CNM Admission & Diversity

Central New Mexico Community College 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. It is the policy of the college not to discriminate on the basis of sexual orientation, marital status or ancestry.

Produced by Central New Mexico Community College @2025.

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About This Catalog

The CNM Catalog is a student's official guide to programs, courses and policies at 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. The college reserves the right to change any provisions or requirements of this catalog at any time. Catalog supplements reflecting changes will be published as required.

- This edition covers academic programs for the 2025-2026 academic year. Information in it is accurate as of May 2025.
- Students may choose to complete their program requirements as defined in the catalog 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. Time of attendance is defined as the period of time between the student's first earned credit hours at CNM through their last earned credit hours at CNM.
- Information in the CNM Catalog is subject to change. Not all programs and classes listed in this Catalog are offered at all campuses or every term. If 50% or less of the class capacity enrolls in a course, the course may be canceled.
- To access earlier CNM catalogs visit Archived Catalogs.

For dates, times and locations of specific courses and course sections, see the Schedule of Classes.

Title IX

Central New Mexico Community College (CNM) does not discriminate based on sex and prohibits sex discrimination in any educational program or activity it operates, in compliance with Title IX. This includes admissions and employment. For inquiries regarding the application of Title IX, contact CNM's Title IX Coordinators or the Office of Civil Rights. The college's Title IX nondiscrimination policy and grievance procedures are available on the CNM Title IX Policy and Procedures webpage: https://www.cnm.edu/about-cnm/title-ix-policy-and-procedures. Individuals may report conduct that may constitute sex discrimination under Title IX to a Title IX Coordinator or CNM Security. To make a complaint of sex discrimination under CNM's Title IX Policy, please contact the appropriate Title IX Coordinator.

Title IX Coordinator for Employees:

Juliane Ziter, Senior Project Consultant, General Counsel Division
Email: jziter@cnm.edu
Phone: 505-224-4000 x 51294
Location: Main Campus, Ted Martinez Bldg., Room 204A
Mailing Address: 525 Buena Vista SE, Albuquerque, NM 87106

Title IX Coordinator for Students:

Christopher Cavazos, Dean of Students
Email: ccavazos@cnm.edu
Phone: 505-224-4000 x 51240
Location: Main Campus, Student Services Center Building, Room 202B
Mailing Address: 525 Buena Vista SE, Albuquerque, NM 87106

CNM Security (available 24/7):

Emergencies: 505-224-3001
Non-emergencies: 505-224-3002

Department of Education's Office for Civil Rights

Website: https://www2.ed.gov/about/offices/list/ocr/complaintintro.html
Phone: (800) 421-3481

Prerequisites, Corequisites and Program Requirements

Prerequisite: A Prerequisite is a requirement that must be successfully completed before a student may enroll in a course. All Prerequisite courses must be completed with a grade of "C" or better. Read more.

- Corequisite: A corequisite is a course that is required to be taken in combination with another course. Read more.
- CNM programs require students to be proficient in reading, writing and math or a combination of these basic skills before they can begin most college courses in their program. Proficiency requirements can be met through Accuplacer, SAT, ACT, or TOEFL scores, completion of an Arts & Sciences Elective, or by successfully completing appropriate level course work.

Prerequisites, Corequisites and Program Requirements

Prerequisites and Corequisites

Prerequisites 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 Prerequisite 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 will be stopped from enrolling or will be disenrolled if Prerequisites 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 "CR" or "C" or better grade.

Most entry-level courses have Prerequisites for reading, writing, or math. See "How to Meet a Course Prerequisite" below.

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

How to Meet a Course Prerequisite

There are five ways to meet a course Prerequisite:

- Take the free Accuplacer placement exam at CNM (see Assessment Centers). Placement Exam Score Guide
- Submit official ACT, SAT, or TOEFL scores to any CNM Admissions Office.
- Take a placement or challenge exam for Biology, BCIS 1110 (IC3 or CLEP), Spanish or French.
- Enroll in the required Prerequisite course and pass it with a grade of CR or C or higher.
- Complete the required Prerequisite course at another institution with a grade of C or higher (official transcript must be on file at CNM Records Office).

Speak with an advisor for further assistance with Prerequisite and course placement.

Note:

Students with an associate degree may have the following Prerequisites overridden: all developmental courses (numbered below 1000) and **ENGL 1110**.

Students with a bachelor's degree or higher may have the following Prerequisites overridden: all developmental courses (numbered below 1000) **ENGL 1110**, **BCIS 1110**, **MATH 1101** , **MATH 1215**, **BIOL 1140**, **BIOL 1140L**, **CHEM 1120**, **CHEM 1120L**.

Students with an associate or bachelor's degree ***do not*** *receive credit for any of the overridden Prerequisites. Students must take these courses, or have them transferred from another institution, if they are required for the student's degree program.*

Students who enroll in classes without completing the Prerequisite (regardless of the circumstance) must accept complete responsibility for the outcome and their final grade.

Prerequisite Overrides

Please be advised that Prerequisite overrides do not waive certificate or degree requirements. If your program of study requires the overridden class(es), you still need to obtain credit for the overridden class(es). This can be accomplished by any one of the following:

1. Taking and successfully completing the course.
2. Taking and passing a challenge exam for the course, if available.
3. Passing an industry certification exam, if available.
4. Transferring an equivalent course from another institution.
5. Demonstrating your knowledge, skills and abilities related to the learning outcomes of the overridden class(es) through Prior Learning Assessment.

Program Requirements

CNM programs require students to be proficient in reading, writing and math or a combination of these basic skills before they can begin college courses in their program. Program requirements are listed with each program description and can be met through Accuplacer, CNM's placement exam, SAT or ACT scores, PARCC level 4 or 5 (ELA/literacy at grade 11, Algebra II or Mathematics III), or by successfully completing appropriate level course work.

Basic Academic Skills

School of Education courses are designed to allow students to master basic academic skills as well as to apply known information to new and "real world" situations, to work effectively on teams, to integrate relevant technologies into their lives, and to communicate effectively. School of Education courses use collaborative and/or cooperative learning activities, lecture, computer-assisted instruction (as appropriate and/or available), individualized instruction, demonstrations, project-based activities, and hands-on activities.

Reading & Writing Skills Requirements

Reading and Writing Skills 1

Successful completion of

- IRW 0970 or higher level IRW, ESOL, or ENG ǂ

Or Students can demonstrate completion of Reading and Writing Skills 1 through placement scores in this range:

- Accuplacer Next-Generation: Reading score 238 or higher OR
- Accuplacer Next-Generation:WritePlacer score 4 or higher
- ACT: Reading score 16 or higher, and English score 14 or higher
- SAT: Evidence-Based Reading and Writing score 290 or higher (new score)
- SAT: Writing + Critical Reading score 480 or higher (old score)

Or High School Transcript: (all of the following must be met) §

- High School GPA must be 2.5 or greater.
- Student must have graduated with a Diploma.
- An Official Transcript must be presented to Enrollment Services.

***** *Please meet with an advisor if you are using these scores to meet this skill level.*

ǂ If listed as a Pre- or corequisite, these can be taken at the same time as the referring course.

§ Please meet with an advisor if you are using these scores to meet this skill level.

Students with this level of skill in reading and writing are able to identify, understand, and evaluate various work-related and academic texts. Students can write academic and workplace documents and effectively use technology for reading and writing tasks.

Reading and Writing Skills 2

Successful completion of:

- IRW 0980 or (ESOL 1010 and ESOL 1020)

Or Students can demonstrate completion of Reading and Writing Skills 2 through placement scores in this range:

- Accuplacer Next-Generation: Reading score 257 or higher OR
- Accuplacer Next-Generation: WritePlacer Score score 6 or higher
- ACT: Reading score 18 or higher, and English score 16 or higher
- SAT: Evidence-Based Reading and Writing score 330 or higher (new score)
- SAT: Writing + Critical Reading score 540 or higher (old score)

Testing for International & Global Ed. Students:

- TOEFL (minimum score of 61)
- IELTS (minimum score of 6.0)
- CEFR (minimum score of B2)
- Duolingo (minimum score of 90)

Or PARCC*:

- English and Reading-ELA/Literacy level 4 or 5 at grade 11

Or High School Transcript: (all of the following must be met) ǂ

- High School GPA must be 2.5 or greater.
- Student must have graduated with a Diploma.
- An Official Transcript must be presented to Enrollment Services.

Or Completion of an Arts & Sciences Elective

** If listed as a Pre- or corequisite, these can be taken at the same time as the referring course.*

ǂ Please meet with an advisor if you are using these scores to meet this skill level.

Students with this level of skill in reading and writing are able to perform at level one skill and have developed reading, reasoning, and writing processes for academic success that also include critical reading and thinking skills. Students can determine the credibility and proper use of sources and can write organized, logical, and grammatically correct paragraphs.

Students who present a High School Transcript may bypass developmental education courses 1000 or below in English and Reading provided all three of the following conditions are met:

1. High School GPA must be a 2.5 or greater.
2. Student must have graduated with a Diploma.
3. An official Transcript must be presented to Enrollment Services.

Math Skills Requirements

Math Skills 1

Successful completion of:

Any Math class 0750 or higher (MATH 0850 also requires successful completion of the challenge exam)

Or Students can demonstrate completion of Math Skills 1 through placement scores in this range:

- **Classic Accuplacer**: Arithmetic score 57 or higher, Elementary Algebra score 26 or higher
- **Accuplacer Next-Generation**: Arithmetic score 244 or higher (effective Jan. 28, 2019)
- **ACT**: Math score 15 or higher
- **SAT**: Quantitative/Math score 320 or higher (old score)
- **SAT**: Quantitative/Math score 360 or higher (new score)
- **PARCC:** ǂ Mathematics - Algebra II or Mathematics II Level 4 or 5
- ǂ *Please meet with an advisor if you are using these scores to meet this skill level.*

Students with this skill level are able to compute arithmetic operations up to rational numbers, recognize and apply formulas to basic geometric figures, and solve basic linear equations.

Math Skills 2 Alg

Successful completion of:

- MATH 0970

Or Students can demonstrate completion of Math Skills 2 through placement scores in this range:

- **Classic Accuplacer**: Elementary Algebra score 41 or higher
- **Accuplacer Next-Generation**: Quantitative Reasoning score 234 or higher **OR**
- **Accuplacer Next-Generation**: Arithmetic score 264 or higher(effective Jan. 28, 2019)
- **ACT**: Math score 17 or higher
- **SAT**: Quantitative/Math score 350 or higher (old score)
- **SAT**: Quantitative/Math score 390 or higher (new score)
- **PARCC:** ǂ Mathematics - Algebra II or Mathematics II Level 4 or 5
- ǂ *Please meet with an advisor if you are using these scores to meet this skill level.*

Students with this skill level are able to do all skills required for Math Skills 1. Additionally, students are able to apply arithmetic operations to the manipulation of algebraic expressions. They are able to solve linear equations and inequalities using mathematical properties, graphically represent solutions, and interpret the characteristics of lines. Students are able to solve systems of linear equations using graphical and algebraic methods. Students are also able to apply algebraic concepts and formulas to geometry and work with scientific notation.

Math Skills 2 Non-Alg

Successful completion of:

- MATH 0975 or higher

Or Students can demonstrate completion of Math Skills 2 through placement scores in this range:

- **Classic Accuplacer**: Elementary Algebra score 41 or higher
- **Accuplacer Next-Generation**: Quantitative Reasoning score 234 or higher **OR**
- **Accuplacer Next-Generation**: Arithmetic score 264 or higher(effective Jan. 28, 2019)
- **ACT**: Math score 17 or higher
- **SAT**: Quantitative/Math score 350 or higher (old score)
- **SAT**: Quantitative/Math score 390 or higher (new score)
- **PARCC:** ǂ Mathematics - Algebra II or Mathematics II Level 4 or 5
- ǂ *Please meet with an advisor if you are using these scores to meet this skill level.*

Students with this skill level are able to do all skills required for Math Skills 1. Additionally, students are able to apply arithmetic operations to the manipulation of algebraic expressions. They are able to solve linear equations and inequalities using mathematical properties, graphically represent solutions, and interpret the characteristics of lines. Students are able to solve systems of linear equations using graphical and algebraic methods. Students are also able to apply algebraic concepts and formulas to geometry and work with scientific notation.

Math Skills 3

Math Skills 3 equals successful completion of:

- MATH 0980 or higher

Or Students can demonstrate completion of Math Skills 3 through placement scores in this range:

- **Classic Accuplacer**: Elementary Algebra score 66 or higher
- **Accuplacer Next-Generation**: Quantitative Reasoning score 253 or higher **OR**
- **Accuplacer Next-Generation**: Advanced Algebra score 218 or higher (effective Jan. 28, 2019)
- **ACT**: Math score 19 or higher
- **SAT**: Quantitative/Math score 400 or higher (old score)
- **SAT**: Quantitative/Math score 440 or higher (new score)
- **PARCC**: ǂ Mathematics – Algebra II or Mathematics III Level 4 or 5

ǂ Please meet with an advisor if you are using these scores to meet this skill level.

Students with this skill level are able to do all skills required for Math Skills 2. Additionally, students are able to work with exponents, perform arithmetic on polynomials, factor quadratic expressions, and solve quadratic equations using a variety of methods. Students are also able to work with functions and function notation at an introductory level.

Math Skills 3 Alg

Math Skills 3 Alg equals successful completion of:

- MATH 0980
- Or Students can demonstrate completion of Math Skills 3 Alg through placement scores in this range:
- **Classic Accuplacer**: Elementary Algebra score 66 or higher
- **Accuplacer Next-Generation**: Advanced Algebra score 218 or higher (effective Jan. 28, 2019)
- **ACT**: Math score 19 or higher
- **SAT**: Quantitative/Math score 400 or higher (old score)
- **SAT**: Quantitative/Math score 440 or higher (new score)
- **PARCC**: ǂ Mathematics – Algebra II or Mathematics III Level 4 or 5

ǂ *Please meet with an advisor if you are using these scores to meet this skill level.*

Students with this skill level are able to do all skills required for Math Skills 2. Additionally, students are able to work with exponents, perform arithmetic on polynomials, factor quadratic expressions, and solve quadratic equations using a variety of methods. Students are also able to work with functions and function notation at an introductory level.

Math Skills 3 Econ

Successful completion of:

- Any Math class 1000 or higher

Or Students can demonstrate Math Skills 3 Econ through placement scores in this range:

- **Classic Accuplacer**: Elementary Algebra score 66 or higher
- **Accuplacer Next-Generation**: Quantitative

Reasoning score 253 or higher **OR**
- **Accuplacer Next-Generation**: Advanced Algebra score 218 or higher (effective Jan. 28, 2019)
- **ACT**: Math score 19 or higher
- **SAT**: Quantitative/Math score 400 or higher (old score)
- **SAT**: Quantitative/Math score 440 or higher (new score)
- **PARCC**: ‡ Mathematics - Algebra II or Mathematics II Level 4 or 5

Math Skills 4

Math Skills 4 equals successful completion of:

- MATH 1215 or MATH 1215P
- Or Students can demonstrate completion of Math Skills 4 through placement scores in this range:
- **Classic Accuplacer:** Elementary Algebra score 104 or higher
- **Classic Accuplacer:** College Level Math 37 or higher
- **Accuplacer Next-Generation:** Advanced Algebra score 239 or higher (effective Jan. 28, 2019)
- **ACT:** Math score 22 or higher
- **SAT:** Quantitative/Math score 440 or higher (old score)
- **SAT**: Quantitative/Math score 480 or higher (new score)
- **PARCC**: ‡ Mathematics – Algebra II or Mathematics III Level 4 or 5

‡ Please meet with an advisor if you are using these scores to meet this skill level.

Students with this skill level are able to do all skills required for Skill Set 3. Additionally, students are able to work with radical and rational expressions, solve equations involving polynomials, radicals, exponentials, and rational expressions, and analyze linear functions.

Math Skills 5

Math Skills 5 equals successful completion of:

- MATH 1220 or MATH 1220P
- Or Students can demonstrate Math Skills 5 through placement scores in this range:
- **Classic Accuplacer:** College Level Math score 69 or higher
- **Accuplacer Next-Generation:** Advanced Algebra score 249 or higher (effective Jan. 28, 2019)
- **ACT:** Math score 25 or higher
- **SAT:** Quantitative/Math score 490 or higher (old score)
- **SAT**: Quantitative/Math score 520 or higher (new score)

‡ *Please meet with an advisor if you are using these scores to meet this skill level.*

Students with this skill level are able to do all skills required for Skill Set 4. Additionally, students are able to work with exponential and logarithmic expressions, sketch graphs of algebraic functions, and analyze the graphical behavior of functions.

Math Skills 6

Successful completion of:

- (MATH 1230 + MATH 1240) or MATH 1250
- Or Students can demonstrate completion of Math Skills 6 through placement scores in this range:
- **Classic Accuplacer**: College Level Math score 100 or higher
- **Accuplacer Next-Generation**: Advanced Algebra score 284 or higher (effective Jan. 28, 2019)
- **ACT**: Math score 27 or higher
- **SAT**: Quantitative/Math score 540 or higher (old score)
- **SAT**: Quantitative/Math score 570 or higher (new score)

‡ *Please meet with an advisor if you are using these scores to meet this skill level.*

Students with this skill level are able to do all skills required for Skill Set 5. Additionally, students are able to work with trigonometric functions, solve equations and inequalities involving algebraic, logarithmic, and trigonometric expression, and analyze functions and their limits.

Biology Skills Requirements

Biology Skills

Successful completion of:

- (CHEM 1120 & CHEM 1120L
- **or**
- (CHEM 1215 & CHEM 1215L)
- **AND**

- (BIOL 1140 & BIOL 1140L)
- **or**
- (BIOL 2410 & BIOL 2410L)

Or Students can demonstrate completion of Biology Skills through placement scores in this range:

- Biology Placement Exam * score of 64 or higher

The Biology Placement Exam is intended for students with significant prior experience in chemistry and biology. Passing the exam with a score of 64 will waive the Prerequisites for BIOL 2310/**BIOL 2310L**, BIOL 2210/ BIOL 2210L and **NUTR 2110**.

It will not waive the Prerequisites for any other courses. It does not award credit for **BIOL 1140**/BIOL 1140L, **BIOL 2110/BIOL 2110L** + **BIOL 2410/BIOL 2410L**, **CHEM 1120**/CHEM 1120L or **CHEM 1215**/**CHEM 1215L** and does not meet degree requirements for those classes.

*Transferring students should be aware that the CNM Biology Placement Exam will not be recognized by other institutions. A passing score on the Biology Placement Exam will not waive the Biology and Chemistry Prerequisites at other institutions, and they will not award credit for BIOL 1140/**BIOL 1140L**, **BIOL 2110/BIOL 2110L** + BIOL 2410/BIOL 2410L, **CHEM 1120**/CHEM 1120L or CHEM 1215/**CHEM 1215L.** Students will still need to take these courses if they are required by their degree program at another institution.

General Education & Elective Charts

AA, AS and AAS General Education Requirements Chart

Courses numbered 1000 and above that may be used to meet the state general education core requirements for Associate of Arts (AA), Associate of Science (AS), and Associate of Applied Science (AAS) degrees.

Arts & Sciences Elective Chart

Courses numbered 1000 and above that provide broad learning in disciplines such as Mathematics, English, Arts, Humanities, and Physical, Biological, and Social Sciences.

Career Technology Education Elective Chart

Courses numbered 1000 and above that provide students with relevant technical knowledge and skills through applied learning for further education and careers in current or emerging professions.

Unrestricted Electives

An unrestricted elective is any course that is numbered 1000 or higher.

Course Descriptions

Some courses are not eligible for Financial Aid. Please check the list here **when considering a course.**

General Education Core Curriculum Requirements for the General Education Core Curriculum Requirements for the Associate of Arts (AA), Associate of Science (AS) and Associate of Applied Science (AAS) Degrees

NM Higher Education (HED) General Education Core Model

The New Mexico General Education Core Curriculum includes designated general education courses that are focused on the essential skills that all college graduates need for success and are guaranteed to transfer to any New Mexico public college or university. The current approved CNM courses are listed below under each of the six General Education Content Areas and the additional Multi-Discipline Area

The Associate of Arts (AA) and Associate of Science (AS) degrees require 22 credits distributed among the six General Education Content Areas and an additional nine credits may be selected from the Content Areas and/or the Multi-Discipline Area.

The Associate in Applied Science (AAS) degree requires 12 credit hours distributed among the six General Education Content Areas and an additional 3 credit hours may be selected from the six General Education Content Areas or the Multi-Discipline Content Area.

Individual programs may require that students take specific courses within the General Education requirements for the purpose of transfer or for meeting industry standards and accreditation guidelines.

AS/AA General Education Requirements

At least 31 credit hours of courses from the following content areas:

- Communications Requirement - Six (6) credit hours
- Creative and Fine Arts Requirement - Three (3) credit hours
- Humanities Requirement - Three (3) credit hours
- Laboratory Science Requirement - Four (4) credit hours, to include at least one laboratory class
- Mathematics Requirement - Three (3) credit hours
- Social and Behavioral Science Requirement - Three (3) credit hours
- Multi-Discipline/Flexible Requirement - Nine (9) credit hours

AAS General Education Requirements

At least 12 credit hours of courses from four of the following six content areas:

- Communications Requirement
- Creative and Fine Arts Requirement
- Humanities Requirement
- Laboratory Science Requirement
- Mathematics Requirement
- Social and Behavioral Science Requirement

At least three (3) credit hours from the following content area:

- Multi-Discipline/Flexible Requirement

Communications Requirement

- COMM 1130 - Public Speaking **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- COMM 2150 - Communication for Teachers **3 credit hour(s)**
- COMM 2160 - Gender Communication **3 credit hour(s)**
- COMM 2180 - Business and Professional Communication **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- ENGL 1160 - Introduction to Digital Storytelling **3 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**
- ENGL 2120 - Intermediate Composition **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)** § (Click here

for more information)

Creative and Fine Arts Requirement

- ARTH 1110 - Art Appreciation **3 credit hour(s)**
- ARTH 2110 - History of Art I **3 credit hour(s)**
- ARTH 2120 - History of Art II **3 credit hour(s)**
- ARTH 2130 - Modern Art **3 credit hour(s)**
- ARTH 2140 - Art of the American Southwest **3 credit hour(s)**
- ARTS 1240 - Design I **3 credit hour(s)**
- ARTS 1250 - Design II **3 credit hour(s)**
- ARTS 1610 - Drawing I **3 credit hour(s)**
- ENGL 2310 - Introduction to Creative Writing **3 credit hour(s)**
- ENGL 2320 - Introduction to Fiction Writing **3 credit hour(s)**
- ENGL 2330 - Introduction to Poetry Writing **3 credit hour(s)**
- ENGL 2520 - Film as Literature **3 credit hour(s)**
- MUSC 1110 - Music Appreciation: Jazz **3 credit hour(s)**
- MUSC 1130 - Music Appreciation: Western Music **3 credit hour(s)**
- MUSC 1140 - Music Appreciation: World Music **3 credit hour(s)**
- MUSC 1210 - Fundamentals of Music for non-majors **4 credit hour(s)**
- THEA 1110 - Introduction to Theatre **3 credit hour(s)**

Humanities Requirement

- AMST 1130 - Introduction to Politics in Popular Culture **3 credit hour(s)**
- AMST 1140 - Introduction to Critical Race and Indigenous Studies **3 credit hour(s)**
- ARCH 1120 - Introduction to Architecture **3 credit hour(s)**
- DGST 1120 - Introduction to Digital Humanities **3 credit hour(s)**
- ENGL 1410 - Introduction to Literature **3 credit hour(s)**
- ENGL 2510 - Analysis of Literature **3 credit hour(s)**
- ENGL 2610 - American Literature I **3 credit hour(s)**
- ENGL 2620 - American Literature II **3 credit hour(s)**
- ENGL 2630 - British Literature I **3 credit hour(s)**
- ENGL 2640 - British Literature II **3 credit hour(s)**
- ENGL 2650 - World Literature I **3 credit hour(s)**
- ENGL 2660 - World Literature II **3 credit hour(s)**
- FDMA 1110 - Film History **3 credit hour(s)**
- HIST 1103 - Introduction to Historical Study **3 credit hour(s)**
- HIST 1110 - United States History I **3 credit hour(s)**
- HIST 1120 - United States History II **3 credit hour(s)**
- HIST 1150 - Western Civilization I **3 credit hour(s)**
- HIST 1160 - Western Civilization II **3 credit hour(s)**
- HIST 1170 - Survey of Early Latin America **3 credit hour(s)**
- HIST 1180 - Survey of Modern Latin America **3 credit hour(s)**
- HIST 2110 - Survey of New Mexico History **3 credit hour(s)**
- HIST 2240 - History of Vietnam **3 credit hour(s)**
- HNRS 1120 - Honors: Legacy Seminar **3 credit hour(s)**
- HNRS 2167 - Honors: Humanities in Society and Culture **3 credit hour(s)**
- HUMN 1105 - Being Human: An Introduction to the Humanities **3 credit hour(s)**
- HUMN 1110 - Introduction to World Humanities I **3 credit hour(s)**
- HUMN 2110 - Introduction to World Humanities II **3 credit hour(s)**
- NATV 1150 - Introduction to Native American Studies **3 credit hour(s)**
- PHIL 1115 - Introduction to Philosophy **3 credit hour(s)**
- PHIL 1120 - Logic, Reasoning, & Critical Thinking **3 credit hour(s)**
- PHIL 1130 - Contemporary Moral Issues **3 credit hour(s)**
- PHIL 2120 - Biomedical Ethics **3 credit hour(s)**
- PHIL 2210 - Early Modern Philosophy **3 credit hour(s)**
- PHIL 2220 - Greek Philosophy **3 credit hour(s)**
- RELG 1110 - Introduction to World Religions **3 credit hour(s)**
- RELG 1120 - Introduction to the Bible **3 credit hour(s)**
- RELG 2110 - Eastern Religions **3 credit hour(s)**
- RELG 2120 - Western Religions **3 credit hour(s)**
- RELG 2135 - Ancient Religions **3 credit hour(s)**
- SIGN 1110 - American Sign Language I **4 credit hour(s)**
- SPAN 2280 - Introduction to Hispanic Literature **3 credit hour(s)**

Laboratory Science Requirement

- ASTR 1010 - Introduction to Solar System Astronomy **3 credit hour(s)**
- ASTR 1010L - Introduction to Solar System Astronomy Laboratory **1 credit hour(s)**
- ASTR 1110 - Introduction to Stellar and Galactic Astronomy **3 credit hour(s)**
- ASTR 1110L - Introduction to Stellar and Galactic Astronomy Laboratory **1 credit hour(s)**
- BIOL 1110 - General Biology **3 credit hour(s)**
- BIOL 1110L - General Biology Lab **1 credit hour(s)**
- BIOL 1215 - Biology for Environmental Sciences **3 credit hour(s)**
- BIOL 1215L - Biology for Environmental Sciences Lab **1 credit hour(s)**
- BIOL 1125 - Human Biology **4 credit hour(s) ***
- BIOL 1130 - Introductory Anatomy and Physiology **3 credit hour(s)**
- BIOL 1130L - Introduction to Anatomy and Physiology Lab **1 credit hour(s)**
- BIOL 1140 - Biology for Health Sciences **3 credit hour(s)**
- BIOL 1140L - Biology for Health Sciences Lab **1 credit hour(s)**
- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**

- BIOL 2110L - Principles of Biology: Cellular and Molecular Biology Lab **1 credit hour(s)**
- BIOL 2151 - Medical Imaging Anatomy & Physiology I **4 credit hour(s)**
- CHEM 1110 - Chemistry in Our Community **3 credit hour(s)**
- CHEM 1110L - Chemistry in Our Community Laboratory **1 credit hour(s)**
- CHEM 1115 - Chemistry in Art **3 credit hour(s)**
- CHEM 1115L - Chemistry in Art Laboratory **1 credit hour(s)**
- CHEM 1120 - Introduction to Chemistry **3 credit hour(s)**
- CHEM 1120L - Introduction to Chemistry Laboratory **1 credit hour(s)**
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- GEOG 1110 - Physical Geography **3 credit hour(s)**
- GEOG 1110L - Physical Geography Lab **1 credit hour(s)**
- GEOL 1110 - Physical Geology **3 credit hour(s)**
- GEOL 1110L - Physical Geology Laboratory **1 credit hour(s)**
- GEOL 2110 - Historical Geology **3 credit hour(s)**
- GEOL 2110L - Historical Geology Laboratory **1 credit hour(s)**
- NTSC 1110 - Physical Science for Teachers **4 credit hour(s) ***
- NTSC 1120 - Life Science for Teachers **4 credit hour(s) ***
- NTSC 2110 - Environmental Science for Teachers **4 credit hour(s) ***
- NUTR 1010 - Personal and Practical Nutrition **3 credit hour(s)**
- NUTR 1010L - Personal and Practical Nutrition Lab **1 credit hour(s)**
- PHYS 1115 - Survey of Physics **3 credit hour(s)**
- PHYS 1115L - Survey of Physics Laboratory **1 credit hour(s)**
- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**
- PHYS 1230L - Algebra-Based Physics I Laboratory **1 credit hour(s)**
- PHYS 1310 - Calculus-Based Physics I **4 credit hour(s)**
- PHYS 1310L - Calculus-Based Physics I Laboratory **1 credit hour(s)**

***Meets lab class requirement**

Any lab science course, with the exception of GEOG 2110, that has one or more of the above courses listed as a prerequisite meets the lab science general education core requirements.

Mathematics Requirement

- MATH 1130 - Survey of Mathematics **3 credit hour(s)**
- MATH 1140 - Geometry for Design **3 credit hour(s)**
- MATH 1220 - College Algebra **3 credit hour(s)**
- MATH 1220P - College Algebra Plus **4 credit hour(s)**
- MATH 1350 - Introduction to Statistics **3 credit hour(s)**
- MATH 1350P - Introduction to Statistics Plus **4 credit hour(s)**
- MATH 2110 - Math for Teachers III **3 credit hour(s)**
- Any MATH course with a prerequisite of MATH 1220 or higher may be substituted for MATH 1220.

Social and Behavioral Science Requirement

- AFST 1110 - Introduction to Africana Studies **3 credit hour(s)**
- ANTH 1115 - Introduction to Anthropology **3 credit hour(s)**
- ANTH 1135 - Introduction to Biological Anthropology **3 credit hour(s)**
- ANTH 1140 - Introduction to Cultural Anthropology **3 credit hour(s)**
- ANTH 1155 - Introduction to Linguistic Anthropology **3 credit hour(s)**
- ANTH 1160 - World Archaeology **3 credit hour(s)**
- CCST 2110 - Introduction to Chicana and Chicano Studies **3 credit hour(s)**
- ECON 1110 - Survey of Economics **3 credit hour(s)**
- ECON 2110 - Macroeconomic Principles **3 credit hour(s)**
- ECON 2120 - Microeconomic Principles **3 credit hour(s)**
- GEOG 1130 - Human Geography **3 credit hour(s)**
- GNDR 2110 - Introduction to Women, Gender, and Sexuality Studies **3 credit hour(s)**
- HNRS 2364 - Honors: The Individual and the Collective **3 credit hour(s)**
- LTAM 1110 - Introduction to Latin American Studies **3 credit hour(s)**
- LTAM 1111 - Latin American Film **3 credit hour(s)**
- POLS 1110 - Introduction to Political Science **3 credit hour(s)**
- POLS 1120 - American National Government **3 credit hour(s)**
- POLS 2110 - Comparative Politics **3 credit hour(s)**
- POLS 2120 - International Relations **3 credit hour(s)**
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**
- PSYC 2120 - Developmental Psychology **3 credit hour(s)**
- PSYC 2330 - Psychology of Human Sexuality **3 credit hour(s)**
- SOCI 1110 - Introduction to Sociology **3 credit hour(s)**
- SOCI 2120 - Introduction to Criminal Justice Systems **3 credit hour(s)**
- SOCI 2210 - Sociology of Deviance **3 credit hour(s)**
- SOCI 2220 - Sociology of Gender **3 credit hour(s)**
- SOCI 2240 - Sociology of Intimate Relationships

and Family **3 credit hour(s)**
- SOCI 2250 - Sociology of Race and Ethnicity **3 credit hour(s)**
- SOCI 2310 - Contemporary Social Problems **3 credit hour(s)**
- SOCI 2330 - Society and Personality **3 credit hour(s)**
- SOCI 2340 - Global Issues **3 credit hour(s)**

Multi-Discipline/Flexible Requirement

Flexible Requirement

- Communications Requirement
- Creative and Fine Arts Requirement
- Humanities Requirement
- Laboratory Science Requirement
- Mathematics Requirement
- Social and Behavioral Science Requirement

Multi-Disciplinary Options

- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- CSCI 1108 - CS for All: Introduction to Computer Modeling **4 credit hour(s)**
- CSCI 1230 - C Programming **4 credit hour(s)**
- CSCI 1260 - Computer Programming Fundamentals Java I **4 credit hour(s)**
- CSCI 1153 - Programming in Matlab **4 credit hour(s)**
- DGST 1110 - Introduction to Digital Studies **3 credit hour(s)**
- ENTR 1110 - Entrepreneurship **3 credit hour(s)**
- FUTR 1110 - Introduction to Futures Studies **3 credit hour(s)**

Note

§ ENGL 2210 will satisfy the 3 credit hour communications requirement for the following Math, Science and Engineering degrees:

- Biology, Associate of Science
- Biotechnology, Associate of Science
- Chemistry, Associate of Arts
- Engineering, Associate of Science
- Geography and Environmental Studies, Associate of Arts
- Geology, Associate of Science
- Mathematical Sciences, Associate of Science
- Physics, Associate of Science
- Pre-Health Science (AA), General Health Sciences
- Pre-Health Science (AA), Pre-Nursing
- Pre-Health Science (AS), Pre-Medical

Arts & Sciences Elective Chart

Courses numbered 1000 and above that provide broad learning in disciplines such as Mathematics, English, Arts, Humanities, and Physical, Biological, and Social Sciences.

Biological/Physical Science

- ASTR - Astronomy
- BIOL - Biology
- CHEM - Chemistry
- GEOL - Earth and Planetary Science
- GEOG - Physical Geography
- NTSC - Natural Science
- PHYS - Physics

College Success

FYEX 1110

Community Engagement

LBAR 2999
SERV 1190

Computer Science

- CSCI - Computer Science

Engineering

- ENGR - Engineering

English/Communication

- ENGL - English
- COMM - Communication

Fine Arts

- ARCH - Architecture (except ARCH 1133)
- ARTS - Art Studio
- ARTH - Art History
- DANC - Dance

ENGL 2520

- MUSC - Music
- THEA - Theatre

Humanities

- ENGL - English (Literature), (except ENGL 2520)
- GNHN - General Honors
- HIST - History
- HUMN - Humanities
- NATV - Native American Studies
- PHIL - Philosophy
- RELG - Religion

SPAN 2280

Modern Language

- ARBC - Arabic
- FREN - French
- LANG - Language Topics (Check Schedule of Classes for availability)
- PORT - Portuguese
- SIGN - American Sign Language (except SIGN 2214)
- SPAN - Spanish (except SPAN 2280)

Mathematics

- MATH - Mathematics

Nutrition

- NUTR - Nutrition

Social/Behavioral Science

- AFST - African American Studies
- AMST - Cultural Studies
- ANTH - Anthropology
- CCST - Chicano Studies
- ECON - Economics
- GEOG - Geography (except Physical Geography)
- GNDR - Women's Studies
- LTAM - Latin American Studies
- PLAN - Community and Regional Planning
- POLS - Political Science
- PSYC - Psychology

- SOCI - Sociology
- SUST - Sustainability

Career Technology Education Elective Chart

Courses numbered 1000 and above that provide students with relevant technical knowledge and skills through applied learning for further education and careers in current or emerging professions.

Business, Hospitality & Technology

- ACCT – Accounting
- BEV – Brewing and Beverage
- BFIN – Business Finance
- BIT – Business and Information Technology
- BLAW – Business Law
- BUSA - Business Administration
- CIS – Computer Information Systems
- CULN – Culinary Arts
- ENTR – Entrepreneurship
- HT – Hospitality and Tourism
- IT – Information Technology
- MGMT – Management
- MKTG – Marketing
- OTEC – Office Administration

Education

- ECED – Early Childhood Education
- ECME – Early Childhood Multicultural Education
- EDUC – Education
- SPED – Special Education
- TLOL – Teaching and Learning Online

Health, Wellness and Public Safety

- CHW – Community Health Worker
- CJ – Criminal Justice
- CJUS – Criminal Justice
- COS – Cosmetology
- DA – Dental Assisting
- DMS – Diagnostic Medical Sonography
- EHR – Electronic Health Records
- EMS – Emergency Medical Services
- ENDT – Electroneurodiagnostic Technology
- FITT – Fitness
- FS – Fire Science
- HIT – Health Information Technology
- HLED – Health Education
- HLTH – Health
- HMSV – Human Services
- MLT – Medical Laboratory Technician
- PL – Paralegal
- PTA – Physical Therapy Assistant
- PT – Pharmacy Technician
- RADT – Radiologic Technology
- RT – Respiratory Therapy
- SOWK – Social Work
- SPT – Sterile Processing Technician
- ST – Surgical Technology
- VT – Veterinary Technology

Nursing & Patient Support

- BPCS – Basic Patient Care Skills
- MA – Medical Assistant
- NA – Nursing Assistant
- NMNC - Nursing
- PCT – Patient Care Technician

Skilled Trades & Arts

ARDR – Architectural Drafting

- AT – Applied Technology
- AUTC – Automotive
- AVMT – Aviation Maintenance
- CAD – Computer Aided Drafting
- CARP – Carpentry
- CM – Construction Management
- DETC – Diesel Technology
- ELEC – Electronics
- ELTR – Electrical Trades
- FDMA – Computer Information Systems
- FILM – Film
- GIS – Geographical Information Systems
- HVAC – Heating, Ventilation, and Cooling
- MATT – Machine Tool
- MT – Manufacturing Technology
- OSH – Occupational Safety
- PHOT – Photonics
- PLMB – Plumbing
- RPID – Rapid Prototyping Innovative Design
- SUR – Surveying
- TRDR – Truck Driving
- UAS – Unmanned Aerial Systems
- WELD – Welding

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ACCOUNTING

Accounting, Associate of Applied Science

School of Business, Hospitality & Technology (BHT)

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

Accounting 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 and law. Students also study the verbal, written, and teamwork skills needed for a business career.

Educational Option Information

- This educational option is an Associate of Applied Science Degree
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program
- This educational option can be completed: Part-Time or Full-Time. A full-time student can complete this program in four terms.
- This educational option can be started: Any Term
- Primary Course Location: Main and Montoya campuses; many courses are offered online

Information for people with felony convictions

- A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

- Many of our courses are transferable to universities and CNM currently has transfer agreements with many colleges in New Mexico.

The Associate of Applied Science degree transfers at least 30 technical credits and applicable arts and sciences credits towards the Career Technical Associates of Arts transfer degree. Contact the School Business, Hospitality & Technology for more information.

Career Opportunities

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

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

- Program Requirements
- Math Skills 3
- Reading and Writing Skills 2
- Courses

Term 1

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**

Term 2

- ACCT 1135 - Accounting Applications **3 credit hour(s)**
- ACCT 2120 - Principles of Accounting II **3 credit hour(s)**
- ACCT 2170 - Payroll Accounting **3 credit hour(s)**
- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 3

- ACCT 1150 - QuickBooks **3 credit hour(s)**
  or
- ACCT 2998 - Accounting Internship **3 credit hour(s)**

- ACCT 2125 - Introduction to Intermediate Accounting I **3 credit hour(s)**
- ACCT 2265 - Advanced Accounting Techniques **3 credit hour(s)**

- ACCT 2320 - Introduction to Tax I (Individual) **3 credit hour(s)**
  or
- ACCT 1220 - Volunteer Tax Training **2 credit hour(s)**
  and
- ACCT 1998 - Volunteer Tax Preparation Internship **1 credit hour(s)**

- Communications Requirement **3 credit hour(s)** *

Term 4

- ACCT 2240 - Cost Management Accounting **3 credit hour(s)**
- ACCT 2999 - Accounting Capstone **1 credit hour(s)**
- BLAW 2110 - Business Law I **3 credit hour(s)**
- ECON 2110 - Macroeconomic Principles **3 credit hour(s)**
  or
- ECON 2120 - Microeconomic Principles **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

*It is recommended that Accounting degree students should choose ENGL 1210 - Technical Communications.

Program Approved Electives

- **Any ACCT course not used elsewhere**
- **Any BFIN course**
- ACCT 1996 - Topics in Accounting **1-6 credit hour(s)**
  or
- ACCT 2996 - Topics in Accounting **1-6 credit hour(s)**
- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**
- BCIS 1210 - Introduction to MS Access **3 credit hour(s)**
- BCIS 1330 - Introduction to Analytics and Data Visualization **3 credit hour(s)**
- BCIS 1340 - Data Concepts **3 credit hour(s)**
- BUSA 1198 - Project Management Fundamentals **3 credit hour(s)**
- ECON 2110 - Macroeconomic Principles **3 credit hour(s)** (if not previously taken)
- ECON 2120 - Microeconomic Principles **3 credit hour(s)** (if not previously taken)
- ENTR 1110 - Entrepreneurship **3 credit hour(s)**
- OTEC 1301 - Introduction to Practical and Ethical AI Usage **3 credit hour(s)**

Accounting, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

CNM offers this 3-term Accounting Certificate of Completion to provide students with the necessary skills for accounting positions in industry.

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

Accounting 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 and law. Students also study the verbal, written, and teamwork skills needed for a business career.

Educational Option Information

- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in three terms.
- This educational option can be started: Any term
- Primary course location: Main campus, Montoya campus, and many courses are offered online

Special Requirements

- Note: A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The Associate of Applied Science degree transfers at least 30 technical credits and applicable arts and sciences credits toward the Career Technical Associate of Arts transfer degree. Contact the School of Business, Hospitality & Technology for more information.

Many of our Accounting courses are transferable to universities and CNM currently has transfer agreements with many colleges in New Mexico.

Other licenses or industry certification opportunities available with this educational option:

- Certified Bookkeeper (CB)
- Certified Public Bookkeeper (CPB)

Career Opportunities

This program is designed to provide a strong foundation in the theory and procedures of accounting for business transactions to enable you to become employable in the industry.

Potential employers for this educational option:

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

than average.

Sample job titles for this educational option:

- Accounting Clerk, Accounting Assistant, Bookkeeper, Account Clerk, Accounts Payable Clerk, Accounts Receivable Clerk, Accounts Payable Specialist, Accounting Associate.

Sample job duties/description for this educational option:

- Operate computers programmed with accounting software to record, store, and analyze information.
- Check figures, postings, and documents for correct entry, mathematical accuracy, and proper codes.
- Classify, record, and summarize numerical and financial data to compile and keep financial records, using journals and ledgers or computers.
- Debit, credit, and total accounts on computer spreadsheets and databases, using specialized accounting software.
- Operate 10-key calculators, typewriters, and copy machines to perform calculations and produce documents.
- Receive, record, and bank cash, checks, and vouchers.
- Comply with federal, state, and company policies, procedures, and regulations.
- Compile statistical, financial, accounting or auditing reports and tables pertaining to such matters as cash receipts, expenditures, accounts payable and receivable, and profits and losses.
- Code documents according to company procedures.
- Reconcile or note and report discrepancies found in records.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 3
- Reading and Writing Skills 2
- Courses

Term 1

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**

Term 2

- ACCT 1135 - Accounting Applications **3 credit hour(s)**
- ACCT 2120 - Principles of Accounting II **3 credit hour(s)**
- ACCT 2170 - Payroll Accounting **3 credit hour(s)**
- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**

Term 3

- ACCT 1150 - QuickBooks **3 credit hour(s)**
  or
- ACCT 2998 - Accounting Internship **3 credit hour(s)**

- ACCT 2125 - Introduction to Intermediate Accounting I **3 credit hour(s)**
- ACCT 2265 - Advanced Accounting Techniques **3 credit hour(s)**

- ACCT 2320 - Introduction to Tax I (Individual) **3 credit hour(s)**
  or
- ACCT 1220 - Volunteer Tax Training **2 credit hour(s)**
  and
- ACCT 1998 - Volunteer Tax Preparation Internship **1 credit hour(s)**

- Mathematics Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 42

Bookkeeping, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

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

Educational Option Information

- This program can be completed: Part-time or full-time. Full-time students can complete the program in three terms.
- This program can be started: Any term.
- Primary course location: Main Campus, Montoya Campus and many courses are offered online.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Certifications that are available include:

- Certified Bookkeeper (CB)
- Certified Public Bookkeeper (CPB)

The courses in this program may integrate into other Business, Hospitality & Technology programs. Students can take additional courses and receive an Accounting certificate or Associate of Applied Science degree in Accounting.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

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

Sample job duties/descriptions for this educational option include: Accounting Clerk, Accounting Assistant, Accounts Payables Clerk, Bookkeeper, Account Clerk, Accounts Receivable Clerk, Accounts Payable Specialist, Accounting Associate.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**

Term 2

- ACCT 2120 - Principles of Accounting II **3 credit hour(s)**
- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**

Term 3

- ACCT 1135 - Accounting Applications **3 credit hour(s)**
- ACCT 1150 - QuickBooks **3 credit hour(s)**
- ACCT 2170 - Payroll Accounting **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 30

Certified Public Accountant (CPA) Academic Requirements, Post Degree Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Certified Public Accountant (CPA) Academic Requirements, Certificate of Completion provides 27 credit hours in accounting plus 3 credit hours in Business Law. This program is design to provide you with the academic requirements needed to comply with a portion of the qualifications required to take the CPA exam. Satisfactory completion of the coursework does not guarantee passing that exam.

Other requirements, which are set by the New Mexico Public Accountancy Board, include a bachelor's degree or higher from an accredited college or university with at least 150 semester hours, which includes the 30 hours of accounting/law. Additional information about licensing requirements for the CPA can be obtained from the New Mexico Public Accountancy Board. All of the courses included may also be applied toward an Associate of Applied Science degree in Accounting or an Accounting or Bookkeeping Certificate of Completion.

Educational Option Information

- This educational option can be completed: Part-Time or Full-Time
- This educational option can be started: Any term
- Primary course location: Main campus, Montoya campus, and many courses are online
- Special requirements for this educational option:
- Students are required to have obtained a bachelor's degree or higher from an accredited college or university to pursue this certificate.
- One of the qualifications required to take the CPA exam is to be fingerprinted to establish positive identification for a state and federal criminal history background check.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

- All of the courses included in the Certified Public Accountant (CPA) Academic Requirements, Post Degree Certificate of Completion option may also be applied toward an Associate of Applied Science degree in Accounting or an Accounting or Bookkeeping Certificate of Completion.
- Note: 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 Public Accountancy Board.

Career Opportunities

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

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- **Bachelor's Degree**
- **Department Approval**
- **ACCT 2110 or equivalent course**
- **ACCT 2120 or equivalent course**
- **BCIS 1110 or equivalent course**

Courses

Term 1

- ACCT 1135 - Accounting Applications **3 credit hour(s)**
- ACCT 2320 - Introduction to Tax I (Individual) **3 credit hour(s)**
- BLAW 2110 - Business Law I **3 credit hour(s)**

Term 2

- ACCT 2125 - Introduction to Intermediate Accounting I **3 credit hour(s)**
- ACCT 2240 - Cost Management Accounting **3 credit hour(s)**
- ACCT 2250 - Introduction to Fund Accounting **3 credit hour(s)**
- ACCT 2350 - Introduction to Tax II (Corporate) **3 credit hour(s)**

Term 3

- ACCT 2130 - Introduction to Intermediate Accounting II **3 credit hour(s)**
- ACCT 2170 - Payroll Accounting **3 credit hour(s)**
- ACCT 2520 - Introduction to Auditing **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 30

Payroll Clerk, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Payroll Clerk Certificate of Completion is a series of courses that provide entry-level skills in payroll accounting.

Educational Option Information

- This educational option can be completed: Part-time or full-time
- This educational option can be started: Any term
- Primary course location: Main Campus, Montoya Campus, and many courses are offered online

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

All of the Payroll Clerk courses may also be applied toward an Associate of Applied Science degree in Accounting or an Accounting or Bookkeeping Certificate of Completion. Students should see an advisor to customize their educational plans.

Industry certifications available include:

- Fundamental Payroll Certification (FPC)
- Certified Payroll Professional (CPP)

Career Opportunities

Most businesses, governmental and non-profit organizations employ payroll professionals. Common job titles include Payroll Clerk, Payroll Specialist, Payroll Professional.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional

demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**

Term 2

- ACCT 1135 - Accounting Applications **3 credit hour(s)**
- ACCT 1150 - QuickBooks **3 credit hour(s)**
- ACCT 2170 - Payroll Accounting **3 credit hour(s)**
- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 24

School Business Management, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

This certificate provides graduates with a strong foundation in the theory and procedures of accounting for business transactions including governmental entities. Select business courses provide students with an introduction to business operations and a background necessary to relate with employees and the community. The courses in this program may integrate into other Business, Hospitality & Technology programs.

Educational Option Information

- This educational option is a Certificate of Completion
- This educational option is designed for: Student interested in working in the accounting and business fields at public and charter educational institutions.
- This educational option can be completed: Part-Time
- This educational option can be started: Any Term
- Primary Course Location: Main and Montoya campuses; many courses are offered online

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The Associate of Applied Science degree transfers at least 30 technical credits and applicable arts and sciences credits toward the Career Technical Associate of Arts transfer degree. Contact the School of Business, Hospitality & Technology for more information. Many of our Accounting courses are transferable to universities and CNM currently has transfer agreements with many colleges in New Mexico.

Career Opportunities

Potential employers for this educational option: Most charter and public schools and school districts employ School Business Managers. Sample job titles for this educational option: Business Manager, District Manager, Associate District Manager, School Business Manager, School Business Officer, and School Business Operations Manager.

The U.S. Department of Labor Statistics Job Outlook Handbook predicts that both full- and part-time employment for persons with accounting and business education are expected to grow faster than average.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 3
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**

Term 2

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BUSA 2460 - Business Ethics **3 credit hour(s)**
- MGMT 2110 - Principles of Management **3 credit hour(s)**

Term 3

- ACCT 1135 - Accounting Applications **3 credit**

hour(s)
- ACCT 2120 - Principles of Accounting II **3 credit hour(s)**
- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)** BUSA 2220 - Human Resource Management **3 credit hour(s)**

Term 4

- ACCT 2125 - Introduction to Intermediate Accounting I **3 credit hour(s)**
- ACCT 2170 - Payroll Accounting **3 credit hour(s)**
- ACCT 2250 - Introduction to Fund Accounting **3 credit hour(s)**
- ACCT 2270 - Budgeting **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 45

ADULT BASIC EDUCATION (ABE)

English as a Second Language (ESL)

School of Education (ED)

The Adult Basic Education (ABE) English as a Second Language (ESL) program offers non-credit courses in ESL. The goal of these courses is to help adult students improve their listening, speaking, reading, and writing skills in English. A range of leveled courses is available from Beginning level to Advanced level. Tutoring and conversation groups are also available. ESL classes are non-credit courses; students completing this program can transition to credit courses through the ESOL (English for Speakers of Other Languages) program.

Educational Option Information

- This program can be completed: Part-time
- This program can be started: See Schedule.
- Primary course location: Main Campus; courses are also offered at Montoya Campus.

Special requirements:

- *Students registering for ESL classes are required to successfully complete an orientation and take the TABE test to determine the appropriate course level.* The test is administered again periodically to assess student progress.
- *Adult Basic Education ESL students do not follow the procedures outlined in this catalog for admission and registration.* Interested students should contact the Adult Basic Education program office at Main Campus for information on how to enroll.

Cost and Financial Aid

- ESL courses are non-credit and as such are not financial aid eligible. However, these courses are tuition-free.
- Tuition: There is a $10 registration fee, but there is no tuition for these courses
- Other: Textbooks for this program are provided at no cost to the student.

Students who are enrolled only in ESL courses receive the same services as other CNM students (for example, library access), but are not eligible for financial aid. Also, students registering for ESL classes do not follow the procedures outlined in this catalog for admission and registration. Interested students should contact the Adult Basic Education program office for more information.

Career and Educational Opportunities

English as a Second Language (ESL) courses prepare students for higher education, job advancement, or personal fulfillment.

These courses are not transferable and there is no certification in ESL. However, students who complete the ESL program can transition to CNM credit courses through the ESOL program (English for Speakers of Other Languages). Early Childhood Multicultural Education or Nursing Assistant certificates are available to ESL students who complete the career pathway.

Students who complete the career pathway in Early Childhood Multicultural Education or Nursing Assistant are eligible to take state licensing exams that can lead to employment in those fields.

English as a Second Language (ESL) Course Options

Course placement and order based on TABE test results.

Courses

- IBEC 0500 - ESL Early Childhood Multicultural Education **0 credit hour(s)**
- IBNA 0500 - ESL Nursing Assistant **0 credit hour(s)**

Next Level Courses

- **HSE (High School Equivalency) classes (offered in English and Spanish)**
- **ESOL (English for Speakers of Other Languages) Courses for credit**
- **Developmental Education (DE) Courses for credit**
- **CNM Degree or Certificate program**

High School Equivalency Exam (HiSET/ GED) Preparation

School of Education (ED)

The Adult Basic Education (ABE) high-school equivalency (HSE) preparation program offers non-credit courses in Language Arts, Math, Science and Social Studies to students who are preparing for high-school equivalency exams, including the HiSET and GED. The program also offers instruction in reading and writing to students who are at a basic literacy level. Traditional classes, study groups, preparation for HSE in Spanish, and distance learning options are available. Classes are offered on an intensive 5 week schedule.

Educational Option Information

This program can be completed:

- Part-time or full-time

When can this program be started?

- Intensive classes meet four days per week. Students may begin in CNM's fall, spring

or summer terms.

Primary course location:

- Main Campus; courses are also offered at Montoya, Westside and South Valley campuses.

Special Requirements

- *New students must successfully complete an orientation and take the TABE test to determine appropriate course placement.* The test is administered again periodically to assess student progress.
- *Adult Basic Education HSE students do not follow the procedures outlined in this catalog for admission and registration.* For information on how to enroll, interested students should contact the Adult Basic Education Program.

Cost and Financial Aid

- HiSET/GED preparation courses are non-credit and as such are not financial aid eligible. However, these courses are tuition-free.
- Tuition: There is a $10 registration fee per term, but there is no tuition for these courses.
- Other: Textbooks for this program are provided at no cost to the student.

Students who are enrolled only in HSE preparation courses receive the same services as other CNM students (for example, library access), but are not eligible for financial aid. Also, students registering for HSE preparation classes do not follow the procedures outlined in this catalog for admission and registration. Interested students should contact the Adult Basic Education program office for more information.

Educational Opportunities

- Students who complete the program and pass a high-school equivalency exam (like the HiSET/GED) are able to enroll in CNM certificate and degree programs.

Career Opportunities

- Students with a high-school equivalency diploma are significantly more likely to obtain employment.

Courses

Course placement and order will be based on TABE test results.

Leveled Courses

- GECK 0500 - Computer Keyboarding **0 credit hour(s)**
- GELA 0550 - Language Arts I **0 credit hour(s)**
- GELA 0750 - Language Arts II **0 credit hour(s)**
- GELA 0950 - Language Arts III **0 credit hour(s)**
- GEMA 0450 - Math Fundamentals **0 credit hour(s)**
- GEMA 0550 - Decimals, Fractions and Measurements **0 credit hour(s)**
- GEMA 0750 - Proportions, Percentages and Data Analysis **0 credit hour(s)**
- GEMA 0950 - Basic Algebra and Geometry **0 credit hour(s)**
- GESC 0650 - General Education Science **0 credit hour(s)**
- GESS 0650 - General Education Social Studies **0 credit hour(s)**

Integrated Courses

- GELA 0500 - Multi-level Language Arts **0 credit hour(s)**
- GEMA 0500 - Multi-level Math **0 credit hour(s)**
- GEMS 0500 - General Education Multi-Subject **0 credit hour(s)**

ALTERNATIVE TEACHER LICENSURE

Alternative Teacher Licensure (Post Degree Certificate of Completion), Early Childhood PreK-Grade 3 Concentration

School of Education (ED)

CNM offers a state-accredited teacher licensure program based on national InTASC standards for teacher preparation and the New Mexico state framework for teacher education. CNM offers Alternative Teacher Licensure with certificates in Early Childhood Education, Elementary Education, Secondary Education, and Special Education. Students are able to complete licensure pathways in multiple areas and all students are encouraged to complete dual licensure in special education.

For students currently in the Alternative Teacher Licensure Program or licensed teachers, CNM offers coursework that can be applied to endorsements in Gifted Education, Teaching English to Speakers of Other Languages (TESOL) and Bilingual Education. https://www.cnm.edu/programs-of-study/programs-a-z/alternative-teacher-licensure/endorsement-coursework

See Recommended Sequence of Courses

Educational Option Information

- This educational option is an: Post Degree Certificate of Completion
- This educational option can be completed: Part-time
- This educational option is design for: Post baccalaureate degree students
- This educational option can be started: Anytime
- Primary course location: Main Campus

Special Requirements

Students must complete a separate application process for the Alternative Teacher Licensure Program.

- Alternative Teacher Licensure Program (ATLP) Application

Application requirements include:

- Submission of official transcript to CNM Records Office confirming bachelor's degree from an accredited institution
- Ability to pass a Criminal Background Check

Approximate Costs of this Educational Option

- Cost of Attendance

- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

There are many scholarships available for teacher education. Please go to the scholarship page for more information and be sure to check out these opportunities:

- Grow Your Own Teachers Scholarship
- Teacher Preparation Affordability Scholarship

Educational Opportunities

This certificate is post-baccalaureate degree and leads to a teaching license from the state of New Mexico. Students are encouraged to pursue dual licensure with special education and early childhood to support all children in New Mexico.

Career Opportunities

Upon successful admission to the Alternative Licensure Program candidates are eligible to apply for an Alternative Level I Provisional Teaching License from the NM Public Education Department. Teaching remains a high demand field in New Mexico, especially in the areas of bilingual elementary, secondary (math or science), and special education.

Gainful Employment information is available from Job Connection Services.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Alternative Teacher Licensure Program (ATLP) Application
- **Bachelor's Degree**

- All program teacher candidates must complete a comprehensive portfolio documenting proficiency in key competency areas in order to complete the program and be recommended for licensure.

Courses

- SPED 2250 - Foundations of Special Education **3 credit hour(s)**
  or
- EDUC 2250 - Foundations of Education **3 credit hour(s)**

- EDUC 2285 - Curriculum Development Assessment and Evaluation I **3 credit hour(s)**
- ECED 2860 - Emergent Literacy: Foundations for PreK-Grade 3 Literacy Instruction **3 credit hour(s)**
- ECED 2862 - Developmentally Appropriate Observation, Assessment, and Learning Environments **3 credit hour(s)**
- EDUC 2260 - Emergent Literacy for Diverse Learners **3 credit hour(s)**
- ECED 2864 - Child Guidance and Supporting Positive Behavior: Child, Family, Community and Culture **3 credit hour(s)**

- SPED 2390 - Special Education Supervised Field Experience **3 credit hour(s)**
  or
- EDUC 2190 - Supervised Field Experience **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 21

Alternative Teacher Licensure (Post Degree Certificate of Completion), Elementary Education Concentration

School of Education (ED)

CNM offers a state-accredited teacher licensure program based on national InTASC standards for teacher preparation and the New Mexico state framework for teacher education. CNM offers Alternative Teacher Licensure with certificates in, Early Childhood Education, Elementary Education, Secondary Education, and Special Education. Students are able to complete licensure pathways in multiple areas and all students are encouraged to complete dual licensure in special education.

For students currently in the Alternative Teacher Licensure Program or licensed teachers, CNM offers coursework that can be applied to endorsements in Gifted Education, Teaching English to Speakers of Other Languages (TESOL) and Bilingual Education. https://www.cnm.edu/programs-of-study/programs-a-z/alternative-teacher-licensure/endorsement-coursework

See Recommended Sequence of Courses

Special Requirements

Students must complete a separate application process for the Alternative Teacher Licensure Program.

- Alternative Teacher Licensure Program (ATLP) Application
- Application requirements include:
- Submission of official transcript to CNM Records Office confirming bachelor's degree from an accredited institution
- Ability to pass a Criminal Background Check

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books

- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Employment Information

Upon successful admission to the Alternative Licensure Program candidates are eligible to apply for an Alternative Level I Teaching License from the NM Public Education Department. Teaching remains a high demand field in New Mexico, especially in the areas of bilingual elementary, secondary (math or science), and special education.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Alternative Teacher Licensure Program (ATLP) Application
- **Bachelor's Degree**

- All program teacher candidates must complete a comprehensive portfolio documenting proficiency in key competency areas in order to complete the program and be recommended for licensure.

Courses

- EDUC 2250 - Foundations of Education **3 credit hour(s)**
- EDUC 2285 - Curriculum Development Assessment and Evaluation I **3 credit hour(s)**
- EDUC 2260 - Emergent Literacy for Diverse Learners **3 credit hour(s)**
- EDUC 2262 - Intermediate Literacy for Diverse Learners **3 credit hour(s)**
- EDUC 2284 - Classroom Management and Effective Teaching Strategies **3 credit hour(s)**
- EDUC 2286 - Curriculum Development Assessment and Evaluation II **3 credit hour(s)**
- EDUC 2190 - Supervised Field Experience **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 21

Alternative Teacher Licensure (Post Degree Certificate of Completion), Secondary Education Concentration

School of Education (ED)

CNM offers a state-accredited teacher licensure program based on national InTASC standards for teacher preparation and the New Mexico state framework for teacher education. CNM offers Alternative Teacher Licensure with certificates in, Early Childhood Education, Elementary Education, Secondary Education, and Special Education . Students are able to complete licensure pathways in multiple areas and all students are encouraged to complete dual licensure in special education.

For students currently in the Alternative Teacher Licensure Program or licensed teachers, CNM offers coursework that can be applied to endorsements in Gifted Education, Teaching English to Speakers of Other Languages (TESOL) and Bilingual Education. https://www.cnm.edu/programs-of-study/programs-a-z/alternative-teacher-licensure/endorsement-coursework

See Recommended Sequence of Courses

Special Requirements

- Students must complete a separate application process for the Alternative Teacher Licensure Program.
- Alternative Teacher Licensure Program (ATLP) Application
- Application requirements include:
- Submission of official transcript to CNM Records Office confirming bachelor's degree from an accredited institution
- Ability to pass a Criminal Background Check

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Information

Upon successful admission to the Alternative Licensure Program candidates are eligible to apply for an Alternative Level I Provisional Teaching License from the NM Public Education Department. Teaching remains a high demand field in New Mexico, especially in the areas of bilingual elementary, secondary (math or science), and special education.

Gainful Employment information is available from Job Connection Services.

Ten Year Rule for CTE Courses

Career and technical education courses in this program

will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Alternative Teacher Licensure Program (ATLP) Application
- **Bachelor's Degree**

- All program teacher candidates must complete a comprehensive portfolio documenting proficiency in key competency areas in order to complete the program and be recommended for licensure.

Courses

- EDUC 2190 - Supervised Field Experience **3 credit hour(s)**
- EDUC 2250 - Foundations of Education **3 credit hour(s)**
- EDUC 2285 - Curriculum Development Assessment and Evaluation I **3 credit hour(s)**
- EDUC 2264 - Reading and Writing in Secondary Education for Diverse Learners **3 credit hour(s)**
- EDUC 2284 - Classroom Management and Effective Teaching Strategies **3 credit hour(s)**
- EDUC 2286 - Curriculum Development Assessment and Evaluation II **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 18

Alternative Teacher Licensure (Post Degree Certificate of Completion), Special Education Concentration

School of Education (ED)

CNM offers a state-accredited teacher licensure program based on national InTASC standards for teacher preparation and the New Mexico state framework for teacher education. CNM offers Alternative Teacher Licensure with certificates in, Early Childhood Education, Elementary Education, Secondary Education , and Special Education. Students are able to complete licensure pathways in multiple areas and all students are encouraged to complete dual licensure in special education.

For students currently in the Alternative Teacher Licensure Program or licensed teachers, CNM offers coursework that can be applied to endorsements in Gifted Education, Teaching English to Speakers of Other Languages (TESOL) and Bilingual Education.

See Recommended Sequence of Courses

Special Requirements

Students must complete a separate application process for the Alternative Teacher Licensure Program.

- Alternative Teacher Licensure Program (ATLP) Application

Application requirements include:

- Submission of official transcript to CNM Records Office confirming bachelor's degree from an accredited institution
- Ability to pass a Criminal Background Check

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Upon successful admission to the Alternative Licensure Program candidates are eligible to apply for an Alternative Level I Teaching License from the NM Public Education Department. Teaching remains a high demand field in New Mexico, especially in the areas of bilingual elementary, secondary (math or science), and special education.

Gainful Employment information is available from Job Connection Services.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Alternative Teacher Licensure Program (ATLP) Application
- **Bachelor's Degree**

- All program teacher candidates must complete a comprehensive portfolio documenting proficiency in key competency areas in order to complete the program and be recommended for licensure.

Courses

- SPED 2250 - Foundations of Special Education **3 credit hour(s)**
- SPED 2258 - Classroom and Behavior Management for Special Education **3 credit hour(s)**
- EDUC 2285 - Curriculum Development Assessment and Evaluation I **3 credit hour(s)**
- EDUC 2260 - Emergent Literacy for Diverse Learners **3 credit hour(s)**
- SPED 2260 - Methods and Materials for Special

Education **3 credit hour(s)**

- EDUC 2262 - Intermediate Literacy for Diverse Learners **3 credit hour(s)**
  or
- EDUC 2264 - Reading and Writing in Secondary Education for Diverse Learners **3 credit hour(s)**

- SPED 2390 - Special Education Supervised Field Experience **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 21

AMERICAN STUDIES

American Studies, Associate of Arts

School of Liberal Arts (LA)

American Studies at CNM is an interdisciplinary program in which students engage in a social and cultural investigation into structures and dynamics that shape the lives and experiences of people within the United States in a global context. CNM's unique program empowers students to ask questions and address issues facing our communities in the current moment. Our program is built on a foundation of critical pedagogy and designed for students who are interested in social responsibility and social justice. Upon completion of the program, students will earn an Associate of Arts in American Studies with a Certificate of Achievement in Social Justice.

The Associate of Arts in American Studies provides students with the opportunity to transfer into the AMST program at UNM as a junior, with 60 applicable credits. From there, students may go on to complete a bachelor's, master's, and doctoral degree in American Studies.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- AMST 1105 - Introduction to American Studies **3 credit hour(s)**

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
  or
- DGST 1110 - Introduction to Digital Studies **3 credit hour(s)**
  or
- FUTR 1110 - Introduction to Futures Studies **3 credit hour(s)**

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- HUMN 1105 - Being Human: An Introduction to the Humanities **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 2

- AMST 1140 - Introduction to Critical Race and Indigenous Studies **3 credit hour(s)**
- Creative and Fine Arts **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Laboratory Science Requirement **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 3

- AMST 1130 - Introduction to Politics in Popular Culture **3 credit hour(s)**
- Arts & Sciences Elective **3 credit hour(s)**
- GNDR 2110 - Introduction to Women, Gender, and Sexuality Studies **3 credit hour(s)**
- Modern Language Requirement **4 credit hour(s)**
- Social Justice Certificate Option **3 credit hour(s)**

Term 4

- AMST 1150 - Introduction to Southwest Studies **3 credit hour(s)**
- AMST 2110 - American Life and Thought (Capstone) **3 credit hour(s)**
- Arts and Sciences Elective **3 credit hour(s)**

- AMST 2998 - Internship in American Studies **1-3 credit hour(s)**
  or
- Social Justice Certificate Option
  or
- Arts and Sciences Elective **3 credit hour(s)**

- SERV 1190 - Service Learning **1 credit hour(s)**

Minimum Credit Hours to Complete Degree 60

- Social Justice Certificate Options
- AFST 1110 - Introduction to Africana Studies **3 credit hour(s)**
- AFST 2140 - Black Women in the African Diaspora **3 credit hour(s)**
- AMST 1160 - Environment, Science & Technology **3 credit hour(s)**
- AMST 1170 - Introduction to Asian American Studies **3 credit hour(s)**
- ARCH 1215 - Introduction to Environmental Problems **3 credit hour(s)**
- CCST 2110 - Introduction to Chicana and Chicano Studies **3 credit hour(s)**
- COMM 2160 - Gender Communication **3 credit hour(s)**
- COMM 2289 - Listening Communication Studies **3 credit hour(s)**
- HIST 2110 - Survey of New Mexico History **3 credit hour(s)**
- LTAM 1110 - Introduction to Latin American Studies **3 credit hour(s)**
- LTAM 1111 - Latin American Film **3 credit hour(s)**
- POLS 2140 - Introduction to Political Analysis **3**

credit hour(s)
- POLS 2150 - Public Policy and Administration **3 credit hour(s)**
- SOCI 2220 - Sociology of Gender **3 credit hour(s)**
- SOCI 2310 - Contemporary Social Problems **3 credit hour(s)**
- SOCI 2340 - Global Issues **3 credit hour(s)**

ANTHROPOLOGY

Anthropology, Associate of Arts

School of Liberal Arts (LA)

Anthropology is the scientific study of human beings, both past and present, in all parts of the world. Anthropology has traditionally been divided into four distinct, but interrelated sub-disciplines or fields: Biological/Physical Anthropology; Archaeology; Cultural Anthropology; and Linguistic Anthropology. Applied anthropology applies the concepts, methods, and skills of anthropologists in solving community problems.

This program is designed to meet the requirements for an Associate of Arts in Anthropology from CNM and prepare a student to obtain a Bachelor of Arts in Anthropology from a 4-year college or university.

Educational Option Information

- This educational option is an: Associate of Arts Degree.
- This educational option can be completed: Part-Time or Full-Time.

Special Requirements

- Students are expected to purchase textbooks and personal safety equipment for Archeology lab.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

An Associate Degree is an important milestone for students pursuing either a baccalaureate degree or a graduate degree in the field. Core requirements for the baccalaureate are met through completion of the CNM Associate of Arts degree.

Students planning to transfer to UNM should keep in mind that the UNM Anthropology program offers three concentrations of study: Archeology, Ethnology, and Evolutionary Anthropology.
* Please note Physical Anthropology and Evolutionary Anthropology are the same field.

Refer to the Student Handbook from the UNM Department of Anthropology. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements. College catalogs are generally available online.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ANTH 1115 - Introduction to Anthropology **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**

  or
- Arts & Sciences Elective **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- Laboratory Science Requirement **4 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 3

- Arts & Sciences Elective **1-3 credit hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**

  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**
- Program Approved Elective (2000 level) **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 4

- Creative and Fine Arts Requirement **3 credit hour(s)**
- Program Approved Elective **6 credit hour(s)**
- Program Approved Elective (2000 level) **3 credit hour(s)**
- Social and Behavioral Science Requirement **3**

credit hour(s)

Minimum Credit Hours Required to Complete Degree: 60

This information is meant to serve as a general guide for students intending to major in Anthropology. Specific requirements for transfer will vary from school to school. It is the student's responsibility to contact the four year transfer school to confirm specific admission and degree requirements.

Please consult the UNM Anthropology Department's Major Study Requirements to choose CNM courses according to your intended concentration at UNM.

Program Approved Electives

*Students planning to transfer to University of New Mexico should choose courses based on pathways to concentrations in Archaeology, Ethnology, and Evolutionary Anthropology.

- Archaeology
- ANTH 1120C - Introduction to Archaeology Lecture and Lab **4 credit hour(s)**
- ANTH 1160 - World Archaeology **3 credit hour(s)**
- ANTH 2160 - Prehistoric Peoples of the American Southwest **3 credit hour(s)**
- ANTH 2222 - Ancient Mesoamerica **3 credit hour(s)**
- Ethnology
- ANTH 1140 - Introduction to Cultural Anthropology **3 credit hour(s)**
- ANTH 1155 - Introduction to Linguistic Anthropology **3 credit hour(s)**
- ANTH 2140 - Indigenous Peoples of North America **3 credit hour(s)**
- ANTH 2150 - Indigenous Peoples of the American Southwest **3 credit hour(s)**
- ANTH 2265 - The Anthropology of Drugs **3 credit hour(s)**
- Evolutionary Anthropology
- ANTH 1135 - Introduction to Biological Anthropology **3 credit hour(s)**
- ANTH 2130 - Introduction to Forensic Anthropology **3 credit hour(s)**
- Additional Electives
- ANTH 2290 - Anthropology Practicum **Variable credit hour(s)**
- ANTH 2996 - Special Topics **3 credit hour(s)**

ARCHITECTURE

Pre-Architecture, Associate of Applied Science

School of Skilled Trades & Arts (STA)

Architecture is the art and science of designing and constructing the built environment. The Pre-Architecture degree is designed to introduce students to architectural design, history and practice. Prepares students for transfer to a pre-professional architecture degree.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is an Associate of Applied Science Degree.
- This educational option can be completed: 4 Terms
- This educational option is designed for: Students who wish to transfer directly to a Bachelor's of Architecture program.
- This educational option can be started: Fall term only
- Primary course location: CNM Advanced Technology Center

Special Requirements

Additional Supplies

- Students are required to purchase materials for architecture studio courses.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and most can be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

This program listed below is designed to meet the requirements for an Associate of Applied Science in Pre-Architecture from CNM and prepare a student to obtain a Bachelor of Architecture at University of New Mexico (UNM).

Students interested in transferring to UNM should consult the UNM School of Architecture. Students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students should always refer to the catalog of their intended transfer institution for specific admission and curricular requirements. Students should also consult an Advisor.

Career Opportunities

https://www.onetonline.org/link/summary/17-1011.00

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 3
- Reading and Writing Skills 2

Courses

Term 1

- ARCH 1120 - Introduction to Architecture **3 credit hour(s)**
- ARCH 1115 - Introduction to Architectural Graphics **3 credit hour(s)**
- ARDR 1101 - Building Materials and Methods I **3 credit hour(s)**
- ARDR 1102 - Introduction to A/E/C Software **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

Term 2

- ARDR 1201 - Building Materials and Methods II **3 credit hour(s)**
- ARCH 1125 - Design Fundamentals **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- MATH 1215 - Intermediate Algebra **4 credit hour(s)**

  or
- MATH 1215P - Intermediate Algebra Plus **6 credit hour(s)**

Term 3

- ARCH 2120 - World Architecture I **3 credit hour(s)**
- ARCH 2315 - Architectural Design I **6 credit hour(s)**
- CM 1233 - Sustainable Building Practices **3 credit hour(s)**
- MATH 1220 - College Algebra **3 credit hour(s)**

  or
- MATH 1220P - College Algebra Plus **4 credit hour(s)**

Term 4

- ARCH 2125 - World Architecture II **3 credit hour(s)**
- ARCH 2117C - Architectural Visualization II **3 credit hour(s)**
- ARCH 2325 - Architectural Design II **6 credit hour(s)**
- Humanities Requirement **3 credit hour(s) ***

Minimum Credit Hours Required to Complete Degree: 62

* Recommended: AMST 1140, ENGL 2650, ENGL 2660, NATV 1150

ARCHITECTURE ENGINEERING CONSTRUCTION MODELING AND DOCUMENTATION TECHNOLOGY (A/E/C DOC TECH)

Architecture Engineering Construction Modeling and Documentation Technology (A/E/C DOC TECH), Associate of Applied Science

School of Skilled Trades & Arts (STA)

The ARDR program utilizes up-to-date computer-aided drafting software applications to train drafting technicians for the Architectural/Engineering/Construction (A/E/C) industry. Drafting is taught in combination with the principles of architectural/engineering graphic conventions and the theory and practice of construction technology. The curriculum also concentrates on the development of communication, teamwork, and problem solving skills necessary to prepare students for the architectural/engineering office environment.

For information, contact the School of Skilled Trades & Arts (STA).

See Recommended Sequence of Courses

Educational Option Information

- This program can be completed: Part-time or full time. Full-time students can complete the program in 4 terms.
- This program can be started: Any term.
- Primary course location: Advanced Technology Center.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Other costs:

- Students must purchase drafting tools, construction hard hat, camera, safety vest and safety glasses.

Educational Opportunities

Though primarily intended as a stand-alone program, many courses within the Architectural Drafting degree coursework are transferable to 4-year institutions.

Many of the courses in this degree are transferable and some may be applied to four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Graduates are prepared for entry-level jobs such as architectural or engineering drafting technicians in residential and commercial construction and in drafting and sales positions with contractors, fabricators and suppliers.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ARDR 1101 - Building Materials and Methods I **3 credit hour(s)**
- ARDR 1102 - Introduction to A/E/C Software **3 credit hour(s)**
- ARDR 1104 - Professional Practice **2 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- ARDR 1116 - Introduction to Architectural Drafting **3 credit hour(s)**

Term 2

Either Term 2, 3 or 4 courses may be taken directly after the completion of Term 1 courses.

- ARDR 1201 - Building Materials and Methods II **3 credit hour(s)**
- ARDR 1202 - A/E/C Software for Residential Development **3 credit hour(s)**
- ARDR 1203 - Construction Documents for Residential Development **4 credit hour(s)**
- Creative and Fine Arts Elective **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**

Term 3

Either Term 2, 3 or 4 courses may be taken directly after the completion of Term 1 courses.

- ARDR 1301 - Building Materials and Methods III **3 credit hour(s)**
- ARDR 1302 - A/E/C Software for Commercial Development **3 credit hour(s)**
- ARDR 1303 - Construction Documents for Commercial Development **4 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 4

Either Term 2, 3 or 4 courses may be taken directly after the completion of Term 1 courses.

- ARDR 1401 - Building Materials and Methods IV **3 credit hour(s)**
- ARDR 1402 - A/E/C Software for Commercial Building Systems **3 credit hour(s)**
- ARDR 1403 - Construction Documents for Commercial Building Systems **4 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

Program Approved Electives

- ARCH 1120 - Introduction to Architecture **3 credit hour(s)**
- ARDR 2096-2996 - Special Topics **1-7 credit hour(s)**
- ARDR 2297 - Independent Study **1-7 credit hour(s)**
- ARDR 2298 - Internship **1-4 credit hour(s)**
- CM 1205 - Introduction to Building Information Modeling **3 credit hour(s)**
- CM 1233 - Sustainable Building Practices **3 credit hour(s)**
- CM 2225 - BIM for Building Systems Management [Inactive]
- GIS 1002 - Fundamentals of Geospatial Technology **3 credit hour(s)**
- GIS 1005 - CAD for Surveying and GIS **3 credit hour(s)**
- UAS 2010 - UAS for Design and Construction **3 credit hour(s)**

Commercial Building Systems Design Coordination, Certificate of Completion

School of Skilled Trades & Arts (STA)

This certificate comprises Terms 1 and 4 of the Architectural/Engineering Drafting A.A.S. degree

Educational Option Information

- This educational option is an: Certificate of Completion
- This educational option can be completed: Part-time or full time
- This educational option is design for: Students who plan to complete the Architectural/ Engineering Drafting Technology A.A.S. degree.
- This educational option can be started: Anytime
- Primary course location: Advanced Technology Center

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid.

Please check the list here when considering a course.

Educational Opportunities

This certificate is embedded in CNM's Architectural/ Engineering Drafting, Associate of Applied Science degree, allowing students to complete this certificate and continue seamlessly into their associates degree. Many of the courses in this degree are transferable and some may be applied to two and four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

https://www.onetonline.org/link/summary/17-1011.00

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 3
- Reading and Writing Skills 2

Courses

Term 1

- ARDR 1101 - Building Materials and Methods I **3 credit hour(s)**
- ARDR 1102 - Introduction to A/E/C Software **3 credit hour(s)**
- ARDR 1104 - Professional Practice **2 credit hour(s)**
- ARDR 1116 - Introduction to Architectural Drafting **3 credit hour(s)**

Term 2

- ARDR 1401 - Building Materials and Methods IV **3 credit hour(s)**
- ARDR 1402 - A/E/C Software for Commercial Building Systems **3 credit hour(s)**
- ARDR 1403 - Construction Documents for Commercial Building Systems **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 24

Program Approved Electives

- ARCH 1120 - Introduction to Architecture **3 credit hour(s)**
- ARDR 2096-2996 - Special Topics **1-7 credit hour(s)**
- ARDR 2297 - Independent Study **1-7 credit hour(s)**
- ARDR 2298 - Internship **1-4 credit hour(s)**
- CM 1205 - Introduction to Building Information Modeling **3 credit hour(s)**
- CM 1233 - Sustainable Building Practices **3 credit hour(s)**
- CM 2225 - BIM for Building Systems Management [Inactive]
- GIS 1002 - Fundamentals of Geospatial Technology **3 credit hour(s)**
- GIS 1005 - CAD for Surveying and GIS **3 credit hour(s)**
- UAS 2010 - UAS for Design and Construction **3 credit hour(s)**

Commercial Development Design Coordination, Certificate of Completion

School of Skilled Trades & Arts (STA)

This certificate comprises terms 1 and 3 of the Architectural/Engineering Drafting Technology A.A.S.

Educational Option Information

- This educational option is an: Certificate of Completion
- This educational option can be completed: Part-time or full time
- This educational option is design for: Students who plan to complete the Architectural/ Engineering Drafting Technology A.A.S. degree.
- This educational option can be started: Anytime
- Primary course location: Advanced Technology Center

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

This certificate is embedded in CNM's Architectural/ Engineering Drafting, Associate of Applied Science degree, allowing students to complete this certificate and continue seamlessly into their associates degree. Many of the courses in this degree are transferable and some may be applied to two and four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

https://www.onetonline.org/link/summary/17-1011.00

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they

were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 3
- Reading and Writing Skills 2

Courses

Term 1

- ARDR 1101 - Building Materials and Methods I **3 credit hour(s)**
- ARDR 1102 - Introduction to A/E/C Software **3 credit hour(s)**
- ARDR 1104 - Professional Practice **2 credit hour(s)**
- ARDR 1116 - Introduction to Architectural Drafting **3 credit hour(s)**

Term 2

- ARDR 1301 - Building Materials and Methods III **3 credit hour(s)**
- ARDR 1302 - A/E/C Software for Commercial Development **3 credit hour(s)**
- ARDR 1303 - Construction Documents for Commercial Development **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 24

Program Approved Electives

- ARCH 1120 - Introduction to Architecture **3 credit hour(s)**
- ARDR 2096-2996 - Special Topics **1-7 credit hour(s)**
- ARDR 2297 - Independent Study **1-7 credit hour(s)**
- ARDR 2298 - Internship **1-4 credit hour(s)**
- CM 1205 - Introduction to Building Information Modeling **3 credit hour(s)**
- CM 1233 - Sustainable Building Practices **3 credit hour(s)**
- CM 2225 - BIM for Building Systems Management [Inactive]
- GIS 1002 - Fundamentals of Geospatial Technology **3 credit hour(s)**
- GIS 1005 - CAD for Surveying and GIS **3 credit hour(s)**
- UAS 2010 - UAS for Design and Construction **3 credit hour(s)**

Residential Development Design Coordination, Certificate of Completion

School of Skilled Trades & Arts (STA)

This certificate comprises Terms 1 and 2 of the redesigned ARDR AAS degree, which focuses on fundamentals (Term 1) and residential design elements (Term 2).

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 3
- Reading and Writing Skills 2

Courses

Term 1

- ARDR 1101 - Building Materials and Methods I **3 credit hour(s)**
- ARDR 1102 - Introduction to A/E/C Software **3 credit hour(s)**
- ARDR 1104 - Professional Practice **2 credit hour(s)**
- ARDR 1116 - Introduction to Architectural Drafting **3 credit hour(s)**

Term 2

- ARDR 1201 - Building Materials and Methods II **3 credit hour(s)**
- ARDR 1202 - A/E/C Software for Residential Development **3 credit hour(s)**
- ARDR 1203 - Construction Documents for Residential Development **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 24

Program Approved Electives

- ARCH 1120 - Introduction to Architecture **3 credit hour(s)**
- ARDR 2096-2996 - Special Topics **1-7 credit hour(s)**
- ARDR 2297 - Independent Study **1-7 credit hour(s)**
- ARDR 2298 - Internship **1-4 credit hour(s)**
- CM 1205 - Introduction to Building Information Modeling **3 credit hour(s)**
- CM 1233 - Sustainable Building Practices **3 credit hour(s)**
- 2225 - BIM for Building Systems Management [Inactive]
- GIS 1002 - Fundamentals of Geospatial Technology **3 credit hour(s)**
- GIS 1005 - CAD for Surveying and GIS **3 credit hour(s)**
- UAS 2010 - UAS for Design and Construction **3 credit hour(s)**

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Artificial Intelligence and Machine Learning, Associate of Applied Science

School of Business, Hospitality & Technology (BHT)

This CIS Artificial Intelligence degree focuses on building machine learning models that can be used for predicting, making decisions and enhancing human capabilities. The program provides the knowledge and skills used in a variety of fields using artificial intelligence, including the information technology, automotive, healthcare, aerospace, industrial, and manufacturing industries. Program content includes an introduction to artificial intelligence and machine learning, natural language processing, computer vision, and artificial intelligence for business solutions and other applications.

Educational Option Information

- This educational option is an: Associate of Applied Science
- This educational option is design for: Students who want to begin a new career in the area of Artificial Intelligence and Machine Learning.
- This educational option can be started: Anytime
- Primary course location: Main

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this degree are transferable and some may be applied to two and four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Artificial intelligence is impacting the future of virtually every industry. Artificial intelligence has acted as the main driver of emerging technologies like big data, robotics and IoT, and it will continue to act as a technological innovator for the foreseeable future. Common jobs found in this industry include software engineer and AI developer.

During January to July of 2020, employers posted 198,000 jobs in occupations related to Artificial Intelligence. Additionally in 2019, ZipRecruiter reported that AI jobs accounted for four of every 1,000 general job postings and ONET predicts a 10% growth rate in this industry in the next 10 years.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**
- CSCI 1108 - CS for All: Introduction to Computer Modeling **4 credit hour(s)**
- CSCI 1220 - Computer Programming Fundamentals: Python **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
  or
- Social and Behavioral Science Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 2

- AIML 1320 - Fundamentals of Artificial Intelligence **3 credit hour(s)**
- CIST 1605 - Internet of Things **3 credit hour(s)**
- CIST 2210 - Introduction to SQL (Structured Query Language) **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s) (except NTSC courses)**
- Program Approved Elective **3 credit hour(s)**

Term 3

- AIML 2310 - Deep Learning **3 credit hour(s)**
- CIST 2331 - Predictive Analytics **3 credit hour(s)**
- CIST 1680 - Linux Essentials **3 credit hour(s)**
- CIST 2616 - Intro to Competitive Robotics **3 credit hour(s)**
- CIST 2251 - Python Programming II **3 credit hour(s)**

Term 4

- AIML 2320 - Natural Language Processing **3 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**
  or
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- Program Approved Elective **9 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

Program Approved Electives

- CIST 1996 - Special Topics **1-3 credit hour(s)**
  or
- CIST 2996 - Special Topics **1-3 credit hour(s)**

- CSCI 1240 - C++ Programming I **3 credit hour(s)**
- CIST 2220 - .Net I/C# **3 credit hour(s)**
- CIST 1261 - JavaScript Web Programming **3 credit hour(s)**
- CIST 1858 - Introduction to Cyber Security **3 credit hour(s)**
- CIST 2998 - Internship **3 credit hour(s)**
- CIST 2235 - Java Programming I **3 credit hour(s)**
- CIST 2237 - Android App Dev with Java and Kotlin **3 credit hour(s)**
- CIST 2215 - iPhone Programming with Swift **3 credit hour(s)**
- CIST 2225 - Game Development **3 credit hour(s)**
- CIST 2251 - Python Programming II **3 credit hour(s)**
- CIST 2275 - C++ Programming II **3 credit hour(s)**
- CIST 2284 - .NET II/C# **3 credit hour(s)**
- CIST 2626 - Advanced Competitive Robotics **3 credit hour(s)**
- CIST 2636 - Cloud Computing **3 credit hour(s)**
- CIST 2680 - Linux Administration **3 credit hour(s)**
- CSCI 1230 - C Programming **4 credit hour(s)**
- CSCI 1260 - Computer Programming Fundamentals Java I **4 credit hour(s)**
- CSCI 2310 - Discrete Mathematics for Computer Science **4 credit hour(s)**
- ENGR 2810 - Engineering Statics **3 credit hour(s)**
- UAS 1010 - Introduction to Unmanned Aircraft Systems **3 credit hour(s)**
- UAS 1011 - UAS Standards, Regulations and Law and Exam Prep **1 credit hour(s)**

Artificial Intelligence and Machine Learning, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

This CIS Artificial Intelligence certificate focuses on building machine learning models that can be used for predicting, making decisions and enhancing human capabilities. The program provides the knowledge and skills used in a variety of fields using artificial intelligence, including the information technology, automotive, healthcare, aerospace, industrial, and manufacturing industries. Program content includes an introduction to artificial intelligence and machine learning, natural language processing, computer vision, and artificial intelligence for business solutions and other applications.

Educational Option Information

- This educational option is an: Certificate of Completion
- This educational option can be completed: Full-time or part-time
- This educational option is designed for: Students who want to enhance their current STEM career or begin a new career in the area of Artificial Intelligence and Machine Learning.
- This educational option can be started: Anytime
- Primary course location: Main, Distance Learning

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this degree are transferable and some may be applied to two and four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Artificial intelligence is impacting the future of virtually every industry. Artificial intelligence has acted as the main driver of emerging technologies like big data, robotics, and IoT, and it will continue to act as a technological innovator for the foreseeable future.

During January to July of 2020, employers posted 198,000 jobs in occupations related to Artificial Intelligence. Additionally, in 2019, ZipRecruiter reported that AI jobs accounted for four of every 1,000 general job postings and ONET predicts a 10% growth rate in this industry in the next 10 years.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**

  or

- CSCI 1108 - CS for All: Introduction to Computer Modeling **4 credit hour(s)**

- CSCI 1220 - Computer Programming Fundamentals: Python **3 credit hour(s)**
- CIST 1680 - Linux Essentials **3 credit hour(s)**

Term 2

- AIML 1320 - Fundamentals of Artificial Intelligence **3 credit hour(s)**
- CIST 2331 - Predictive Analytics **3 credit hour(s)**
- CIST 1605 - Internet of Things **3 credit hour(s)**
- CIST 2210 - Introduction to SQL (Structured Query Language) **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 24

AUTOMOTIVE TECHNOLOGY

Automotive Service Fundamentals, Certificate of Achievement

School of Skilled Trades & Arts (STA)

Entering students will study, through lecture and hands-on training, the fundamentals of automotive service. This includes an introduction to automotive systems, and further study in the ASE automotive specialty areas of: brakes, steering and suspension, and electrical systems. Upon completion of the Automotive Service Fundamentals Certificate program, graduates will be eligible for entry level employment at facilities focused on under-car repair and service. Students who earn certificates in their chosen concentration are encouraged to earn an Associate Degree in Transportation Technology by taking academic and related trades classes, including welding, OSHA compliance, environmental protection, communication, English and physical science. Upon completion of the associate degree program, graduates will be eligible for entry level employment at automotive or medium/heavy duty equipment dealerships and independent repair facilities. Graduates have the potential to work in management and other related areas of service operations.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Educational Opportunities

Many of our courses are transferable to universities and CNM currently has transfer agreements with many colleges in New Mexico.

Employment Information

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 specialist and overhaul specialist. The national shortage of technicians in the both the automotive and the diesel truck and heavy equipment fields ensures plentiful employment opportunities with excellent pay and benefits.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- AUTC 1110 - Introduction to Automotive Systems **4 credit hour(s)**
- AUTC 1120 - Brake Systems **3 credit hour(s)**
- AUTC 1130 - Suspension and Alignment **3 credit hour(s)**
- AUTC 1140 - Automotive Electrical **4 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 14

Automotive Technology, Certificate of Completion

School of Skilled Trades & Arts (STA)

Entering students will study, through lecture and hands-on training, the fundamentals of automotive service, which includes an introduction to automotive systems, and further study in the ASE automotive specialty areas of: brakes, steering and suspension, and electrical systems. Automotive Technology students will continue their career preparation by studying the more advanced principles of automotive service and repair, which includes course work in the following ASE specialty areas: Engine Repair, Automatic Transmission, Manual Drive Train, Electrical/Electronic Systems, Heating and Air Conditioning, and Engine Performance. Upon completion of the Automotive Service Fundamentals Certificate program, graduates will be eligible for entry-level employment at facilities focused on under-car repair and service. Upon completion of the Automotive Technology Certificate program, graduates will be eligible for entry-level employment at dealerships and independent repair facilities.

Special Requirements

Students are required to purchase textbooks, tools, and personal safety equipment. One must not be allergic to fuels, oils, and chemicals used in industry. Most

employers require a valid driver's license and a good driving record.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students are encouraged to pursue the Transportation Technology program.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

There is a local and national shortage of automotive technicians. Students who earn this certificate can find jobs in automotive dealerships and independent repair facilities that perform all phases of automotive service and repair.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- AUTC 1110 - Introduction to Automotive Systems **4 credit hour(s)**
- AUTC 1120 - Brake Systems **3 credit hour(s)**
- AUTC 1130 - Suspension and Alignment **3 credit hour(s)**
- AUTC 1140 - Automotive Electrical **4 credit hour(s)**

Term 2

- AUTC 1210 - Manual Transmissions **3 credit hour(s)**
- AUTC 1220 - Engine Repair **4 credit hour(s)**
- AUTC 1230 - Automatic Transmissions **4 credit hour(s)**
- AUTC 1240 - Automotive Electronics **3 credit hour(s)**

Term 3

- AUTC 2111 - Air Conditioning and Heating **3 credit hour(s)**
- AUTC 2120 - Engine Performance I **3 credit hour(s)**
- AUTC 2130 - Engine Performance II **4 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 38

Electric Vehicle Technology, Certificate of Completion

School of Skilled Trades & Arts (STA)

Entering Electric Vehicle, EV, students will study, through lab, lecture, online and hands-on training, the fundamentals of EV's, which includes Introduction to Electric Vehicles, Electric Vehicle batteries and components, Electric Vehicle Design, Construction and Diagnostics, Automotive Electrical, Electric vehicle advanced control systems, Electric vehicle advanced electronic and drivability, Electric Vehicle heating ventilation and air conditioning and Electronic systems. Upon completion of the Electric Vehicle Technician Certificate, graduates will be eligible for entry level employment at facilities focused on Electric vehicles. Upon completion of the Electric Vehicle Technology Certificate program, graduates will be eligible for entry level employment at dealerships, independent repair facilities and fleet facilities.

Educational Option Information

- This educational option is a Certificate of Completion
- This educational option can be completed: Full-time or part-time
- This educational option is design for: Entry Level Positions or Reskilling/Upskilling
- This educational option can be started: Fall and Spring
- Primary course location: Main Campus

Special Requirements

Students are required to purchase textbooks, tools and personal safety equipment. One must not be allergic to fuels, oils and chemicals used in industry. Most employers require a valid driver's license and a good driving record.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *pending* Financial Aid approval.
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Some classes will transfer to Automotive and Diesel programs.

Career Opportunities

Independent shops and dealership are consistently looking for entry level trained technicians

Independent shops and dealerships. Tesla is currently running an internship for graduating students.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- EVTC 1110 - Introduction to Electric Vehicles **3 credit hour(s)**
- EVTC 1120 - Electric Vehicle Batteries and Components **4 credit hour(s)**
- EVTC 1130 - Electric Vehicle Design, Construction and Diagnostics **3 credit hour(s)**
- EVTC 1140 - Electric Vehicle Electrical Systems **4 credit hour(s)**

Term 2

- EVTC 1210 - Electric Vehicle Advanced Control Systems **4 credit hour(s)**
- EVTC 1220 - Electric Vehicle Advanced Electronic and Drivability **4 credit hour(s)**
- EVTC 1230 - Electric Vehicle Heating, Ventilation and Air Conditioning **3 credit hour(s)**
- EVTC 1240 - Electronic Systems **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 28

Transportation Technology (AAS), Automotive Technology Concentration

School of Skilled Trades & Arts (STA)

Students who earn certificates in their chosen concentration are encouraged to earn an Associate Degree in Transportation Technology by taking academic and related trades classes. Upon completion of the associate degree program, graduates will be eligible for entry-level employment at automotive or medium/heavy duty equipment dealerships and independent repair facilities. Graduates have the potential to work in management and other related areas of service operations.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career and Educational Opportunities

Career opportunities exist in government, independent repair facilities and dealerships for all aspects of the industry including line technician, field service technician, service writer, service manager, warranty and parts specialist and overhaul specialist. The national shortage of technicians in the both the automotive and the diesel truck and heavy equipment fields ensures plentiful employment opportunities with excellent pay and benefits.

For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in *my***CNM**.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- AUTC 1110 - Introduction to Automotive Systems **4 credit hour(s)**
- AUTC 1120 - Brake Systems **3 credit hour(s)**
- AUTC 1130 - Suspension and Alignment **3 credit hour(s)**
- AUTC 1140 - Automotive Electrical **4 credit hour(s)**

Term 2

- AUTC 1210 - Manual Transmissions **3 credit hour(s)**
- AUTC 1220 - Engine Repair **4 credit hour(s)**
- AUTC 1230 - Automatic Transmissions **4 credit hour(s)**
- AUTC 1240 - Automotive Electronics **3 credit hour(s)**

Term 3

- AUTC 2111 - Air Conditioning and Heating **3 credit hour(s)**
- AUTC 2120 - Engine Performance I **3 credit hour(s)**
- AUTC 2130 - Engine Performance II **4 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**

Term 4

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- OSH 2006 - Occupational Safety for Construction I **1 credit hour(s)**
  or
- OSH 2016 - Occupational Safety I **1 credit hour(s)**

- Mathematics Requirement **3 credit hour(s)**
- WELD 1110 - Introduction to Welding Fundamentals **3 credit hour(s)**

Term 5

- Humanities Requirement **3 credit hour(s)**
  or
- Creative and Fine Arts Requirement **3 credit hour(s)**

- Program Approved Electives 6 **credit hours(s)**
- Social and Behavioral Science Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 63

Program Approved Electives

- AT 1005 - Survey of Applied Technologies **3 credit hour(s)**
- AUTC 1310 - Automotive Restoration and Modification **2 credit hour(s)**
- AUTC 1315 - Introduction to Hybrid and Electric Vehicles **2 credit hour(s)**
- AUTC 1320 - Parts Specialist **2 credit hour(s)**
- AUTC 1325 - Light Duty Diesel Service and Diagnosis **2 credit hour(s)**
- AUTC 2096-2996 - Special Topics **1-7 credit hour(s)**
- AUTC 2198 - Automotive Internship **6 credit hour(s)**
- AUTC 2250 - Transportation Alternative Fuels **2 credit hour(s)**
- DETC 1160 - Fixed Power Systems **2 credit hour(s)**
- DETC 2096-2996 - Special Topics **1-7 credit hour(s)**

AVIATION MAINTENANCE TECHNOLOGY

Airframe Maintenance Technician, Certificate of Completion

School of Skilled Trades & Arts (STA)

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

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career 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.

Gainful Employment information is available from Job Connection Services.

Contact Information

Program information is available from the School of Applied Technologies.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

Aviation General Subjects

- AVMT 1005 - Aviation Math **3 credit hour(s)**
- AVMT 1010 - Aviation Science **3 credit hour(s)**
- AVMT 1015 - Materials & Processes **3 credit hour(s)**
- AVMT 1020 - Maintenance Forms & Publications **3 credit hour(s)**
- AVMT 1025 - Basic Electricity **4 credit hour(s)**

Term 2

Airframe Core 1

- AVMT 1105 - Airframe Electrical **3 credit hour(s)**

- AVMT 1110 - A/C Materials & Finishes **4 credit hour(s)**
- AVMT 1115 - A/C Sheet Metal **4 credit hour(s)**
- AVMT 1120 - A/C Assembly & Rigging **3 credit hour(s)**
- AVMT 1130 - A/C Fuel Systems **2 credit hour(s)**

Term 3

Airframe Core 2

- AVMT 1125 - A/C Landing Gear Systems **3 credit hour(s)**
- AVMT 1135 - A/C Environmental Systems **3 credit hour(s)**
- AVMT 1140 - A/C Instruments **3 credit hour(s)**
- AVMT 1145 - Airframe Inspection **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 44

Aviation Maintenance Technology, Associate of Applied Science

School of Skilled Trades & Arts (STA)

The maintenance technician degree prepare students for certification as Federal Aviation Administration (FAA) certified Airframe and Powerplant (A&P) Technician. Upon completion of the program, graduates will be prepared and equipped to take the FAA written, oral and practical exam. These programs are FAA part 147 approved (FAA #Q8UT5734K).

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Graduates who pass the FAA exams will be qualified for employment in entry level positions in the aviation maintenance and manufacturing fields, and other fields requiring highly trained technicians.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

Aviation General Subjects

- AVMT 1005 - Aviation Math **3 credit hour(s)**
- AVMT 1010 - Aviation Science **3 credit hour(s)**
- AVMT 1015 - Materials & Processes **3 credit hour(s)**
- AVMT 1020 - Maintenance Forms & Publications **3 credit hour(s)**
- AVMT 1025 - Basic Electricity **4 credit hour(s)**

Term 2

Airframe Core 1

- AVMT 1105 - Airframe Electrical **3 credit hour(s)**
- AVMT 1110 - A/C Materials & Finishes **4 credit hour(s)**
- AVMT 1115 - A/C Sheet Metal **4 credit hour(s)**
- AVMT 1120 - A/C Assembly & Rigging **3 credit hour(s)**
- AVMT 1130 - A/C Fuel Systems **2 credit hour(s)**

Term 3

Airframe Core 2

- AVMT 1125 - A/C Landing Gear Systems **3 credit hour(s)**
- AVMT 1135 - A/C Environmental Systems **3 credit hour(s)**
- AVMT 1140 - A/C Instruments **3 credit hour(s)**
- AVMT 1145 - Airframe Inspection **3 credit hour(s)**

Term 4

Powerplant Core 1

- AVMT 1305 - Powerplant Electrical **2 credit hour(s)**
- AVMT 1310 - Reciprocating Eng. 1 **3 credit hour(s)**
- AVMT 1315 - Reciprocating Eng. 2 **4 credit hour(s)**
- AVMT 1320 - Turbine Engines **4 credit hour(s)**

Term 5

Powerplant Core 2

- AVMT 1330 - Propellers **2 credit hour(s)**
- AVMT 1335 - Powerplant Fuel Systems **3 credit hour(s)**
- AVMT 1340 - Powerplant Systems 2 **3 credit hour(s)**
- AVMT 1345 - Engine Inspection **3 credit hour(s)**
- AVMT 1325 - Powerplant Systems 1 **3 credit hour(s)**

Term 6

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**

- Communications Requirement **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 86

Powerplant Maintenance Technician, Certificate of Completion

School of Skilled Trades & Arts (STA)

The Aviation Powerplant Maintenance Technician certificate prepares students for certification as Federal Aviation Administration (FAA) certified Powerplant Technician. Upon completion of the program, graduates will be prepared and equipped to take the FAA written, oral and practical exam. These programs are FAA part 147 approved (FAA #Q8UT5734K).

Graduates who pass the FAA exams will be qualified for employment in entry level positions in the aviation maintenance and manufacturing fields, and other fields requiring highly trained technicians.

See Recommended Sequence of Courses

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

Aviation General Subjects

- AVMT 1005 - Aviation Math **3 credit hour(s)**
- AVMT 1010 - Aviation Science **3 credit hour(s)**
- AVMT 1015 - Materials & Processes **3 credit hour(s)**
- AVMT 1020 - Maintenance Forms & Publications **3 credit hour(s)**
- AVMT 1025 - Basic Electricity **4 credit hour(s)**

Term 2

Powerplant Core 1

- AVMT 1305 - Powerplant Electrical **2 credit hour(s)**
- AVMT 1310 - Reciprocating Eng. 1 **3 credit hour(s)**
- AVMT 1315 - Reciprocating Eng. 2 **4 credit hour(s)**
- AVMT 1320 - Turbine Engines **4 credit hour(s)**

Term 3

Powerplant Core 2

- AVMT 1330 - Propellers **2 credit hour(s)**
- AVMT 1335 - Powerplant Fuel Systems **3 credit hour(s)**
- AVMT 1340 - Powerplant Systems 2 **3 credit hour(s)**
- AVMT 1345 - Engine Inspection **3 credit hour(s)**
- AVMT 1325 - Powerplant Systems 1 **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 43

BEVERAGE PRODUCTION & MANAGEMENT

Beverage Management, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Beverage Management Certificate of Completion will prepare students to work in the bar and beverage industry. Students will study safety, sanitation, supervisory skills, human relations, purchasing, cost controls, hospitality law, guest services, food pairing and menu management, and other general coursework.

Educational Option Information

- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in two terms.
- This educational option is designed for: Students seeking the knowledge necessary for a career in the beverage industry.
- This educational option can be started: Any term
- Primary course location: Main Campus; some theory courses are offered online

Special Requirements

- Students must be at least 21 years of age or older at the start of term for all BEV courses, except BEV 1160
- Students must be able to lift 30 pounds
- Students must be able to stand for the duration of the laboratory class

This program includes identification and evaluation of alcoholic beverages. Students are urged to consider their ability to consume alcohol before enrolling in this program. If you have concerns about the role of alcohol consumption in this program, please contact an Advisor.

Additional tools or supplies required for this educational option

- Students are required to purchase uniforms, textbooks, and tools

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

This embedded certificate of completion will give students an early exit point for gainful employment, and allows them to continue to the AAS in Brewing and Beverage Management. Students will also have the opportunity to earn the following industry certifications: level 1 Cicerone® certificate, New Mexico ServSafe® alcohol server's permit, and ServSafe® Manager Training and Certification.

Employment Opportunities

Graduates who have earned the Beverage Management Certificate of Completion are well prepared for entry-level and mid-level jobs in the beverage industry. Jobs are available in breweries, wineries, brewpubs, restaurants, casinos, resorts, cruise ships, convention centers, beverage retailers and wholesalers.

Gainful Employment information is available from Job Connection Services.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BEV 1100 - Beer Production and Styles **1 credit hour(s)**
  or
- BEV 1200 - Wine Production and Styles **1 credit hour(s)**
  or
- BEV 1300 - Distilled Spirits Production and Styles **1 credit hour(s)**
- BEV 1160 - Beverage Service I **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**
- CULN 1100 - Introduction to Culinary Skills **3 credit hour(s)**
  and
- CULN 1110 - Culinary Skills **4 credit hour(s)**
  or
- HRTM 1120 - Introduction to Tourism **3 credit hour(s)**
- HT 1111 - Guest Service Management **1 credit hour(s)**

Term 2

- BEV 1192 - Draught Systems **1 credit hour(s)**
  or
- BEV 1292 - Food and Beverage Pairing **1 credit hour(s)**
  or
- BEV 1392 - Mixology **1 credit hour(s)**
- BEV 2160 - Beverage Service II **3 credit hour(s)**
  or
- BEV 2260 - Bar and Beverage Management **3 credit hour(s)**
- HT 2215 - Purchasing and Cost Controls **3 credit hour(s)**
- HT 2240 - Hospitality Law **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 22

Beverage Production & Management (AAS), Brewing Concentration

School of Business, Hospitality & Technology (BHT)

The Beverage Production and Management Program will prepare students for a career as beverage managers working in the beverage industry. In addition to beverage technology, students are exposed to the

underlying sciences behind beverage production, including biology and chemistry courses. Students will also be introduced to purchasing, cost controls, marketing and business/hospitality law.

See Recommended Sequence of Courses

Beverage Production and Management is an excellent field for individuals seeking a challenging career in a rapidly growing industry. The associate degree is a four term program. Students will study beverage equipment and technology, draught beer technology, beverage recipe formulation, brewing, distilling, wine production and cellaring skills, safety, sanitation, chemistry, biology and microbiology, supervisory skills, human relations, guest services, food pairing and menu management, and other general coursework. Classes include classroom and lab time.

Educational Option Information

- This educational option is designed for: Professionals seeking the knowledge and experience necessary for management-level positions in the beverage industry.
- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in four terms.
- This educational option can be started: Fall and Spring Terms
- Primary course location: Main Campus; many class meetings will be held at commercial breweries

Special Requirements

- Students must be at least 21 years of age or older at the start of term for all BEV courses, except BEV 1160
- Students must be able to repeatedly lift 55 pounds
- Students must be able to be on their feet for 8 hours
- Students must be able to work in a hot environment for 8 hours
- Students must be willing to taste beer in small quantities for analysis

Additional tools or supplies required for this educational option

- Students are required to purchase chef's uniforms, textbooks, and tools

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students completing the certificate may also receive a level 1 Cicerone® certificate, draft beer technology certificate, forklift operator certificate, New Mexico alcohol server's permit, and brewery safety training certificates.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Employment Opportunities

Graduates who have earned their A.A.S. in Brewing & Beverage Management are well prepared for entry-level and mid-level jobs in the brewing industry, and management-level jobs in the beverage industry.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BEV 1010 - Beverage Production Equipment and Maintenance **3 credit hour(s)**

  or
- BEV 1110 - Brewing Equipment and Maintenance **3 credit hour(s)**
- BEV 1100 - Beer Production and Styles **1 credit hour(s)**
- CHEM 1120 - Introduction to Chemistry **3 credit hour(s)**
- CHEM 1120L - Introduction to Chemistry Laboratory **1 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**
- HT 1111 - Guest Service Management **1 credit hour(s)**
- OSH 2016 - Occupational Safety I **1 credit hour(s)**

Term 2

- BEV 1130 - Beer Production I **3 credit hour(s)**
- BEV 1160 - Beverage Service I **3 credit hour(s)**
- BIOL 1140 - Biology for Health Sciences **3 credit hour(s)**
- BIOL 1140L - Biology for Health Sciences Lab **1 credit hour(s)**
- HRTM 1120 - Introduction to Tourism **3 credit hour(s)**

- Mathematics Requirement **3 credit hour(s)**

Term 3

- BEV 1140 - Beer Production II **3 credit hour(s)**
- BEV 1192 - Draught Systems **1 credit hour(s)**
- BIOL 2310 - Microbiology **3 credit hour(s)**
- FSTE 2110 - Food Science I **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- BEV 2010 - Beverage Product Development and Marketing **3 credit hour(s)**

  or
- BEV 2160 - Beverage Service II **3 credit hour(s)**
- HRTM 1130 - Introduction to Hospitality Management **3 credit hour(s)**
- HT 2215 - Purchasing and Cost Controls **3 credit hour(s)**
- HT 2240 - Hospitality Law **3 credit hour(s)**
- Program Approved Electives **1-3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- **Any BEV Course** (except those required for the award)
- **Any CULN Course** (except those required for the award)
- **Any HT Course** (except those required for the award)
- BEV 1096-1996 - Special Topics **1-3 credit hour(s)**
- BEV 2096-2996 - Special Topics **1-3 credit hour(s)**
- BEV 2097 - Independent Study **1-8 credit hour(s)**
- BEV 2798 - Internship **1 credit hour(s)**
- BEV 2898 - Internship **2 credit hour(s)**
- BEV 2998 - Internship **3 credit hour(s)**

Beverage Production & Management (AAS), Distilled Spirits Concentration

School of Business, Hospitality & Technology (BHT)

The Beverage Production and Management Program will prepare students for a career as beverage managers working in the beverage industry. In addition to beverage technology, students are exposed to the underlying sciences behind beverage production, including biology and chemistry courses. Students will also be introduced to purchasing, cost controls, marketing and business/hospitality law.

See Recommended Sequence of Courses

Beverage Production and Management is an excellent field for individuals seeking a challenging career in a rapidly growing industry. The associate degree is a four term program. Students will study beverage equipment and technology, beverage recipe formulation, distilling, and cellaring skills, safety, sanitation, chemistry, biology and microbiology, supervisory skills, human relations, guest services, food pairing and menu management, and other general coursework. Classes include classroom and lab time.

Educational Option Information

- This educational option is designed for: Professionals seeking the knowledge and experience necessary for management-level positions in the beverage industry.
- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in four terms.
- This educational option can be started: Fall and Spring Terms
- Primary course location: Main Campus; many class meetings will be held at commercial breweries

Special Requirements

- Students must be at least 21 years of age or older at the start of term for all BEV courses, except BEV 1160
- Students must be able to repeatedly lift 55 pounds
- Students must be able to be on their feet for 8 hours
- Students must be able to work in a hot environment for 8 hours
- Students must be willing to taste alcoholic beverages in small quantities for analysis

Additional tools or supplies required for this educational option

- Students are required to purchase uniforms, textbooks, and tools

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students completing the certificate may also receive an industry recognized credential, New Mexico alcohol server's permit, and safety certificates.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Employment Opportunities

Graduates who have earned their A.A.S. in Beverage Production & Management are well prepared for entry-level, mid-level, and management-level jobs in the beverage industry.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BEV 1010 - Beverage Production Equipment and Maintenance **3 credit hour(s)**
  or
- BEV 1110 - Brewing Equipment and Maintenance **3 credit hour(s)**
- BEV 1300 - Distilled Spirits Production and Styles **1 credit hour(s)**
- CHEM 1120 - Introduction to Chemistry **3 credit hour(s)**
- CHEM 1120L - Introduction to Chemistry Laboratory **1 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**
- HT 1111 - Guest Service Management **1 credit hour(s)**
- OSH 2016 - Occupational Safety I **1 credit hour(s)**

Term 2

- BEV 1160 - Beverage Service I **3 credit hour(s)**
- BEV 1330 - Distilled Spirits Production I **3 credit hour(s)**
- BIOL 1140 - Biology for Health Sciences **3 credit hour(s)**
- BIOL 1140L - Biology for Health Sciences Lab **1 credit hour(s)**
- HRTM 1120 - Introduction to Tourism **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 3

- BEV 1340 - Distilled Spirits Production II **3 credit hour(s)**
- BEV 1392 - Mixology **1 credit hour(s)**
- BIOL 2310 - Microbiology **3 credit hour(s)**
- FSTE 2110 - Food Science I **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- BEV 2010 - Beverage Product Development and Marketing **3 credit hour(s)**
- HRTM 1130 - Introduction to Hospitality Management **3 credit hour(s)**
- HT 2215 - Purchasing and Cost Controls **3 credit hour(s)**
- HT 2240 - Hospitality Law **3 credit hour(s)**
- Program Approved Electives **1-3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- **Any BEV Course** (except those required for the award)
- **Any CULN Course** (except those required for the award)
- **Any HT Course** (except those required for the award)
- BEV 1096-1996 - Special Topics **1-3 credit hour(s)**
- BEV 2096-2996 - Special Topics **1-3 credit hour(s)**
- BEV 2097 - Independent Study **1-8 credit hour(s)**
- BEV 2798 - Internship **1 credit hour(s)**
- BEV 2898 - Internship **2 credit hour(s)**
- BEV 2998 - Internship **3 credit hour(s)**

Beverage Production & Management (AAS), Wine Concentration

School of Business, Hospitality & Technology (BHT)

The Beverage Production and Management Program will prepare students for a career as beverage managers working in the beverage industry. In addition to beverage technology, students are exposed to the underlying sciences behind beverage production, including biology and chemistry courses. Students will also be introduced to purchasing, cost controls, marketing and business/hospitality law.

See Recommended Sequence of Courses

Beverage Production and Management is an excellent field for individuals seeking a challenging career in a rapidly growing industry. The associate degree is a four term program. Students will study beverage equipment and technology, beverage recipe formulation, wine production and cellaring skills, safety, sanitation, chemistry, biology and microbiology, supervisory skills, human relations, guest services, food pairing and menu management, and other general coursework. Classes include classroom and lab time.

Educational Option Information

- This educational option is designed for: Professionals seeking the knowledge and experience necessary for management-level positions in the beverage industry.
- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in four terms.
- This educational option can be started: Fall and Spring Terms
- Primary course location: Main Campus; many class meetings will be held at commercial

breweries

Special Requirements

- Students must be at least 21 years of age or older at the start of term for all BEV courses, except BEV 1160
- Students must be able to repeatedly lift 55 pounds
- Students must be able to be on their feet for 8 hours
- Students must be able to work in a hot environment for 8 hours
- Students must be willing to taste alcoholic beverages in small quantities for analysis

Additional tools or supplies required for this educational option

- Students are required to purchase uniforms, textbooks, and tools

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students completing the certificate may also receive an industry recognized credential, New Mexico alcohol server's permit, and safety certificates.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Employment Opportunities

Graduates who have earned their A.A.S. in Beverage Production & Management are well prepared for entry-level, mid-level, and management-level jobs in the beverage industry.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BEV 1010 - Beverage Production Equipment and Maintenance **3 credit hour(s)**

  or
- BEV 1110 - Brewing Equipment and Maintenance **3 credit hour(s)**
- BEV 1200 - Wine Production and Styles **1 credit hour(s)**
- CHEM 1120 - Introduction to Chemistry **3 credit hour(s)**
- CHEM 1120L - Introduction to Chemistry Laboratory **1 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**
- HT 1111 - Guest Service Management **1 credit hour(s)**
- OSH 2016 - Occupational Safety I **1 credit hour(s)**

Term 2

- BEV 1160 - Beverage Service I **3 credit hour(s)**
- BEV 1230 - Wine Production I **3 credit hour(s)**
- BIOL 1140 - Biology for Health Sciences **3 credit hour(s)**
- BIOL 1140L - Biology for Health Sciences Lab **1 credit hour(s)**
- HRTM 1120 - Introduction to Tourism **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 3

- BEV 1240 - Wine Production II **3 credit hour(s)**
- BEV 1292 - Food and Beverage Pairing **1 credit hour(s)**
- BIOL 2310 - Microbiology **3 credit hour(s)**
- FSTE 2110 - Food Science I **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- BEV 2010 - Beverage Product Development and Marketing **3 credit hour(s)**
- HRTM 1130 - Introduction to Hospitality Management **3 credit hour(s)**
- HT 2215 - Purchasing and Cost Controls **3 credit hour(s)**
- HT 2240 - Hospitality Law **3 credit hour(s)**
- Program Approved Electives **1-3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- **Any BEV Course** (except those required for the award)
- **Any CULN Course** (except those required for the award)
- **Any HT Course** (except those required for the award)

- BEV 1096-1996 - Special Topics **1-3 credit hour(s)**
- BEV 2096-2996 - Special Topics **1-3 credit hour(s)**
- BEV 2097 - Independent Study **1-8 credit hour(s)**
- BEV 2798 - Internship **1 credit hour(s)**
- BEV 2898 - Internship **2 credit hour(s)**
- BEV 2998 - Internship **3 credit hour(s)**

Brewing Technology, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Brewing Technology Certificate of Achievement provides students with the knowledge and skills to enter into the brewing industry in entry level positions. These courses include brewing equipment and maintenance, beer production and styles, and food safety principles. Topics include:

- Beer production & styles
- Brewing equipment & maintenance
- Draught beer technology
- Brewhouse operations
- Cellar operations
- Food safety and workplace safety

Students learn the basics of beer production and recipe formulation. Students will apply their knowledge of beer production in hands-on laboratory-style classes located both on-campus and in commercial-scale breweries. This Certificate emphasizes the knowledge of equipment, technology, and skills required of entry-level employees in commercial-scale breweries.

See Recommended Sequence of Courses

The Brewing Technology Certificate is a required part of the associate of applied science degree in brewing & beverage management.

Educational Option Information

- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in one term.
- This educational option is designed for: Professionals seeking the knowledge and experience necessary for entry-level positions in the brewing industry.
- This educational option can be started: Any term
- Primary course location: Main Campus; class meetings may be held at commercial breweries.

Special Requirements

- Students must be at least 21 years of age or older at the start of term for all BEV courses except BEV 1160
- Students must be able to repeatedly lift 55 pounds
- Students must be able to stand for the duration of the laboratory class

This program includes production, identification, and evaluation of alcoholic beverages. Students are urged to consider their ability to consume alcohol before enrolling in this program. If you have concerns about the role of alcohol consumption in this program, please contact an Advisor.

Additional tools or supplies required for this educational option

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

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Educational Opportunities

Students will have the opportunity to earn the following industry certifications: level 1 Cicerone® certificate, forklift operator certificate, New Mexico ServSafe® alcohol server's permit, ServSafe® Manager Training and Certification, and brewery safety training certificates. Students completing the certificate may pursue an associate of applied science degree in brewing & beverage management at CNM.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Both nationally and locally in New Mexico, the brewing industry continues to show a strong growth trend with new breweries opening and existing breweries expanding every year since 2006.

Breweries in New Mexico and nation-wide have expressed a strong interest in hiring trained employees who are familiar with the skills, equipment, and technology necessary for entry-level work in the brewing industry. While the Certificate emphasizes content relevant to workers in packaging, cellaring, and brewhouse roles of a brewery, the Certificate would also provide important background knowledge for affiliated jobs, including:

- Beverage wholesalers
- Beverage retailers
- Beverage servers
- Draft technicians
- Brewery owners and managers

Ten Year Rule for CTE Courses

Career and technical education courses in this program

will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BEV 1010 - Beverage Production Equipment and Maintenance **3 credit hour(s)**

  or

- BEV 1110 - Brewing Equipment and Maintenance **3 credit hour(s)**

- BEV 1100 - Beer Production and Styles **1 credit hour(s)**
- BEV 1130 - Beer Production I **3 credit hour(s)**
- BEV 1140 - Beer Production II **3 credit hour(s)**
- BEV 1192 - Draught Systems **1 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**
- OSH 2016 - Occupational Safety I **1 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 16

Program Approved Electives

- **Any BEV Course** (except those required for the award)
- **Any CULN Course** (except those required for the award)
- **Any HT Course** (except those required for the award)
- BEV 1096-1996 - Special Topics **1-3 credit hour(s)**
- BEV 2096-2996 - Special Topics **1-3 credit hour(s)**
- BEV 2097 - Independent Study **1-8 credit hour(s)**
- BEV 2798 - Internship **1 credit hour(s)**
- BEV 2898 - Internship **2 credit hour(s)**
- BEV 2998 - Internship **3 credit hour(s)**

Distilled Spirits Technology, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Distilled Spirits Technology Certificate of Completion provides students with the knowledge and skills to enter into the distilled spirits industry in entry level positions. Topics include:

- Distilled Spirits production & styles
- Distilled Spirits equipment & maintenance
- Distillery operations
- Food safety and workplace safety

Students will apply their knowledge of distilled spirits production in hands-on laboratory-style classes located both on-campus and in commercial-scale distilleries. This Certificate emphasizes the knowledge of equipment, technology, and skills required of entry-level employees in commercial-scale distilleries.

The Distilled Spirits Technology Certificate is a required part of the associate of applied science degree in Beverage Production and Management Distilled Spirits Concentration.

Educational Option Information

- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in one term.
- This educational option is designed for: Professionals seeking the knowledge and experience necessary for entry-level positions in the distilled spirits industry.
- This educational option can be started: Any term
- Primary course location: Main Campus; class meetings may be held at commercial distilleries.

Special Requirements

- Students must be at least 21 years of age or older at the start of term for all BEV courses except BEV 1160
- Students must be able to repeatedly lift 55 pounds
- Students must be able to stand for the duration of the laboratory class

This program includes production, identification, and evaluation of alcoholic beverages. Students are urged to consider their ability to consume alcohol before enrolling in this program. If you have concerns about the role of alcohol consumption in this program, please contact an Advisor.

Additional tools or supplies required for this educational option

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

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students will have the opportunity to earn the following industry certifications: New Mexico ServSafe® alcohol server's permit, ServSafe® Manager Training and Certification, and distillery safety training certificates. Students completing the certificate may pursue an

associate of applied science degree in Beverage Production and Management, Distilled Spirits Concentration at CNM.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Both nationally and locally in New Mexico, the distilled spirits industry continues to show a strong growth trend with new distilleries opening and existing distilleries expanding.

Distilleries in New Mexico and nation-wide have expressed a strong interest in hiring trained employees who are familiar with the skills, equipment, and technology necessary for entry-level work in the distilled spirits industry. While the Certificate emphasizes content relevant to workers in packaging and production roles of a distillery, the Certificate would also provide important background knowledge for affiliated jobs, including:

- Beverage wholesalers
- Beverage retailers
- Beverage servers
- Distillery owners and managers

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BEV 1010 - Beverage Production Equipment and Maintenance **3 credit hour(s)**

  or

- BEV 1110 - Brewing Equipment and Maintenance **3 credit hour(s)**

- BEV 1300 - Distilled Spirits Production and Styles **1 credit hour(s)**
- BEV 1330 - Distilled Spirits Production I **3 credit hour(s)**
- BEV 1340 - Distilled Spirits Production II **3 credit hour(s)**
- BEV 1392 - Mixology **1 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- OSH 2016 - Occupational Safety I **1 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 16

Program Approved Electives

- **Any BEV Course** (except those required for the award)
- **Any CULN Course** (except those required for the award)
- **Any HT Course** (except those required for the award)
- BEV 1096-1996 - Special Topics **1-3 credit hour(s)**
- BEV 2096-2996 - Special Topics **1-3 credit hour(s)**
- BEV 2097 - Independent Study **1-8 credit hour(s)**
- BEV 2798 - Internship **1 credit hour(s)**
- BEV 2898 - Internship **2 credit hour(s)**
- BEV 2998 - Internship **3 credit hour(s)**

Wine Technology, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Wine Technology Certificate of Completion provides students with the knowledge and skills to enter into the wine industry in entry level positions. Topics include:

- Wine production & styles
- Wine equipment & maintenance
- Winery operations
- Cellar operations
- Food safety and workplace safety

Students will apply their knowledge of wine production in hands-on laboratory-style classes located both on-campus and in commercial-scale wineries. This Certificate emphasizes the knowledge of equipment, technology, and skills required of entry-level employees in commercial-scale wineries.

The Wine Technology Certificate is a required part of the associate of applied science degree in Beverage Production and Management, Wine Concentration.

Educational Option Information

- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in one term.
- This educational option is designed for: Professionals seeking the knowledge and experience necessary for entry-level positions in the wine industry.
- This educational option can be started: Any term
- Primary course location: Main Campus; class meetings may be held at commercial wineries.

Special Requirements

- Students must be at least 21 years of age or older at the start of term for all BEV courses except BEV 1160
- Students must be able to repeatedly lift 55 pounds
- Students must be able to stand for the duration of the laboratory class

This program includes production, identification, and evaluation of alcoholic beverages. Students are urged to consider their ability to consume alcohol before enrolling in this program. If you have concerns about the role of alcohol consumption in this program, please contact an Advisor.

Additional tools or supplies required for this educational option

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

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students will have the opportunity to earn the following industry certifications: New Mexico ServSafe® alcohol server's permit, ServSafe® Manager Training and Certification, and distillery safety training certificates. Students completing the certificate may pursue an associate of applied science degree in Beverage Production and Management, Distilled Spirits Concentration at CNM.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Both nationally and locally in New Mexico, the wine industry continues to show a strong growth trend with new wineries opening and existing wineries expanding.

Wineries in New Mexico and nation-wide have expressed a strong interest in hiring trained employees who are familiar with the skills, equipment, and technology necessary for entry-level work in the wine industry. While the Certificate emphasizes content relevant to workers in packaging, cellaring, and production roles of a winery, the Certificate would also provide important background knowledge for affiliated jobs, including:

- Beverage wholesalers
- Beverage retailers
- Beverage servers
- Winery owners and managers

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Course

Term 1

- BEV 1010 - Beverage Production Equipment and Maintenance **3 credit hour(s)**

  or

- BEV 1110 - Brewing Equipment and Maintenance **3 credit hour(s)**

- BEV 1200 - Wine Production and Styles **1 credit hour(s)**
- BEV 1230 - Wine Production I **3 credit hour(s)**
- BEV 1240 - Wine Production II **3 credit hour(s)**
- BEV 1292 - Food and Beverage Pairing **1 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- OSH 2016 - Occupational Safety I **1 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 16

Program Approved Electives

- **Any BEV Course** (except those required for the award)
- **Any CULN Course** (except those required for the award)
- **Any HT Course** (except those required for the award)
- BEV 1096-1996 - Special Topics **1-3 credit hour(s)**
- BEV 2096-2996 - Special Topics **1-3 credit hour(s)**
- BEV 2097 - Independent Study **1-8 credit hour(s)**
- BEV 2798 - Internship **1 credit hour(s)**
- BEV 2898 - Internship **2 credit hour(s)**
- BEV 2998 - Internship **3 credit hour(s)**

BIOLOGY

Biology, Associate of Science

School of Math, Science & Engineering (MSE)

Students majoring in biology examine the structure and function of the living world. Interested students can learn about career opportunities and pathways in Biology and related fields from the American Institute of Biological Sciences.

The program is designed to meet the requirements for an Associate of Science in Biology from CNM and prepare

a student to obtain a Bachelor of Science in Biology at the University of New Mexico. However, students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students interested in transfer to UNM should consult the UNM Biology department. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements. College catalogs are generally available online. Students should also consult an Advisor at CNM.

Educational Option Information

- This educational option is an: Associate of Science Degree
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program.
- This educational option can be started: Any Term
- Follow course catalog recommendations to avoid scheduling problems.
- Primary course location: Main Campus

Special Requirements

Students are expected to purchase textbooks, lab manuals and lab safety equipment.

Information for people with felony convictions

- A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 5 **or** Math Skills 6
- **Reading and Writing Skills 2**

Courses

Term 1

- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**
- BIOL 2110L - Principles of Biology: Cellular and Molecular Biology Lab **1 credit hour(s)**
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- BIOL 2410 - Principles of Biology: Genetics **3 credit hour(s)**
- BIOL 2410L - Principles of Biology: Genetics Lab **1 credit hour(s)**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- CHEM 1225L - General Chemistry II Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**

Term 3

- MATH 1430 - Applications of Calculus I **3 credit hour(s)**

  or
- MATH 1510 - Calculus I **4 credit hour(s)**
- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**

  or
- PHYS 1310 - Calculus-Based Physics I **4 credit hour(s)**
- Program Approved Communications Elective **3 credit hour(s)**
- Program Approved Electives (Labs Recommended) **3 credit hour(s) ****
- Unrestricted Elective **3 credit hour(s)**

Term 4

- Creative and Fine Arts Requirement **3 credit hour(s)**
- MATH 1440 - Applications of Calculus II **3 credit hour(s)**

  or
- MATH 1520 - Calculus II **4 credit hour(s)**
- PHYS 1240 - Algebra-Based Physics II **4 credit hour(s)**

  or
- PHYS 1320 - Calculus-Based Physics II **4 credit hour(s)**
- Unrestricted Elective **6 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Notes

Additional courses beyond the AS Degree requirements may be taken at CNM and applied toward a four year degree program. This coursework includes:

- an additional Humanities/Fine Arts or Social/ Behavioral Science General Education course (3 credit hour(s)
- CHEM 2130 - Organic Chemistry I 3 credit hour(s) *
- CHEM 2130L - Organic Chemistry I Laboratory 1 credit hour(s) *

*These courses will fulfill the equivalent 300-level Organic Chemistry degree requirement at UNM, but will not transfer to UNM as upper division courses. These classes cannot be used to fulfill UNM's minimum upper division credit hour requirement for Bachelor degrees.

**Students should contact their intended transfer institution to determine the transferability of these courses.

This information is meant to serve as a general guide for students intending to major in Biology. Specific requirements for transfer will vary from school to school. It is the student's responsibility to contact the four year transfer school to confirm specific admission and degree requirements.

- Program Approved Communications Elective
- COMM 1130 - Public Speaking **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**

** Program Approved Electives

- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
- BIOL 2210L - Human Anatomy and Physiology I Lab **1 credit hour(s)**
- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
- BIOL 2225L - Human Anatomy and Physiology II Lab **1 credit hour(s)**
- BIOL 2710 - Biotechnology I **4 credit hour(s)**
- BIOL 2715 - Biotechnology II **4 credit hour(s)**
- BIOL 2720 - Biotechnology III **3 credit hour(s)**

BIOTECHNOLOGY

Biotechnology, Associate of Science

School of Math, Science & Engineering (MSE)

The Biotechnology Program prepares students for transfer to a four year program in Biology with a concentration in the dynamic and exciting field of Biotechnology. Four year degree graduates can expect to compete for positions as biotechnicians where they will use cutting-edge technology to uncover the molecular causes of disease, develop new drugs and therapies, enhance agricultural products or remediate environmental problems. Biotechnicians conduct research experiments, run assays, operate lab equipment, and help manage laboratory activities by maintaining records, performing data analysis, and establishing and maintaining quality controls. Students in the Biotechnology Program build knowledge and skills through a program of lectures and hands-on laboratory experience. Laboratory techniques include molecular biology, recombinant DNA, protein isolation and analysis, immunology and cell culture skills.

The Associate of Science degree is designed for students who wish to acquire the skills necessary to work in the field of biotechnology. Students will receive classroom training in the fundamentals of biology and chemistry, as well as skills taught in biotechnology core courses. The majority of the coursework is intended to fulfill the basic introductory requirements of a Bachelor of Science degree at a four year institution. The specific biotechnology coursework is intended to supplement that coursework with skills and abilities that will provide graduates with a competitive edge when seeking employment or applying for graduate programs. An articulation agreement between CNM and the University of New Mexico allows all CNM biotechnology coursework to be applied to the UNM Bachelor of Science degree in Biology and constitutes a concentration in Biotechnology.

Educational Option Information

- This educational option is an Associate of Science Degree
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program
- This educational option can be started: Any Term
- Follow course catalog recommendations to avoid scheduling problems.
- Primary course location: Montoya Campus

Special Requirements

Biotechnology core courses must be taken in sequence. Please note the following:

- BIOL 2710 is typically offered in Fall term.
- BIOL 2715 is typically offered in Spring term.
- BIOL 2720 is typically offered in Summer term.

Students are expected to purchase textbooks, lab manuals, lab notebooks, a lab coat and lab safety equipment.

Information for people with felony convictions

- A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Prospects for Employment

- Biotechnology is an emerging industry nationally, and as the bioscience industry continues to grow, so will the opportunities for biotechnicians.

Sample Job Duties

- Biotechnicians are employed in areas such as basic science research, clinical research, industrial research and development, pharmaceuticals, agricultural engineering and environmental science. Most Biology graduates with a four year degree and concentration in Biotechnology will find work in the first three fields because these are the most common biotechnology industries found in New Mexico.

Current pay rates

- In New Mexico, entry level salaries start at $15/hour for B.S. degree technicians. Salaries for experienced biotechnicians can reach $20+/hour.

Program Requirements

- Math Skills 5 **or** Math Skills 6
- **Reading and Writing Skills 2**

Courses

Term 1

- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**
- BIOL 2110L - Principles of Biology: Cellular and Molecular Biology Lab **1 credit hour(s)**

  or
- BIOL 2310 - Microbiology **3 credit hour(s)**
- BIOL 2310L - Microbiology Lab **1 credit hour(s)**
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Multi-Discipline/Flexible Requirement **3 credit hour(s)**

Term 2

- BIOL 2410 - Principles of Biology: Genetics **3 credit hour(s)**
- BIOL 2410L - Principles of Biology: Genetics Lab **1 credit hour(s)**
- BIOL 2710 - Biotechnology I **4 credit hour(s)**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- CHEM 1225L - General Chemistry II Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- MATH 1430 - Applications of Calculus I **3 credit hour(s)**

  or
- MATH 1510 - Calculus I **4 credit hour(s)**

Term 3

- BIOL 2715 - Biotechnology II **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- MATH 1440 - Applications of Calculus II **3 credit hour(s)**

  or
- MATH 1520 - Calculus II **4 credit hour(s)**
- Unrestricted Elective **3 credit hour(s)**

Term 4

- BIOL 2720 - Biotechnology III **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- Program Approved Communications Elective **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**
- Unrestricted Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

- Program Approved Communications Elective
- COMM 1130 - Public Speaking **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**

Biotechnology, Certificate of Completion

School of Math, Science & Engineering (MSE)

The Biotechnology Program prepares students for transfer to a four year program in Biology with a concentration in the dynamic and exciting field of biotechnology. Four year degree graduates can expect to compete for positions as biotechnicians where they will use cutting-edge technology to uncover the molecular causes of disease, develop new drugs and therapies, enhance agricultural products or remediate environmental problems. Biotechnicians conduct research experiments, run assays, operate lab equipment, and help manage laboratory activities by maintaining records, performing data analysis, and establishing and maintaining quality controls. Students in the Biotechnology Program build knowledge and skills through a program of lectures and hands-on laboratory experience. Laboratory techniques include molecular biology, recombinant DNA, protein isolation and analysis, immunology and cell culture skills.

The Certificate in Biotechnology is designed for students who wish to acquire or upgrade their hands-on laboratory skills in biotechnology. The certificate is composed solely of foundational biology and chemistry courses and biotechnology core courses. The certificate is intended to supplement the education of CNM students pursuing the Associate of Science in Biology or students pursuing a Bachelor of Science degree at a four year institution.

The Certificate of Completion is also designed for students who wish to acquire the skills necessary to work in the field of biotechnology. Students will receive classroom training in the fundamentals of biology and chemistry, as well as skills taught in biotechnology core courses. The specific biotechnology coursework is intended to supplement a basic biology curriculum with skills and abilities that will provide graduates with a competitive edge when seeking employment or applying for graduate programs. An articulation agreement between CNM and the University of New Mexico allows all CNM biotechnology coursework to be applied to the UNM Bachelor of Science degree in Biology and constitutes a concentration in Biotechnology.

Educational Option Information

- This educational option is a Certificate of Completion Program
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program
- This educational option can be started: Any Term
- Follow course catalog recommendations to avoid scheduling problems.
- Primary course location: Montoya Campus

Special Requirements

Biotechnology core courses must be taken in sequence. Please note the following:

- BIOL 2710 is typically offered in Fall term.
- BIOL 2715 is typically offered in Spring term.
- BIOL 2720 is typically offered in Summer term.

Students are expected to purchase textbooks, lab manuals, lab notebooks, a lab coat and lab safety equipment.

Information for people with felony convictions

- A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this degree are transferable and some may be applied to four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Prospects for Employment

- Biotechnology is an emerging industry nationally, and as the bioscience industry continues to grow, so will the opportunities for biotechnicians.

Sample Job Duties

- Biotechnicians are employed in areas such as basic science research, clinical research, industrial research and development, pharmaceuticals, agricultural engineering and environmental science. Most Biology graduates with a four year degree and concentration in Biotechnology will find work in the first three fields because these are the most common biotechnology industries found in New Mexico.

Current pay rates

- In New Mexico, entry level salaries start at $15/hour for B.S. degree technicians. Salaries for experienced biotechnicians can reach $20+/hour.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**
- BIOL 2110L - Principles of Biology: Cellular and Molecular Biology Lab **1 credit hour(s)**

  or
- BIOL 2310 - Microbiology **3 credit hour(s)**
- BIOL 2310L - Microbiology Lab **1 credit hour(s)**
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- Mathematics Requirement **3 credit hour(s) (MATH 1220 or MATH 1220P recommended) ***

Term 2

- BIOL 2410 - Principles of Biology: Genetics **3 credit hour(s)**
- BIOL 2410L - Principles of Biology: Genetics Lab **1 credit hour(s)**
- BIOL 2710 - Biotechnology I **4 credit hour(s)**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- CHEM 1225L - General Chemistry II Laboratory

for STEM Majors **1 credit hour(s)**

Term 3

- BIOL 2715 - Biotechnology II **4 credit hour(s)**

Term 4

- BIOL 2720 - Biotechnology III **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 30

*** MATH 1220/MATH 1220P is a prerequisite for CHEM 1225.**

BUSINESS

Business Administration (AAS), Business Administration Concentration

School of Business, Hospitality & Technology (BHT)

The Business Administration program provides opportunities for the business leaders of tomorrow to achieve a high-quality, high-value education that enables them to succeed in a competitive market. Students participate in hands-on experiences, community projects and conduct real-world research.

Students use technology and business concepts such as accounting, business law, entrepreneurship, management, marketing and professionalism, to work in teams, solve business problems and make decisions. A number of the Business Administration courses are offered online. There are a total of five concentrations under this AAS degree.

The associate degree is also available in a cohorted fast track program. Contact the Business, Hospitality & Technology for more information.

Educational Option Information

- This educational option is an: Associate of Applied Science Degree
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program
- This educational option can be started: Any Term
- Primary course location: Main, Montoya, Westside, Rio Rancho, and online
- Special Requirements: Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this degree are transferable and some may be applied to four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

- Note: Students who plan to transfer to a four-year business program are encouraged to meet with an advisor, program chair or associate dean during their first term.

Career Opportunities

The Business Administration AAS Degree can lead to employment in both the public and private sectors. Business graduates are commonly needed in advertising, marketing, entrepreneurship, human resources, sales, real estate, retail, manufacturing, small business management and supervision.

Sample job titles include: administrative support, manager, team leader, entrepreneur, project manager, supervisor.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**

  or
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**

Term 2

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BUSA 2120 - Introduction to Global Business **3 credit hour(s)**
- ENTR 1110 - Entrepreneurship **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- MGMT 2110 - Principles of Management **3 credit**

hour(s)

Term 3

- ACCT 2120 - Principles of Accounting II **3 credit hour(s)**
- BLAW 2110 - Business Law I **3 credit hour(s)**
- BUSA 2240 - Customer Service in Business **3 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**
- MKTG 2110 - Principles of Marketing **3 credit hour(s)**

Term 4

- BUSA 2220 - Human Resource Management **3 credit hour(s)**
- BUSA 2460 - Business Ethics **3 credit hour(s)**
- BUSA 2999 - Business Capstone **1 credit hour(s)**
- ECON 2110 - Macroeconomic Principles **3 credit hour(s)**
  or
- ECON 2120 - Microeconomic Principles **3 credit hour(s)**
- Mathematics Requirement **3-4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

Program Approved Electives

- **Any BUSA, ENTR, MGMT, MKTG and BLAW course not specified in the above program requirements**
- **Any BCIS, CIS or FDMA course**
- **Any BFIN course**
- **Any HT course**
- ACCT 1150 - QuickBooks **3 credit hour(s)**
- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**
- BUSA 1996 - Special Topics in Business **1-3 credit hour(s) ***
- BHT 1005 - Survey of Business, Hospitality & Technology **3 credit hour(s)**
- IT 1004 - Computer and Keyboarding Basics **3 credit hour(s)**
- OTEC 1170 - Business Telephone Techniques **1 credit hour(s)**

*** Maximum 3 Special Topics credits allowed toward degree**

Business Administration (AAS), Entrepreneurship Concentration

School of Business, Hospitality & Technology (BHT)

The Business Administration program provides opportunities for the business leaders of tomorrow to achieve a high-quality, high-value education that enables them to succeed in a competitive market. Students participate in hands-on experiences, community projects and conduct real-world research.

In the Entrepreneurship Concentration students will focus on studying the skills necessary to be successful in starting and managing a new business.

Students use technology and business concepts such as accounting, business law, entrepreneurship, management, marketing and professionalism, to work in teams, solve business problems and make decisions. A number of the Business Administration courses are offered online.

Educational Option Information

- This educational option is an: Associate of Applied Science Degree
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program
- This educational option can be started: Any Term
- Primary course location: Main, Montoya, Westside, Rio Rancho, and online
- Special Requirements: Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this degree are transferable and some may be applied to four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

- Note: Students who plan to transfer to a four-year business program are encouraged to meet with an advisor, program chair or associate dean during their first term.

Career Opportunities

The Business Administration AAS Degree can lead to employment in both the public and private sectors. Business graduates are commonly needed in advertising, marketing, entrepreneurship, human resources, sales, real estate, retail, manufacturing, small business management and supervision.

Sample job titles include: administrative support, manager, team leader, entrepreneur, project manager, supervisor.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional

demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**

- BUSA 1115 - Business English I **3 credit hour(s)**

  or
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**

Term 2

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BUSA 2180 - Introduction to E-Commerce **3 credit hour(s)**
- ENTR 1110 - Entrepreneurship **3 credit hour(s)**
- MGMT 2110 - Principles of Management **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**

Term 3

- ACCT 2120 - Principles of Accounting II **3 credit hour(s)**
- BLAW 2110 - Business Law I **3 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**
- ENTR 2110 - Small Business Management **3 credit hour(s)**
- MKTG 2110 - Principles of Marketing **3 credit hour(s)**

Term 4

- ACCT 1150 - QuickBooks **3 credit hour(s)**
- BUSA 2220 - Human Resource Management **3 credit hour(s)**
- BUSA 2460 - Business Ethics **3 credit hour(s)**
- BUSA 2999 - Business Capstone **1 credit hour(s)**

- ECON 2110 - Macroeconomic Principles **3 credit hour(s)**

  or
- ECON 2120 - Microeconomic Principles **3 credit hour(s)**

- Mathematics Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

Business Administration (AAS), Project Management Concentration

School of Business, Hospitality & Technology (BHT)

The Business Administration program provides opportunities for the business leaders of tomorrow to achieve a high-quality, high-value education that enables them to succeed in a competitive market. Students participate in hands-on experiences, community projects and conduct real-world research.

In the Project Management Concentration students will focus on studying contract management, scheduling, estimating, critical path scheduling, and project oversight in order to be successful Project Managers of tomorrow.

Students use technology and business concepts such as accounting, business law, entrepreneurship, management, marketing and professionalism, to work in teams, solve business problems and make decisions. A number of the Business Administration courses are offered online.

Educational Option Information

- This educational option is an: Associate of Applied Science Degree
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program
- This educational option can be started: Any Term
- Primary course location: Main, Montoya, Westside, Rio Rancho, and online
- Special Requirements: Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this degree are transferable and some may be applied to four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

- Note: Students who plan to transfer to a four-

year business program are encouraged to meet with an advisor, program chair or associate dean during their first term.

Career Opportunities

The Business Administration AAS Degree can lead to employment in both the public and private sectors. Business graduates are commonly needed in advertising, marketing, entrepreneurship, human resources, sales, real estate, retail, manufacturing, small business management and supervision.

Sample job titles include: administrative support, manager, team leader, entrepreneur, project manager, supervisor.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**

- BUSA 1115 - Business English I **3 credit hour(s)**
  or
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- BUSA 1198 - Project Management Fundamentals **3 credit hour(s)**

Term 2

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BUSA 2100 - Agile Project Management **3 credit hour(s)**
- BUSA 2170 - Quality Management **3 credit hour(s)**

Term 3

- BLAW 2110 - Business Law I **3 credit hour(s)**
- BUSA 2195 - Budget and Resource Management **3 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- MGMT 2110 - Principles of Management **3 credit hour(s)**

Term 4

- BUSA 2198 - Project Management Applications **3 credit hour(s)**
- BUSA 2220 - Human Resource Management **3 credit hour(s)**
- BUSA 2460 - Business Ethics **3 credit hour(s)**
- BUSA 2999 - Business Capstone **1 credit hour(s)**

- ECON 2110 - Macroeconomic Principles **3 credit hour(s)**
  or
- ECON 2120 - Microeconomic Principles **3 credit hour(s)**

- Mathematics Requirement **3 - 4 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

Business Administration (AAS), Retail Management Concentration

School of Business, Hospitality & Technology (BHT)

The Business Administration program provides opportunities for the business leaders of tomorrow to achieve a high-quality, high-value education that enables them to succeed in a competitive market. Students participate in hands-on experiences, community projects and conduct real-world research.

In the Retail Management Concentration students will focus on studying retail management fundamentals, business professionalism, human resources management and marketing. Additionally, students will acquire skills related to the application of these concepts that are developed through the study of computer applications, communication, team building and decision making.

Students use technology and business concepts such as accounting, business law, entrepreneurship, management, marketing and professionalism, to work in teams, solve business problems and make decisions. A number of the Business Administration courses are offered online.

Educational Option Information

- This educational option is an: Associate of Applied Science Degree
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program
- This educational option can be started: Any Term
- Primary course location: Main, Montoya, Westside, Rio Rancho, and online
- Special Requirements: Students must have

access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this degree are transferable and some may be applied to four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

- Note: Students who plan to transfer to a four-year business program are encouraged to meet with an advisor, program chair or associate dean during their first term.

Career Opportunities

The Business Administration AAS Degree can lead to employment in both the public and private sectors. Business graduates are commonly needed in advertising, marketing, entrepreneurship, human resources, sales, real estate, retail, manufacturing, small business management and supervision.

Sample job titles include: administrative support, manager, team leader, entrepreneur, project manager, supervisor.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**

  or
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**

Term 2

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BUSA 2170 - Quality Management **3 credit hour(s)**
- BUSA 2240 - Customer Service in Business **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- MGMT 2110 - Principles of Management **3 credit hour(s)**

Term 3

- ACCT 2120 - Principles of Accounting II **3 credit hour(s)**
- BLAW 2110 - Business Law I **3 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**
- MKTG 2110 - Principles of Marketing **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 4

- BUSA 2220 - Human Resource Management **3 credit hour(s)**
- BUSA 2330 - Retail Management **3 credit hour(s)**
- BUSA 2460 - Business Ethics **3 credit hour(s)**
- BUSA 2999 - Business Capstone **1 credit hour(s)**
- ECON 2110 - Macroeconomic Principles **3 credit hour(s)**

  or
- ECON 2120 - Microeconomic Principles **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

Program Approved Electives

- **Any BUSA, ENTR, MGMT, MKTG and BLAW course not specified in the above program requirements**
- **Any BCIS, CIS or FDMA course**
- **Any BFIN course**
- **Any HT course**
- ACCT 1150 - QuickBooks **3 credit hour(s)**
- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**
- BUSA 1996 - Special Topics in Business **1-3 credit hour(s) ***
- BHT 1005 - Survey of Business, Hospitality & Technology **3 credit hour(s)**
- OTEC 1170 - Business Telephone Techniques **1 credit hour(s)**

*** Maximum 3 Special Topics credits allowed towards degree**

Business Administration, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Business Administration Certificate of Completion provides entry-level skills for students considering business careers. Students participate in hands-on experiences, community projects and conduct real-world research.

Students use technology and business concepts such as accounting, business law, entrepreneurship, management, marketing and professionalism, to work in teams, solve business problems and make decisions.

Educational Option Information

- This educational option is a: Certificate of Completion
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Students who have completed an associates or bachelor's degree and wish to complete coursework to enter into the Business Analytics profession. .
- This educational option can be started: Any term
- Primary Course Location: Main, Montoya, Westside, and Rio Rancho Campuses, and online
- Special Requirements: Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

* Note: Students who plan to transfer to a four-year business program are encouraged to meet with an advisor, program chair or associate dean during their first term.

Career Opportunities

The Business Administration Certificate of Completion can lead to employment in both the public and private sectors. Business graduates are commonly needed in advertising, marketing, entrepreneurship, human resources, sales, real estate, retail, manufacturing, small business management and supervision.

Sample job titles include: Business Analytics Associate, Associate Business Analyst, Associate Analyst, Network Analyst, Data Analyst

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**

or

- ENGL 1110 - Composition I **3 credit hour(s)**

or

- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**
- Program Approved Electives **3 credit hour(s)**

Term 2

- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BLAW 2110 - Business Law I **3 credit hour(s)**
- BUSA 2240 - Customer Service in Business **3 credit hour(s)**
- Program Approved Electives **6 credit hour(s)**

Minimum Credit Hours to Complete Certificate
30

Program Approved Electives

- **Any BUSA class not specified in the above program requirements**
- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- ACCT 2120 - Principles of Accounting II **3 credit hour(s)**
- BFIN 2110 - Introduction to Finance **3 credit hour(s)**
- ENTR 1110 - Entrepreneurship **3 credit hour(s)**
- ENTR 2110 - Small Business Management **3**

credit hour(s)
- HIT 1020 - Medical Terminology and Anatomy **3 credit hour(s)**
- MKTG 2110 - Principles of Marketing **3 credit hour(s)**
- MGMT 2110 - Principles of Management **3 credit hour(s)**

Business Intelligence, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

For the Business Intelligence Certificate, students will complete coursework in business analytics that includes general theory, best practices, data mining, data warehousing, predictive modeling, project management, statistical analysis and software packages. Students also build related skills in business communication, critical thinking, and decision making.

This certificate is ideal for students coming to CNM with AA/AAS/BS degrees who wish to do the core technical course work for this area.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is an: Certificate Of Completion
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Students who have completed an associates or bachelor's degree and wish to complete coursework to enter into the Business Intelligence profession.
- This educational option can be started: Any Term
- Primary course location: Main, Montoya, Westside, Rio Rancho, and online
- Special Requirements: Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

The Business Intelligence Certificate of Completion can lead to employment in both the public and private sectors. Graduates will support business decision-makers by using data modeling techniques and processes.

Sample job titles include: Business Analytics Associate, Associate Business Analyst, Associate Analyst, Network Analyst, Data Analyst

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BCIS 1340 - Data Concepts **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**

or

- Mathematics Requirement **3 credit hour(s)**

Term 2

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BCIS 1350 - Database Analysis and Design **3 credit hour(s)**
- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**

Term 3

- CIST 2321 - Visual Analytics **3 credit hour(s)**
- CIST 2331 - Predictive Analytics **3 credit hour(s)**
- CIST 2210 - Introduction to SQL (Structured Query Language) **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 27

Business, Associate of Arts

School of Business, Hospitality & Technology (BHT)

This Associate of Arts degree is 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. Click here for Transfer agreements.

Students should communicate with the School of Business, Hospitality & Technology 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.

Educational Option Information

- This educational option is an: Associate of Arts Degree
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program
- This educational option can be completed: Part-time or full-time
- This educational option can be started: Any term
- Primary course location: :Main campus, Montoya campus, and many courses are online

Special requirements

- Contact the School of Business, Hospitality & Technology and transfer institution(s) to determine if additional courses are required or accepted toward specific four-year graduation requirements.
- UNM: It is recommended that students coordinate their choice of classes with the Anderson School of Management (ASM) pre-admission requirements listed on the ASM website bba.mgt.unm.edu/admissions/requirements.asp. Students should contact the ASM admissions office one to two semesters prior to their expected start date to begin the application process.
- NMHU: Students should contact NMHU in Rio Rancho one to two semesters prior to their expected start date to begin the application process.

Information for people with felony convictions

- A felony conviction will not prevent entry into the program or employment; however, if may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Additional Courses: Contact the School of Business, Hospitality & Technology and transfer institution(s) to determine if additional courses are required or accepted toward specific four-year graduation requirements.

Transfer Information

UNM: It is recommended that students coordinate their choice of classes with the Anderson School of Management (ASM) pre-admission requirements listed on the ASM website. Students should contact the ASM admissions office one to two semesters prior to their expected start date to begin the application process.

NMHU: Students should contact NMHU one to two semesters prior to their expected start date to begin the application process.

Career Opportunities

- Careers that may require a bachelor's degree in business range widely and included accounting, financial analysts, personal financial advisors, employment, recruitment and placement specialists, insurance sales agents and marketing and management, to name a few.

Potential employers for this educational option

- Most businesses, governmental and non-profit organizations employ individuals with business degrees.

Prospects for employment

- The U.S. Department of Labor/Bureau of Statistics predicts that the demand for professionals in many of these areas is strong and is expected to remain so over the new few years.

Sample job titles for this educational option:

- Accountant, financial analysts, personal financial advisors, employment, recruitment and placement specialists, insurance sales agents and marketing and management.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- MATH 1220 - College Algebra **3 credit hour(s)**

or

- MATH 1220P - College Algebra Plus **4 credit hour(s)**

  or
- MATH 1240 - Pre-Calculus **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s) ***

Term 2

- Communications Requirement **3 credit hour(s)**
- ECON 2110 - Macroeconomic Principles **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- MATH 1430 - Applications of Calculus I **3 credit hour(s) (or higher level calculus)**

Term 3

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- Business Program Elective **3 credit hour(s)**

  or
- Multi-Discipline/Flexible Requirement **3 credit hour(s)**
- ECON 2120 - Microeconomic Principles **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s) ****

  or
- ENGL 2120 - Intermediate Composition **3 credit hour(s)**
- MATH 1350 - Introduction to Statistics **3 credit hour(s)**

  or
- MATH 1350P - Introduction to Statistics Plus **4 credit hour(s)**

Term 4

- ACCT 2120 - Principles of Accounting II **3 credit hour(s)**
- BLAW 2110 - Business Law I **3 credit hour(s)**
- Business Program Elective **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

* UNM requires PSYC 1110 or SOCI 1110.

** ENGL 2210 recommended for transfer to 4-year schools.

- Business Program Electives
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- MGMT 2110 - Principles of Management **3 credit hour(s)**
- MKTG 2110 - Principles of Marketing **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Customer Service, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

This certificate applies customer relations principles to aid students in being successful Customer Service Representatives. Students learn essential writing skills, business professionalism skills and telephone techniques.

Educational Option Information

- This educational option is a: Certificate of Completion
- This educational option can be completed: Part-time or full-time
- This educational option is designed for: Preparation for immediate employment
- This educational option can be started: Any term
- Primary course location: Main, Montoya, Westside and Rio Rancho Campuses, and online

Special Requirements

- Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The Customer Service certificate courses may be applied to an Associate of Applied Science degree in Business Administration.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Note: Students who plan to transfer to a four-year business program are encouraged to meet with the program chair or associate dean during their first term.

Career Opportunities

Career opportunities with a Customer Service Representative Certificate of Completion are available in both the public and private sectors, including but not limited to retail companies, high-tech companies and small businesses.

Employment opportunities are available in industries that require management, communication and professional behavior skills.

Job titles may include: Customer Service Representative, Client Relations Representative, Call Center Representative, and Online Support Specialist.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- BUSA 1130 - Business Professionalism **3 credit hour(s)**
  or
- ESOL 1030 - U.S. Culture and Contemporary Issues for Specific Purposes **3 credit hour(s)**

- BUSA 2240 - Customer Service in Business **3 credit hour(s)**
- OTEC 1170 - Business Telephone Techniques **1 credit hour(s)**
- Program Approved Electives **6 credit hour(s)**
- Written Communication Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 16

Program Approved Electives

- **Any BA, BUSA, ENTR, MGMT, MKTG and BLAW course (not used for this certificate)**
- **Any HT course**
- **Any SPAN course**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**
- ESOL 1001 - Academic and Workplace Communication for Specific Purposes **3 credit hour(s)**
- ESOL 1010 - Reading and Vocabulary for Specific Purposes **3 credit hour(s)**
- Written Communication Requirement
- BUSA 1115 - Business English I **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**
- ESOL 1020 - English Composition and Grammar for Specific Purposes **4 credit hour(s)**

Digital Marketing, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

Students will complete hands-on digital media coursework, and explore business and marketing strategies to gain the skills to assist organizations with their social media marketing presence. Digital storytelling, web marketing and project management round out this curriculum. This program was developed in conjunction with industry partners including Facebook.

Educational Option Information

- This educational option is an: Certificate of Completion
- This educational option can be completed: Full-time or Part-Time
- This educational option is designed for: All students
- This educational option can be started: Any Term
- Primary course location: Main campus, Montoya campus and online.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Some of the courses in this certificate are transferable to universities and CNM currently has transfer agreements with many colleges in New Mexico. Contact the School of Business, Hospitality & Technology for more information.

Career Opportunities

Many businesses employee Social Media Marketers and Digital Media Strategists.

The U.S. Department of Labor Statistics Job Outlook Handbook predicts that both full-time and part-time employment for persons with digital media marketing specialties are expected to grow faster than average.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1198 - Project Management Fundamentals **3 credit hour(s)**
- ENGL 1160 - Introduction to Digital Storytelling **3 credit hour(s)**
- MKTG 2110 - Principles of Marketing **3 credit hour(s)**
- MKTG 2120 - Marketing Content Strategy and Branding **3 credit hour(s)**

Term 2

- MKTG 2220 - Digital Marketing **3 credit hour(s)**
- MKTG 2230 - Marketing Analytics and Performance Optimization **3 credit hour(s)**
- MKTG 2240 - Email Marketing **3 credit hour(s)**
- MKTG 2250 - Social Media Strategies **3 credit hour(s)**
- Program Approved Electives **2-3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 29

Program Approved Electives

- **Any BUSA, ENTR, MGMT, MKTG and BLAW course (not required in certificate)**
- BUSA 1996 - Special Topics in Business **1-3 credit hour(s)**
- BUSA 2195 - Budget and Resource Management **3 credit hour(s)**
- ENGL 2260 - Digital Storytelling Creation I **3 credit hour(s)**
- FDMA 1260 - Introduction to Digital Media **3 credit hour(s)**
- FDMA 1515 - Introduction to Digital Image Editing-Photoshop **3 credit hour(s)**
- FDMA 1630 - Principles of Design **3 credit hour(s)**
- FILM 1002 - Shooting for Digital Media Applications **2 credit hour(s)**
- FILM 1004 - Shooting Your Story **3 credit hour(s)**

Entrepreneurship, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

This certificate applies entrepreneurial principles to establishing, organizing and managing a business. Students learn basic business skills, complete a market research and feasibility assessment and develop a business plan.

Educational Option Information

- This program can be completed Part-time or full-time
- This program can be started Any term
- Primary course location: Main Campus and Online

Special Requirements:

- Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The courses in this certificate may be applied to an Associate of Applied Science degree in Business Administration.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Note: Students who plan to transfer to a four-year business program are encouraged to meet with the program chair or associate dean during their first term.

Career Opportunities

Small business development.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- ENTR 1110 - Entrepreneurship **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**

  or
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**

  or
- CULN 1100 - Introduction to Culinary Skills **3 credit hour(s)**

  or
- HRTM 1120 - Introduction to Tourism **3 credit hour(s)**

Term 2

- ACCT 1150 - QuickBooks **3 credit hour(s)**
- BLAW 2110 - Business Law I **3 credit hour(s)**
- ENTR 2110 - Small Business Management **3 credit hour(s)**
- MKTG 2110 - Principles of Marketing **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 24

General Business, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The General Business Certificate of Completion is a series of courses for individuals who want to begin or expand their skills in business.

Educational Option Information

- This educational option can be completed Part-time or full-time.
- This educational option can be started Any term.
- Primary course location: Main, Montoya, Westside, and Rio Rancho Campuses, and online.
- Special requirements: Students must have access to a computer and the internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The courses included in the General Business Certificate of Completion may be applied to an associate of applied science degree in Business Administration at CNM and may transfer into degree programs at other institutions.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Career opportunities are available in both the public and private sectors, including industries and businesses that require management, supervision, administrative support, and entrepreneurship. Example industries include advertising, marketing, entrepreneurship, human resources, sales, real estate, retail, small business management and supervision. Example job titles/ descriptions include business owner, manager, team leader, entrepreneur, project manager, supervisor.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**
- Program Approved Electives **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 18

Program Approved Electives

Any ACCT, BUSA, BLAW, ENTR, MKTG or MGMT Course not specified in the above program requirements.

Project Management, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Project Management Certificate of Completion provides opportunities for the business leaders and project managers of tomorrow to achieve a high-quality, high-value education that enables them to succeed in a competitive market. Emphasis is placed on hands-on experiences, conducting real-world research and community projects.

The curriculum includes project management fundamentals, budget and resource management, contract management, scheduling, estimating, critical path scheduling, and project oversight. Skills related to the applications of these concepts are developed through the study of computer applications, communications, team building and decision making.

Educational Option Information

- This program can be completed: Part-time or full-time.
- This program can be started: Any term.
- Primary course location: Main Campus and Online.
- Special requirements:
- Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The courses in this certificate may be applied to an Associate of Applied Science degree in Business Administration.

Many of these courses are transferrable to programs leading to associate and baccalaureate degrees. CNM has Transfer Agreements with many colleges and universities.

Career Opportunities

Project Management is one of the fastest growing disciplines and is used in a multitude of business and government agencies such as information technology, construction, engineering, financial services, and health care.

Career opportunities are available in both the public and private sectors, including but not limited to: scheduling, estimating, procurement, contract management and project supervision.

Gainful Employment information is available from Job Connection Services.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1198 - Project Management Fundamentals **3 credit hour(s)**
- BUSA 2100 - Agile Project Management **3 credit hour(s)**

Term 2

- BUSA 2195 - Budget and Resource Management **3 credit hour(s)**
- BUSA 2198 - Project Management Applications **3 credit hour(s)**
- Program Approved Electives **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 18

Program Approved Electives

- BCIS 1330 - Introduction to Analytics and Data Visualization **3 credit hour(s)**
- BCIS 1340 - Data Concepts **3 credit hour(s)**
- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**
- BLAW 2110 - Business Law I **3 credit hour(s)**
- BUSA 1170 - Introduction to Quality Management **1 credit hour(s)**
- BUSA 1171 - Fundamentals of Continuous Quality Improvement **1 credit hour(s)**
- BUSA 1172 - Quality Tools **1 credit hour(s)**
- BUSA 2170 - Quality Management **3 credit hour(s)**
- BUSA 2220 - Human Resource Management **3 credit hour(s)**
- BUSA 2460 - Business Ethics **3 credit hour(s)**
- MGMT 2110 - Principles of Management **3 credit hour(s)**

Retail Management, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Retail Management Certificate of Completion provides opportunities for retail associates to achieve a high-quality education that will enable them to work their way into retail management.

The curriculum includes retail management fundamentals, business professionalism, human resources management and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building and decision making.

WAFC - Approved Retail Management Certificate
CNM has a program endorsed by the Western Association of Food Chains (WAFC) for current employees of food chains and grocers. Please click here to go to the WAFC Retail Management program page.

Educational Option Information

- This educational option is a: Certificate of Completion
- This educational option can be completed: Part-time or full-time
- This educational option is designed for: Immediate employment or transfer preparation
- This educational option can be started: Any term
- Primary course location: Main, Montoya, Westside and Rio Rancho Campuses, and online

Special requirements

- Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The Retail Management certificate courses may be applied to an Associate of Applied Science degree in Business Administration.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Note: Students who plan to transfer to a four-year business program are encouraged to meet with the program chair or associate dean during their first term.

Career Opportunities

Career opportunities with a Retail Management Certificate of Completion are available in both the public and private sectors, including but not limited to retail companies and small businesses.

Employment opportunities are available in industries that require management, communication and professional behavior skills.

Job titles may include: Retail Team Leader, Retail Associate Store Manager, Customer Service Manager, and Store Assistant Manager or Manager.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**

or

- Mathematics Requirement **3 credit hour(s)**

Term 2

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BUSA 2220 - Human Resource Management **3 credit hour(s)**
- BUSA 2330 - Retail Management **3 credit hour(s)**
- MGMT 2110 - Principles of Management **3 credit hour(s)**
- MKTG 2110 - Principles of Marketing **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 27

CARDIOVASCULAR SONOGRAPHY

Cardiovascular Sonography, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

The goal of the CNM Cardiovascular Sonography program is to prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the following concentrations it offers: Adult Echocardiography and Non-Invasive Vascular Sonography. A sonographer is a health care professional who uses high-frequency sound waves as a diagnostic tool to view the human body

in order to aid the physician in the determination of a diagnosis. 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 credentialing exams administered by Cardiovascular Credentialing International in the specialty areas of Cardiac and Vascular Sonography. Successful completion of these exams results in attaining the RCS (Registered Cardiac Sonographer) and RVS (Registered Vascular Specialist) credentials, respectively.

The Cardiovascular Sonography program is not yet accredited.

This program's first term courses are offered in the spring term only. This may delay a student's program start date. Please check with an advisor for more information.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is an: Associate of Applied Science
- This educational option can be completed: Full-time
- This educational option is designed for: qualifies students interested in pursuing a career in sonography
- This educational option can be started: Spring
- Primary course location: South Valley

Special Requirements

Program Entry Registration Screening

This is a "Coordinated Program Entry" program; students must complete a pre-registration screening process administered through the Coordinated Program Entry Office before being eligible to register for program courses.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health caregiver's criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Felony Conviction

Students will be asked to declare any felony convictions which may impact clinical placement while in the program. Each case will need to be reviewed by program officials and CNM administration

Transportation

Students will need to be able to travel to clinical assignments within the Albuquerque/Rio Rancho/Santa Fe metro areas and to classes/labs at the CNM South Valley Campus.

Cost and Financial Aid

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Additional Supplies

Through student fees each student will be provided with an iPad and case with keyboard, Apple pencil with cover, scrubs and patches, subscription to ASE Curriculum resource, Complete Anatomy and Typhon clinical tracking resources.

Educational Opportunities

Credits may be transferred to UNM for Radiologic Sciences BS. Upon program completion students are eligible to sit for credentialing exams in Cardiac and Vascular Sonography.

Career Opportunities

There is currently a nationwide demand for registered sonographers. Graduates will be employed as sonographers in hospitals, physician's offices and private sonography practices.

Gainful Employment information is available from Job Connection Services.

For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in my CNM.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional

demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Coordinated Entry Program
- Math Skills 3
- Reading and Writing Skills 2
- BIOL 1140
- BIOL 1140L

- CHEM 1120
  or
- CHEM 1215

Courses

Term 1

- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
  or
- BIOL 2151 - Medical Imaging Anatomy & Physiology I **4 credit hour(s)**

- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Mathematics Elective 3 credit hour(s)

Term 2

- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
  or
- BIOL 2161 - Medical Imaging Anatomy & Physiology II **4 credit hour(s)**

- PHYS 1115 - Survey of Physics **3 credit hour(s)**
  or
- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**

Term 3 - Typically offered spring term only

- CVS 1215 - Cardiovascular Anatomy in Imaging **1 credit hour(s)**
- CVS 1225 - Vascular Sonography I **2 credit hour(s)**
- CVS 1293 - Echo-Vascular Lab I **3 credit hour(s)**
- CVS 1630 - Cardiovascular Physics **2 credit hour(s)**
- DMS 1130 - Sonographic Physics I **2 credit hour(s)**

- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**

Term 4 - Typically offered summer term only

- CVS 1220 - Cardiac Pathophysiology I **3 credit hour(s)**
- CVS 1625 - Vascular Sonography II **2 credit hour(s)**
- CVS 1690 - CV Clinical Sonography I **5 credit hour(s)**
- CVS 1693 - Echo-Vascular Lab II **2 credit hour(s)**
- DMS 1530 - Sonographic Physics II **2 credit hour(s)**

Term 5 - Typically offered fall term only

- CVS 1620 - Cardiac Pathophysiology II **3 credit hour(s)**
- CVS 2125 - Advanced Vascular Sonography **1 credit hour(s)**
- CVS 2190 - CV Clinical Sonography II **5 credit hour(s)**
- CVS 2193 - Echo-Vascular Lab III **2 credit hour(s)**
- CVS 2620 - Advanced Procedures in Echocardiography **1 credit hour(s)**

Term 6 - Typically offered spring term only

- CVS 2120 - Cardiac Pathophysiology III **2 credit hour(s)**
- CVS 2690 - CV Clinical Sonography III **5 credit hour(s)**
- CVS 2699 - Cardiovascular Registry Review **2 credit hour(s)**
- PHIL 2120 - Biomedical Ethics **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 64

Mathematics Elective

- MATH 1220 - College Algebra **3 credit hour(s)**
- MATH 1220P - College Algebra Plus **4 credit hour(s)**
- MATH 1240 - Pre-Calculus **4 credit hour(s)**
- MATH 1350 - Introduction to Statistics **3 credit hour(s)**
- MATH 1430 - Applications of Calculus I **3 credit hour(s)**

CARPENTRY

Carpentry Technology (AAS), General Woodworking and Construction

School of Skilled Trades & Arts (STA)

"This degree includes courses that are designed to provide students with the skills necessary to be employable in construction-related fields. Students completing this program will have tangible hands on experience as well as a solid knowledge base of how the construction workflow progresses through the stages of a particular job. Students will be introduced to construction software they may encounter in the industry. Students will select an architectural woodworking/furniture making, or construction management core during their final term."

See Recommended Sequence of Courses

Special Requirements

Students must be able to lift 50 pounds. Students may

work in various internal and external environments and should be free of chronic respiratory diseases and allergies. Most employers require a valid driver's license and clean driving record.

Fees: Course fees are published in the *Schedule of Classes*. These fees cover the cost of tools required for lab activities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

The New Mexico Department of Workforce Solutions predicts a continued increase in the demand for construction workers. In recent years, over 90 percent of Construction Technology graduates have obtained employment.

Gainful Employment information is available from Career and Job Placement.

For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in my CNM.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- CARP 1005 - Carpentry Blueprint Reading **4 credit hour(s)**
- CNST 1170 - Construction Methods I **3 credit hour(s)**
- CNST 1110 - Building Trades I **4 credit hour(s)**
- OSH 2006 - Occupational Safety for Construction I **1 credit hour(s)**
  or
- OSH 2016 - Occupational Safety I **1 credit hour(s)**

Term 2

- ARDR 1102 - Introduction to A/E/C Software **3 credit hour(s)**
- CARP 1300 - Basic Woodworking **3 credit hour(s)**
- CARP 1320 - Carpentry Fundamentals **3 credit hour(s)**
- CARP 1492 - Interior/Exterior Finishing **4 credit hour(s)**
- CNST 1270 - Construction Methods II **3 credit hour(s)**

Term 3

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- CARP 2040 - Introduction to CNC Woodworking **3 credit hour(s)**
- CARP 2130 - Metal Stud Framing **2 credit hour(s)**
- CARP 2230 - Concrete Forming and Rigging **2 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 4

- Humanities Requirement **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**
- Construction Management Core **10-12 credit hour(s)**
  or
- Woodworking Core **10-12 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Electives: Woodworking Core

- CNST 1310 - Furniture Making **3 credit hour(s)**
- CNST 1240 - Cabinet Making **3 credit hour(s)**
- CARP 1692 - Advanced Furniture Making **2 credit hour(s)**
- CARP 1892 - Spanish Colonial Furniture Making **2 credit hour(s)**
- Program Electives: Construction Management Core
- CNST 1120 - Construction Drawings **3 credit hour(s)**
- CM 1110 - Construction Materials and Techniques **3 credit hour(s)**
- CM 1205 - Introduction to Building Information Modeling **3 credit hour(s)**
- CNST 1220 - Construction Project Management I **3 credit hour(s)**

Residential Carpentry, Certificate of Completion

School of Skilled Trades & Arts (STA)

The Residential Carpentry Certificate includes courses that are designed to provide students with the skills necessary to be employable in construction-related fields. Students completing this program will have tangible hands on experience as well as a solid knowledge base of how the construction work flow progresses through the stages of a particular job.

See Recommended Sequence of Courses

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

In addition to the general carpentry courses, students may take additional coursework including construction management, computer aided drafting, commercial construction theory, cost estimating, construction equipment, methods and general contractor preparation to earn an Associate Degree from Construction Technology.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2
- Reading and Writing Skills 1

Courses

Term 1

- CARP 1005 - Carpentry Blueprint Reading **4 credit hour(s)**
- CNST 1170 - Construction Methods I **3 credit hour(s)**
- CNST 1110 - Building Trades I **4 credit hour(s)**
- CARP 2040 - Introduction to CNC Woodworking **3 credit hour(s)**
- OSH 2006 - Occupational Safety for Construction I **1 credit hour(s)**

Term 2

- CARP 1300 - Basic Woodworking **3 credit hour(s)**
- CARP 1320 - Carpentry Fundamentals **3 credit hour(s)**
- CARP 1492 - Interior/Exterior Finishing **4 credit hour(s)**
- CNST 1270 - Construction Methods II **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 28

CHEMISTRY

Chemistry, Associate of Arts

School of Math, Science & Engineering (MSE)

Students majoring in chemistry examine the composition, structure and properties of matter with an emphasis on chemical reactions and the nature of chemical bonding. Interested students can learn about career opportunities and pathways in Chemistry and related fields from the American Chemical Society.

See Recommended Sequence of Courses

The program is designed to meet the requirements for an Associate of Arts in Chemistry from CNM and prepare a student to obtain a Bachelor of Arts in Chemistry at the University of New Mexico. However, students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students interested in transfer to UNM should consult the UNM Chemistry Department. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements. College catalogs are generally available online. Students should also consult an advisor.

Educational Option Information

- This educational option is an: Associate of Arts Degree
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program.
- This educational option can be started: Any Term
- Scheduling Information: Follow course catalog recommendations to avoid scheduling problems.
- Primary course location: Main Campus

Special Requirements

Felony Conviction

A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Additional Requirements

Students are expected to purchase textbooks, lab manuals, non-programmable scientific calculator and safety goggles.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The program is designed to meet the requirements for an Associate of Arts in Chemistry from CNM and prepare a student to obtain a Bachelor of Arts in Chemistry at the University of New Mexico. However, students from CNM seeking a baccalaureate degree may also transfer to other institutions.

Program Requirements

- Math Skills 5
- Reading and Writing Skills 2

Courses

Term 1

- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- MATH 1230 - Trigonometry **3 credit hour(s)**

  or
- Program Approved Math* **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- CHEM 1225L - General Chemistry II Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Program Approved Communications Elective **3 credit hour(s)**
- MATH 1240 - Pre-Calculus **4 credit hour(s)**

  or
- Program Approved Math* **3 credit hour(s)**

Term 3

- CHEM 2130 - Organic Chemistry I **3 credit hour(s)**
- CHEM 2130L - Organic Chemistry I Laboratory **1 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**

  or
- PHYS 1310 - Calculus-Based Physics I **4 credit hour(s)** *
- PHYS 1230L - Algebra-Based Physics I Laboratory **1 credit hour(s)**

  or
- PHYS 1310L - Calculus-Based Physics I Laboratory **1 credit hour(s)** *
- MATH 1510 - Calculus I **4 credit hour(s)**

  or
- MATH 1430 - Applications of Calculus I **3 credit hour(s)**

  or
- Program Approved Math* **3 credit hour(s)**

Term 4

- CHEM 2135 - Organic Chemistry II **3 credit hour(s)**
- CHEM 2135L - Organic Chemistry II Laboratory **1 credit hour(s)**
- PHYS 1240 - Algebra-Based Physics II **4 credit hour(s)**

  or
- PHYS 1320 - Calculus-Based Physics II **4 credit hour(s)** *
- PHYS 1240L - Algebra-Based Physics II Laboratory **1 credit hour(s)**

  or
- PHYS 1320L - Calculus-Based Physics II Laboratory **1 credit hour(s)** *
- Multi-Discipline/Flexible Requirement **3 credit hour(s)**
- Unrestricted Elective 4 **credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

- Program Approved Communications Elective
- COMM 1130 - Public Speaking **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- Program Approved Math*

- MATH 1250 - Trigonometry & Pre-Calculus **5 credit hour(s)**
- MATH 1350 - Introduction to Statistics **3 credit hour(s)**
- MATH 1520 - Calculus II **4 credit hour(s)**
- MATH 2530 - Calculus III **4 credit hour(s)**

* Students intending on transferring to NMSU or NMT are encouraged to complete MATH 1510 and the PHYS 1310/1310L as these are degree requirements. Students are encouraged to consult with an advisor at the 4-year institution to which they wish to transfer to best determine which courses to take.

CHICANA AND CHICANO STUDIES

Chicana and Chicano Studies, Associate of Arts

School of Liberal Arts (LA)

The Associate of Arts in Chicana and Chicano Studies (CCS) provides students the opportunity to transfer into the CCS program at UNM as a junior, with 60 applicable credits. It prepares students with a critical understanding of issues facing Chicano/Hispano/Mexicano communities.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
  or
- DGST 1110 - Introduction to Digital Studies **3 credit hour(s)**
  or
- FUTR 1110 - Introduction to Futures Studies **3 credit hour(s)**
- CCST 1110 - Introduction to Comparative Global and Ethnic Societies **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- SPAN 1110 - Spanish I **4 credit hour(s)**
  or
- SPAN 1210 - Spanish for Heritage Learners I **4 credit hour(s)**
  or
- Arts & Sciences Elective **3-4 credit hour(s)**

Term 2

- CCST 1125 - Chicana/o Latina/o Musical Cultures and Expressions **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**
- SPAN 1120 - Spanish II **4 credit hour(s)**
  or
- SPAN 1220 - Spanish for Heritage Learners II **4 credit hour(s)**
  or
- Arts & Sciences Elective **3-4 credit hour(s**

Term 3

- CCST 2110 - Introduction to Chicana and Chicano Studies **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- SPAN 2110 - Spanish III **3 credit hour(s)**
  or
- Arts & Sciences Elective **3 credit hour(s)**

Term 4

- Arts & Sciences Electives **9 credit hour(s)**
- CCST 2332 - Introduction to Chicana Studies **3 credit hour(s)**
- SPAN 2120 - Spanish IV **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree 61

Admission to the Chicana and Chicano Studies degree at UNM requires students to attain Spanish Level IV proficiency. Students who test into SPAN 1110 or 1210 will need to complete the Spanish sequence to SPAN 2120 as noted in the term-by-term. Students who test into higher-level Spanish classes may use Arts and Sciences coursework to satisfy degree requirements.

COMMUNICATION

Communication, Associate of Arts

School of Liberal Arts (LA)

This Associate of Arts degree program is intended to fulfill the freshman- and sophomore-level requirements in a Bachelor of Arts Degree at a four year institution. A variety of program-approved electives provide introductory exposure in Communication Studies. Such exposure can aid students in choosing a four-year concentration best suited to their interests and goals.

The field of Communication Studies emphasizes how people use messages to generate meaning within and

across all kinds of contexts, cultures, channels and media. Upon completion of this program, successful students will be able to:

- Demonstrate communication competence with diverse audiences in multiple contexts to achieve intended goals.
- Critically analyze communication elements of processes and messages in various contexts and relationships.

Educational Option Information

- This educational option is designed for:
- Helping you acquire the knowledge and skills necessary to give you an edge in the job market.
- Meeting the requirements for an Associate of Arts in Communication from CNM and prepare a student to obtain a Bachelor of Arts in Communication.
- This educational option can be completed: Part-time or full-time.
- This educational option can be started: Any term.
- Primary course location: Main, Montoya, Rio Rancho, South Valley or Westside Campuses. Some courses are available online.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

This program prepares students for transfer to a four-year program in Communication or Speech, with a concentration in one or more of the following areas:

- Interpersonal Communication
- Intercultural Communication
- Organizational Communication
- Public Communication
- Mass Communication

Students interested in transferring to UNM should consult the UNM Department of Communication & Journalism. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements. Students should also consult an advisor for more information.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Four-year graduates can pursue careers in a wide variety of fields.

Additionally, the program is designed to help you acquire the knowledge and skills necessary to give you an *edge* in the job market. Year after year, surveys show that communication skills are ranked by employers as the *most* important quality necessary for entry-level job candidates. Ironically, communication skills are those that employers say entry-level job candidates most often *lack*.

Examples of career options in Communications are listed here.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- COMM 1115 - Introduction to Communication **3 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**

  or
- COMM 2180 - Business and Professional Communication **3 credit hour(s)**

  or
- Program Approved Elective **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- COMM 1130 - Public Speaking **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**

Term 3

- Creative and Fine Arts Requirement **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Program Approved Electives **6 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- Arts & Sciences Elective **10 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

This information is meant to serve as a general guide for students intending to major in Communication. Specific

requirements for transfer will vary from school to school. It is the student's responsibility to contact the four year transfer school to confirm specific admission and degree requirements.

Please refer to the UNM Communication Concentrations as you select which courses to take at CNM.

Program Approved Electives

Choose from the following list of courses:

- COMM 1150 - Introduction to Mass Communication **3 credit hour(s)**
- COMM 2130 - Media Theories **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- COMM 2150 - Communication for Teachers **3 credit hour(s)**
- COMM 2160 - Gender Communication **3 credit hour(s)**
- COMM 2170 - Intercultural Communication **3 credit hour(s)**
- COMM 2180 - Business and Professional Communication **3 credit hour(s)**
- COMM 2223 - Introduction to Nonverbal Communication Studies **3 credit hour(s)**
- COMM 2240 - Organizational Communication Studies **3 credit hour(s)**
- COMM 2282 - Family Communication Studies **3 credit hour(s)**
- COMM 2289 - Listening Communication Studies **3 credit hour(s)**
- COMM 2996 - Special Topics **1-3 credit hour(s)**

COMMUNITY HEALTH WORKER

Community Health Worker, Certificate of Achievement

School of Health, Wellness & Public Safety (HWPS)

CHWs are frontline public health workers and critical members of health care delivery teams. They focus on the social aspects of care that support and enhance critical clinical activities such as diagnosis, treatment, or clinical procedures that are performed by licensed health professionals like doctors and nurses. This certificate prepares students to enter the workforce as community health workers.

See Recommended Sequence of Courses

Special Requirements

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the HWPS Office at (505) 224- 4111 for more information.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- CHW 1010 - Community Health Worker Fundamentals **2 credit hour(s)**
- CHW 1020 - Health Promotion **2 credit hour(s)**
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**
- PHLS 1120 - Introduction to Community Health Care **3 credit hour(s)**

Term 2

- CHW 1190 - Community Health Worker Practicum **1 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 9

COMPUTER INFORMATION SYSTEMS

Computer Information Systems (AAS), Cloud Computing and Systems Administration Concentration

School of Business, Hospitality & Technology (BHT)

Cloud Computing and Systems Administration focuses on design, implementation, management and troubleshooting computer systems in a business environment. The required courses in the program cover all objectives needed to prepare for the Microsoft Certified Solutions Associate (MCSA) exams. Areas covered are Enterprise/Server Support and Client Support in the Windows environment.

Students will receive instruction and hands-on training on subjects that include; installing operating systems, managing performance, implementing security, disaster recovery, directory services, virtualization of servers and desktops, troubleshooting hardware and software, and many more advanced computing technologies.

See Recommended Sequence of Courses

Educational Option Information

- This program can be completed: Part-time or full-time. Full-time students can complete the program in four terms.
- This educational option can be started: Any term.
- Primary course location: Main Campus.
- Additional requirements:
- Students are expected to purchase textbooks and USB flash drives.
- Ability to work at a computer for extended periods of time.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Other licenses or industry certification opportunities are available with this educational option:

- Microsoft: MCP, MCSA
- CompTIA: A+, Network+, Security +, Server+

Many of our courses are transferrable to baccalaureate degree programs, and CNM has Transfer Agreements with many colleges in New Mexico and beyond.

Career Opportunities

CNM's Cloud and Systems Administration concentration is current and relevant to today's technology needs and its graduates may find work with any organization that depends on computers or any organization with an Information Technology Department. Common job descriptions include the keywords computer network management and maintenance and typical job titles are System Administrator, Server Manager, Support Technician, Computer Help Desk, Desktop Support Technician, Cloud Engineer, Cloud Architect, Cloud Consultant.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- CIST 1410 - IT Essentials: Hardware **3 credit hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**

Term 2

- CIST 1413 - Network Administration Concepts **3 credit hour(s)**
- CIST 1605 - Internet of Things **3 credit hour(s)**
- CIST 1610 - IT Essentials: Software **3 credit hour(s)**
- CIST 1680 - Linux Essentials **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 3

- CIST 2620 - Windows Server Administration **3 credit hour(s)**
- CIST 2636 - Cloud Computing **3 credit hour(s)**
- CIST 2881 - Cybersecurity Fundamentals **3 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**

  or
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)** (**except NTSC courses**)

Term 4

- CIST 2640 - PowerShell for SysAdmins **3 credit hour(s)**
- CIST 2641 - AWS Solutions Architect Associate **3 credit hour(s)**
- CIST 2650 - Advanced Windows Server **3 credit hour(s)**
- CIST 2999 - Capstone Course **1 credit hour(s)**

- Humanities Requirement **3 credit hour(s)**

or

- Social and Behavioral Science Requirement **3 credit hour(s)**

- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

Program Approved Electives

- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**
- AIML 1320 - Fundamentals of Artificial Intelligence **3 credit hour(s)**
- BCIS 1340 - Data Concepts **3 credit hour(s)**
- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**
- BFIN 1110 - Personal Financial Planning for College Students **3 credit hour(s)**
- BHT 1005 - Survey of Business, Hospitality & Technology **3 credit hour(s)**

- CIST 1996 - Special Topics **1-3 credit hour(s) ***

or

- CIST 2996 - Special Topics **1-3 credit hour(s) ***

- CIST 1217 - Overview of Web Technologies **3 credit hour(s)**
- CIST 1411 - Introduction to Networks **3 credit hour(s)**
- CIST 1858 - Introduction to Cyber Security **3 credit hour(s)**
- CIST 2097 - Independent Study **1-6 credit hour(s)**
- CIST 2220 - .Net I/C# **3 credit hour(s)**
- CIST 2616 - Intro to Competitive Robotics **3 credit hour(s)**
- CIST 2680 - Linux Administration **3 credit hour(s)**
- CIST 2798 - Internship **1 credit hour(s)**
- CIST 2898 - Internship **2 credit hour(s)**
- CIST 2998 - Internship **3 credit hour(s)**
- CSCI 1220 - Computer Programming Fundamentals: Python **3 credit hour(s)**
- CSCI 1240 - C++ Programming I **3 credit hour(s)**

* Maximum 3 Special Topics credits allowed

Computer Information Systems (AAS), Cyber Security Concentration

School of Business, Hospitality & Technology (BHT)

Cyber Security prepares students for employment in a variety of in-demand positions related to cyber and information security. The required courses in the program cover current cyber coursework including network security and defense, ethical hacking and digital forensics.

Educational Option Information

- This program can be completed: Part-time or full-time. Full-time students can complete the program in four terms.
- This educational option can be started: Any term.
- Primary course location: Main Campus.
- Additional requirements:
- Students are expected to purchase textbooks and USB flash drives.
- Ability to work at a computer for extended periods of time.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Other licenses or industry certification opportunities are available with this educational option:

- CompTIA: A+, Network+, Security +
- EC Council

Many of our courses are transferrable to baccalaureate degree programs, and CNM has Transfer Agreements with many colleges in New Mexico and beyond.

Career Opportunities

CNM's Cyber Security concentration is current and relevant to today's technology needs and its graduates may find work with any organization that depends on computers or any organization with an Information Technology Department.

In Aug, 2017, CNM received the prestigious designation of National Center of Academic Excellence in Cyber Defense Two-Year Education (CAE 2Y).

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information

Literacy and Systems **3 credit hour(s)**
or

- CSCI 1108 - CS for All: Introduction to Computer Modeling **4 credit hour(s)**

- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- CIST 1410 - IT Essentials: Hardware **3 credit hour(s)**
- CIST 1858 - Introduction to Cyber Security **3 credit hour(s)**

Term 2

- CSCI 1220 - Computer Programming Fundamentals: Python **3 credit hour(s)**
- CIST 1413 - Network Administration Concepts **3 credit hour(s)**
- CIST 1610 - IT Essentials: Software **3 credit hour(s)**
- CIST 1680 - Linux Essentials **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)** (**except NTSC courses**)

Term 3

- CIST 2881 - Cybersecurity Fundamentals **3 credit hour(s)**
- CIST 2620 - Windows Server Administration **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**

- Humanities Requirement **3 credit hour(s)**
or
- Social and Behavioral Science Requirement **3 credit hour(s)**

- Mathematics Requirement **3 credit hour(s)**

Term 4

- CIST 2853 - Cyber Defense Basics **3 credit hour(s)**
- CIST 2887 - Ethical Hacking **3 credit hour(s)**
- CIST 2860 - Digital Forensics and Incident Response **3 credit hour(s)**
- CIST 2999 - Capstone Course **1 credit hour(s)**

- ENGL 1210 - Technical Communications **3 credit hour(s)**
or
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**

- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

Program Approved Electives

* Preferred electives for program of study.
** Maximum 3 Special Topics credits allowed

- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**
- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**
- BFIN 1110 - Personal Financial Planning for College Students **3 credit hour(s)**
- BHT 1005 - Survey of Business, Hospitality & Technology **3 credit hour(s)**
- CIST 1996 - Special Topics **1-3 credit hour(s)** **
or
- CIST 2996 - Special Topics **1-3 credit hour(s)** **

- CSCI 1240 - C++ Programming I **3 credit hour(s)**
- CIST 2220 - .Net I/C# **3 credit hour(s)**
- CIST 1411 - Introduction to Networks **3 credit hour(s)**
- CIST 1605 - Internet of Things **3 credit hour(s)**
- CIST 1217 - Overview of Web Technologies **3 credit hour(s)**
- CIST 2097 - Independent Study **1-6 credit hour(s)**
- CIST 2636 - Cloud Computing **3 credit hour(s)**
- CIST 2640 - PowerShell for SysAdmins **3 credit hour(s)**
- CIST 2680 - Linux Administration **3 credit hour(s)** *
- CIST 2798 - Internship **1 credit hour(s)**
- CIST 2898 - Internship **2 credit hour(s)**
- CIST 2998 - Internship **3 credit hour(s)**
- CJUS 2514 - Introduction to Homeland Security **3 credit hour(s)**
- CSCI 1230 - C Programming **4 credit hour(s)**
- CSCI 1260 - Computer Programming Fundamentals Java I **4 credit hour(s)**

Computer Information Systems (AAS), Network Administration Concentration

School of Business, Hospitality & Technology (BHT)

The CIS Network Administration Concentration prepares students with the technical knowledge and skills to excel in administering complex IP networks, which are increasingly integral to the functioning of any large business, from manufacturing to finance to food service to science and government services.

Through a partnership with the Cisco Networking Academy we offer courses which provide interactive learning tools and activities to help students develop practical experience and 21st century career skills such as problem solving, collaboration, and critical thinking.

Educational Option Information

- This program can be completed: Part-time or full-time
- This program can be started: Fall and Spring Terms
- Primary course location: Main Campus, with some courses offered as Distance Learning

Approximate Costs of this Educational Option

- Cost of Attendance

- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Other costs

- Optional costs for certification exam fees are approximately $200-$300 each for the CompTIA and Cisco Certifications. However, students can qualify for discounts on the Cisco exams with scores above 75% in a qualifying course.

Educational Opportunities

Graduates that successfully complete the curriculum of this program will be eligible to sit for several industry certification exams including:

- CompTIA A+ (PC Pro)
- CompTIA Network+ (Network Pro)
- CompTIA Linux+
- Cisco Systems CCENT
- Cisco Systems CCNA
- Cisco Systems CCNA Security

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

The employment outlook should be favorable for network administration occupations as firms invest in newer, faster technology and mobile networks. Growth is expected in healthcare industries as their use of information technology increases. More administrators will be required to manage the growing systems and networks found at hospitals and other healthcare institutions. Administrators with proper training will be needed to reinforce network and system security as information security concerns are increasing for many businesses and industries.

Prospects are even better for applicants with a bachelor's degree in computer science and who are up to date on the latest technology. So students should consider transferring their AAS credits into a four-year program.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- CIST 1410 - IT Essentials: Hardware **3 credit hour(s)**
- CIST 1411 - Introduction to Networks **3 credit hour(s)**

Term 2

- CIST 1605 - Internet of Things **3 credit hour(s)**
- CIST 1610 - IT Essentials: Software **3 credit hour(s)**
- CIST 1680 - Linux Essentials **3 credit hour(s)**
- CIST 1412 - Network Device Configuration **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s) (Except NTSC courses)**

Term 3

- CIST 2411 - Enterprise Networking **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**

  or
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 4

- CIST 2427 - Troubleshooting Networks **3 credit hour(s)**
- CIST 2428 - Juniper Fundamentals **3 credit hour(s)**
- CIST 2450 - Fundamentals of Network Security **3 credit hour(s)**
- CIST 2999 - Capstone Course **1 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**

  or
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

Program Approved Electives

- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**
- BFIN 1110 - Personal Financial Planning for

College Students **3 credit hour(s)**
- BHT 1005 - Survey of Business, Hospitality & Technology **3 credit hour(s)**

- CIST 1996 - Special Topics **1-3 credit hour(s) * or**
- CIST 2996 - Special Topics **1-3 credit hour(s) ***

- CSCI 1220 - Computer Programming Fundamentals: Python **3 credit hour(s)**
- CSCI 1240 - C++ Programming I **3 credit hour(s)**
- CIST 1413 - Network Administration Concepts **3 credit hour(s)**
- CIST 1217 - Overview of Web Technologies **3 credit hour(s)**
- CIST 2097 - Independent Study **1-6 credit hour(s)**
- CIST 2210 - Introduction to SQL (Structured Query Language) **3 credit hour(s)**
- CIST 2636 - Cloud Computing **3 credit hour(s) ***
- CIST 2680 - Linux Administration **3 credit hour(s) ***
- CIST 2798 - Internship **1 credit hour(s)**
- CIST 2898 - Internship **2 credit hour(s)**
- CIST 2998 - Internship **3 credit hour(s)**

* Maximum 3 Special Topics credits allowed

Computer Information Systems (Certificate of Completion), Cloud Computing and Systems Administration

School of Business, Hospitality & Technology (BHT)

This CIS Cloud Computing and Systems Admin certificate is a subset of the core AAS degree technical courses. These technical courses focus on design, implementation, management and troubleshooting computer systems in a business environment. The required courses in the program cover all objectives needed to prepare for the certification exams. Areas covered are Enterprise/Server Support and Client Support in the Windows environment.

Students will receive instruction and hands-on training on subjects that include; installing operating systems, managing performance, implementing security, disaster recovery, directory services, virtualization of servers and desktops, troubleshooting hardware and software, and many more advanced computing technologies.

Since this CIS Cloud Computing and Systems Administration certificate is a subset of the core AAS degree technical courses, it will enable CNM students who have completed the CIS AAS degree in a different concentration to complete the remaining technical courses in this area and earn this CIS certificate. Additionally, this cert is ideal for students coming to CNM with AA/AAS/BS degrees who wish to do the core technical course work for this area.

See Recommended Sequence of Courses

Educational Option Information

- This educational option can be completed: Part-time or full-time.
- This educational option is designed for: Students who have completed an associates or bachelor's degree and wish to complete coursework to enter into the IT profession. .
- This educational option can be started: Any term.
- Primary course location: Main campus, many courses offered online.
- Other course or licensing requirements that apply to this educational option:
- Some courses in the program have associated course fees that cover the cost of industry recognized certification exams.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- CIST 1410 - IT Essentials: Hardware **3 credit hour(s)**
- CIST 1610 - IT Essentials: Software **3 credit hour(s)**

Term 2

- CIST 1413 - Network Administration Concepts **3**

credit hour(s)
- CIST 1605 - Internet of Things **3 credit hour(s)**
- CIST 1680 - Linux Essentials **3 credit hour(s)**
- CIST 2620 - Windows Server Administration **3 credit hour(s)**

Term 3

- CIST 2636 - Cloud Computing **3 credit hour(s)**
- CIST 2641 - AWS Solutions Architect Associate **3 credit hour(s)**
- CIST 2650 - Advanced Windows Server **3 credit hour(s)**
- CIST 2881 - Cybersecurity Fundamentals **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 33

Computer Information Systems (Certificate of Completion), Cyber Security

School of Business, Hospitality & Technology (BHT)

Cyber Security prepares students for employment in a variety of in-demand positions related to cyber and information security. The required courses in the program cover current cyber coursework including network security and defense, ethical hacking and digital forensics.

Educational Option Information

- This educational option can be completed: Part-time or full-time.
- This educational option is designed for: Students who have completed an associates or bachelor's degree and wish to complete coursework to enter into the IT profession. .
- This educational option can be started: Any term.
- Primary course location: Main campus, many courses offered online.
- Other course or licensing requirements that apply to this educational option:
- Some courses in the program have associated course fees that cover the cost of industry recognized certification exams.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Employment Opportunities

Gainful Employment information is available from Career and Job Placement.

CNM's Cyber Security Certificate of Completion is current and relevant to today's technology needs and its graduates may find work with any organization that depends on computers or any organization with an Information Technology Department.

In Aug, 2017, CNM received the prestigious designation of National Center of Academic Excellence in Cyber Defense Two-Year Education (CAE 2Y). CNM and our CIS program has already had a strong college-wide as well as curricular standing in Cyber Security area. This new certificate will create additional pathways for training Cyber professionals.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**

  or

- CSCI 1108 - CS for All: Introduction to Computer Modeling **4 credit hour(s)**

- CIST 1410 - IT Essentials: Hardware **3 credit hour(s)**
- CIST 1610 - IT Essentials: Software **3 credit hour(s)**
- CIST 1858 - Introduction to Cyber Security **3 credit hour(s)**

Term 2

- CSCI 1220 - Computer Programming Fundamentals: Python **3 credit hour(s)**
- CIST 1413 - Network Administration Concepts **3 credit hour(s)**
- CIST 1680 - Linux Essentials **3 credit hour(s)**
- CIST 2881 - Cybersecurity Fundamentals **3 credit hour(s)**

Term 3

- CIST 2853 - Cyber Defense Basics **3 credit hour(s)**
- CIST 2887 - Ethical Hacking **3 credit hour(s)**
- CIST 2860 - Digital Forensics and Incident Response **3 credit hour(s)**

Minimum Credit Hours Required to Complete

Certificate: 33

Computer Information Systems (Certificate of Completion), Network Administration

School of Business, Hospitality & Technology (BHT)

This CIS Network Admin certificate is a subset of the core AAS degree technical courses. These core courses prepare students with the technical knowledge and skills to excel in administering complex IP networks, which are increasingly integral to the functioning of any large business, from manufacturing to finance to food service to science and government services.

Through a partnership with the Cisco Networking Academy we offer courses which provide interactive learning tools and activities to help students develop practical experience and 21st century career skills such as problem solving, collaboration, and critical thinking.

Since this CIS Network Administration certificate is a subset of the core AAS degree technical courses, it will enable CNM students who have completed the CIS AAS degree in a different concentration to complete the remaining technical courses in this area and earn a CIS certificate. Additionally, this cert is ideal for students coming to CNM with AA/AAS/BS degrees who wish to do the core technical course work for this area.

Educational Option Information

- This educational option can be completed: Part-time or full-time.
- This educational option is designed for: Students who have completed an associates or bachelor's degree and wish to complete coursework to enter into the IT profession. .
- This educational option can be started: Any term.
- Primary course location: Main campus, many courses offered online.
- Other course or licensing requirements that apply to this educational option:
- Some courses in the program have associated course fees that cover the cost of industry recognized certification exams.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- CIST 1410 - IT Essentials: Hardware **3 credit hour(s)**
- CIST 1411 - Introduction to Networks **3 credit hour(s)**

Term 2

- CIST 1610 - IT Essentials: Software **3 credit hour(s)**
- CIST 1680 - Linux Essentials **3 credit hour(s)**
- CIST 1412 - Network Device Configuration **3 credit hour(s)**

Term 3

- CIST 1605 - Internet of Things **3 credit hour(s)**
- CIST 2411 - Enterprise Networking **3 credit hour(s)**
- CIST 2427 - Troubleshooting Networks **3 credit hour(s)**

Term 4

- CIST 2428 - Juniper Fundamentals **3 credit hour(s)**
- CIST 2450 - Fundamentals of Network Security **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 33

DevSecOps, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The program is designed to introduce students to DevOps fundamentals, including the core principles of the DevOps methodology. Students will learn to develop, deploy and maintain applications. They will also learn to use tools and common techniques for configuring and deploying systems. Students will also learn operations, monitoring, testing, security, and Cloud features. Several scripting languages are introduced, as well as Linux. In addition, students will learn network services, topologies and protocols.

Educational Option Information

- This educational option is an: Certificate of Completion
- This educational option can be completed: Part-time
- This educational option is design for: Students desiring to start a career in DevOps.
- This educational option can be started: Anytime
- Primary course location: Main

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this degree are transferable and some may be applied to two and four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

With the continued adoption of DevOps to bring together development and operations to increase innovation and expedite processes, those with training in a DevOps skill set will be in demand for years to come. Some careers in this area include DevOps Engineer, software developer, automation architect.

The U.S. Bureau of Labor Statistics estimates a 22% job growth for DevOps team positions of software developers and testers through 2029. This growth is much faster than average when compared to all occupations.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s) ***

  or

- CSCI 1108 - CS for All: Introduction to Computer Modeling **4 credit hour(s)**

- CSCI 1220 - Computer Programming Fundamentals: Python **3 credit hour(s)**
- CSCI 1240 - C++ Programming I **3 credit hour(s)**
- CIST 1410 - IT Essentials: Hardware **3 credit hour(s)**

Term 2

- CIST 1413 - Network Administration Concepts **3 credit hour(s)**
- CIST 1680 - Linux Essentials **3 credit hour(s)**

- CIST 1261 - JavaScript Web Programming **3 credit hour(s)**

  or

- CIST 2284 - .NET II/C# **3 credit hour(s)**

Term 3

- CIST 2620 - Windows Server Administration **3 credit hour(s)**
- CIST 2636 - Cloud Computing **3 credit hour(s)**
- CIST 2801 - Introduction to DevSecOps **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 30

- Note:

* BCIS 1110 is recommended.

Software Development Programs

Software Development Programs

COMPUTER SCIENCE

Computer Science, Associate of Science

School of Business, Hospitality & Technology (BHT)

Students majoring in Computer Science examine the theory of computation, the design of algorithms and how to apply these principles to problem-solving.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

This program is designed to meet the requirements for an Associate of Science degree in Computer Science from CNM and prepare students to obtain a bachelor's

degree in Computer Science at the University of New Mexico. However, students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students should refer to the catalog of their intended transfer institution for admission, program, course and graduation requirements. Students should also consult an advisor with CNM Advisement.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Demand for workers in computer occupations is being driven by the continuing need for businesses, government agencies, and other organizations and industries to adopt and utilize the latest technologies. The ever-increasing use of computers and information technology has generated a need for highly trained, innovative workers in the field.

Program Requirements

- Math Skills 6
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
  or
- CSCI 1108 - CS for All: Introduction to Computer Modeling **4 credit hour(s)**

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- Humanities Requirement **3 credit hour(s)**
- Program Approved Laboratory Science Requirement **4-5 credit hour(s)***
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- CSCI 1260 - Computer Programming Fundamentals Java I **4 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- MATH 1510 - Calculus I **4 credit hour(s)**
- Program Approved Laboratory Science Requirement **4-5 credit hour(s)**

Term 3

- CSCI 2260 - Computer Programming Fundamentals: Java 2 **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- MATH 1520 - Calculus II **4 credit hour(s)**
- Program Approved Laboratory Science Requirement **3-4 credit hour(s)**

Term 4

- COMM 1130 - Public Speaking **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- CSCI 2310 - Discrete Mathematics for Computer Science **4 credit hour(s)**
- Program Approved Laboratory Science Requirement **3-4 credit hour(s) * ***
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

Program Approved Laboratory Science Courses

*** One of the following three sequences of laboratory science courses must be included in order to satisfy the lab science requirement:**

1) BIOL 2110/BIOL 2110L and BIOL 2410/BIOL 2410L

2) CHEM 1215/CHEM 1215L and CHEM 1225/CHEM 1225L

3) PHYS 1310/PHYS 1310L and PHYS 1320/PHYS 1320L: **This course sequence is strongly recommended.**

In addition to one of the sequences specified above, the following lab science courses may be used to complete the 14 - 18 credit lab science requirement:

GEOL 1110/GEOL 1110L

BIOL 1215/BIOL 1215L (ENVS 101/102L is the UNM equivalent) however, students may not use GEOL 1110/GEOL 1110L and BIOL 1215/BIOL 1215L together to complete the lab science requirement.

The lab science courses must be completed with lab in one discipline; remaining two science courses do not require the lab portion.

*** * Required if less than 14 credits of Approved Lab Science completed.**

CONSTRUCTION MANAGEMENT TECHNOLOGY

Construction Management Technology, Associate of Applied Science

School of Skilled Trades & Arts (STA)

Construction Management insures the timely, safe and cost-efficient execution of building projects. Construction managers use advanced software and an in-depth understanding of the construction process and related materials to optimize project efficiency and work in an office as well as outside, on the jobsite.

CNM Construction Management A.A.S. students acquire a range of skills related to construction project management, from estimating and scheduling to safety, construction surveying, and basic accounting principles. Designed to be completed in 5 terms, the CM A.A.S. degree also incorporates a core of approved general

education courses, making it appropriate for transfer to a 4-year program.

- CNM Construction Management accredited by American Council for Construction Education (ACCE)

Educational Option Information

- This program can be completed: Part-time or full-time
- This program can be started: First term Construction Management courses are typically offered in fall and spring. Students may take second term classes in summer if available.
- Primary course location: Advanced Technology Center (ATC)
- Special Requirements, if any: Students may be able to get Credit for Prior Learning and experience. Please consult with department faculty if you wish to explore this option.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The CM A.A.S. degree also incorporates a core of approved general education courses, making it appropriate for transfer to a 4-year program.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

This program is the only accredited Construction Management program in New Mexico, and is accredited by the American Council for Construction Education (ACCE). Students are prepared for entry level positions as construction estimators and schedulers, and project engineers.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 3
- Reading and Writing Skills 2

Courses

Term 1

- CNST 1120 - Construction Drawings **3 credit hour(s)**
- CM 1110 - Construction Materials and Techniques **3 credit hour(s)**
- CM 1205 - Introduction to Building Information Modeling **3 credit hour(s)**
- CNST 1220 - Construction Project Management I **3 credit hour(s)**
- GIS 1002 - Fundamentals of Geospatial Technology **3 credit hour(s)**

Term 2

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- CM 1233 - Sustainable Building Practices **3 credit hour(s)**
- CM 2105 - Construction Scheduling **3 credit hour(s)**
- CNST 1210 - Construction Cost Estimating **3 credit hour(s)**
- CNST 1320 - Construction Project Management II **3 credit hour(s)**
- SUR 2205 - Fundamentals of Land Surveying **3 credit hour(s)**

Term 3

- BLAW 2110 - Business Law I **3 credit hour(s)**
- BUSA 1170 - Introduction to Quality Management **1 credit hour(s)**
- BUSA 1171 - Fundamentals of Continuous Quality Improvement **1 credit hour(s)**
- BUSA 1172 - Quality Tools **1 credit hour(s)**
- BUSA 1198 - Project Management Fundamentals **3 credit hour(s)**
- BUSA 2195 - Budget and Resource Management **3 credit hour(s)**
- BUSA 2198 - Project Management Applications **3 credit hour(s)**

Term 4

- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- Laboratory Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Construction Management Technology, Associate of Science

School of Skilled Trades & Arts (STA)

Construction Management ensures the timely, safe and cost-efficient execution of building projects. Construction managers use advanced software and an in-depth understanding of the construction process and related

materials to optimize project efficiency and work in an office as well as outside, on the jobsite.

CNM Construction Management A.S. students acquire a range of skills related to construction project management, from estimating and scheduling to safety, construction surveying, and basic accounting principles. Designed to be completed in 4 terms, the CM A.S. degree is primarily intended for transfer to a 4-year program.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- MATH 1215
- Reading & Writing Skills 2

Courses

Term 1

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- MATH 1350 - Introduction to Statistics **3 credit hour(s)**
- CNST 1120 - Construction Drawings **3 credit hour(s)**
- CNST 1220 - Construction Project Management I **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

Term 2

- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
  and
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- CM 1110 - Construction Materials and Techniques **3 credit hour(s)**
- CM 1205 - Introduction to Building Information Modeling **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- MATH 1220 - College Algebra **3 credit hour(s)**

Term 3

- CM 1233 - Sustainable Building Practices **3 credit hour(s)**
- CM 2105 - Construction Scheduling **3 credit hour(s)**
- ECON 2110 - Macroeconomic Principles **3 credit hour(s)**
  or
- ECON 2120 - Microeconomic Principles **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- MATH 1430 - Applications of Calculus I **3 credit hour(s)**

Term 4

- CNST 1210 - Construction Cost Estimating **3 credit hour(s)**
- CNST 1320 - Construction Project Management II **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**
- SUR 2205 - Fundamentals of Land Surveying **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

Pre-Construction, Certificate of Completion

School of Skilled Trades & Arts (STA)

Construction estimating and scheduling are critical skills for construction managers. This certificate, which falls under the Construction Management program, provides a firm base in construction fundamentals, scheduling and estimating, and introduces students to the wider field of construction management in a 3-term certificate. All courses are also included in the Construction Management A.A.S. degree, providing a certification opportunity for students while they complete their degree studies.

In this program students acquire the basic knowledge and skills for construction estimating and scheduling. An emphasis is placed in developing the skills necessary to use state of the art, industry standard technology and software. Several of the program courses are transferable to the University of New Mexico Construction Management Bachelor of Science degree program.

Educational Option Information

- This program can be completed: Part-time or full-time
- This program can be started: First term Construction Management courses are typically offered in fall and spring. Students may take second term classes in summer if available.
- Primary course location: Advanced Technology Center (ATC)
- Special requirements, if any: Students may be able to get Credit for Prior Learning and experience. Please consult with department faculty if you wish to explore this option.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Students are prepared for entry level positions as construction estimators and schedulers.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 3
- Reading and Writing Skills 2
- BCIS 1110

Courses

Term 1

- CNST 1120 - Construction Drawings **3 credit hour(s) ****
- CM 1110 - Construction Materials and Techniques **3 credit hour(s) ****
- CM 1205 - Introduction to Building Information Modeling **3 credit hour(s) ****
- CNST 1220 - Construction Project Management I **3 credit hour(s)**

Term 2

- CM 1233 - Sustainable Building Practices **3 credit hour(s)**
- CM 2105 - Construction Scheduling **3 credit hour(s)**
- CNST 1210 - Construction Cost Estimating **3 credit hour(s)**
- CNST 1320 - Construction Project Management II **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 24

In accordance with a transfer agreement, courses marked with ** may be applied toward the Bachelor of Science degree in Construction Management at the University of New Mexico.

COSMETOLOGY

Cosmetology, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

Students will study basic cosmetology skills designed to meet standards established by the New Mexico State Board of Barbers and Cosmetologists. The degree requires 62-63 credit hours in cosmetology and general education, which exceeds the minimum of 1,600 clock hours required by 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, pedicures, salon business and retail sales. Students can earn licensure by the New Mexico Board of Barbers and Cosmetologists after passing the state exam.

Educational Option Information

- This educational option is an: Associate degree of Applied Science
- This educational option can be completed: 5 terms – 1 term pre-requisites, 4 terms Cosmetology
- This educational option is designed for: A completed associate degree and licensed cosmetologist upon passed state board examination and receiving licensure from New Mexico Board of Barbers and Cosmetologists.
- Primary course location: RB Building, Joseph Montoya Campus.

Special Requirements

Completed High School diploma or equivalent. Credit for prior learning depending on the correct sources.

Felony Conviction

Contact Patrick Gomez, student advisor for any information pertaining to this at 505-224-4000 ext. 51659. Consult the Criminal Offender's Employment Act.

Transportation

Students are responsible for their own transportation to off-campus training sites. (Clinical courses at hospitals, internships, etc.)

Additional Supplies

Upon payment from the student, the textbooks and Pivot Point Kit are provided and available at the CNM bookstore.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid.

Please check the list here when considering a course.

Educational Opportunities

Upon graduation the student will receive an Associate degree in Applied Science whereupon they may progress to build on this degree toward a bachelor degree or business degree.

Career Opportunities

The student may contact New Mexico Board of Barbers and Cosmetologists for the vast possibilities available to a Cosmetologist. The graduated Cosmetologist may progress to earn a business degree. Consult the New Mexico Labor Board.

Cosmetologists may work in Dermatology Medical office with skin care, senior center hair care and nail care, cruise ship cosmetology, or with the entertainment industry such as theatre makeup and hair, the film industry, or fashion industry. They may also choose to open their own salon, or be a part of a large corporation that has salons such as JCPenney Salons.

For the graduation policy refer to the Graduating From CNM section, cnm.edu or the Students tab in my CNM.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 1
- Reading and Writing Skills 1

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

or

- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- COS 1010 - Orientation **2 credit hour(s)**
- COS 1020 - Cosmetology Fundamentals I **6 credit hour(s)**
- COS 1030 - Cosmetology Fundamentals II **6 credit hour(s)**

Term 3

- COS 1080 - Salon Theory I **2 credit hour(s)**
- COS 1092 - Hair Service Lab II **5 credit hour(s)**
- COS 1192 - Nail Service Lab **2 credit hour(s)**
- COS 1194 - Skin Service Lab **2 credit hour(s)**

Term 4

- COS 2080 - Salon Theory II **1 credit hour(s)**
- COS 2093 - Hair Service III **5 credit hour(s)**
- COS 2493 - Manicuring/Pedicuring Lab **2 credit hour(s)**
- COS 2494 - Facials Lab II **2 credit hour(s)**

Term 5

- COS 2505 - Salon Operation Theory **2 credit hour(s)**
- COS 2510 - Advanced Salon Theory **2 credit hour(s)**
- COS 2511 - State Laws/Regulations **1 credit hour(s)**
- COS 2590 - Cosmetology Practicum **3 credit hour(s)**
- COS 2692 - Advanced Salon Lab **4 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

Nail Technician, Certificate of Completion

School of Health, Wellness & Public Safety (HWPS)

To provide theory and practical skill development in the career field as a nail technician.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is a: Certificate of Completion
- This educational option is designed for: A certificate in nail technology and licensed nail technician upon passing state board examination and receiving licensure from New Mexico Board of Barbers and Cosmetologists.
- This educational option can be started: The nail technology program accepts new students every Fall term and Spring term.
- Primary course location: Joseph Montoya Campus in RB 104.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Special Requirements

Completed High School diploma or equivalent.

Felony Conviction

Consult the Criminal Offender's Employment Act.

Additional Supplies

Textbooks and Nail Technician Kit are available for purchase through the CNM bookstore.

Educational Opportunities

Upon graduation the student will receive a certificate in nail technology, with an option to continue working towards a cosmetology license and receive an associates degree in applied science.

Career Opportunities

The student may contact New Mexico Board of Barbers and Cosmetologists for the opportunities available to a nail technician. Consult the New Mexico Labor Board.

What are the prospects for employment for this educational option?

Nail technicians may work in the industry as a manicurist, nail technician on a cruise ship, employment with a product manufacturer as an educator, or own/operate a salon.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Courses

Term 1 - Fall and Spring

- COS 1010 - Orientation **2 credit hour(s)**
- COS 1040 - Nail Technician Theory **6 credit hour(s)**
- COS 1050 - Sanitation Bacteriology for Nail Technicians **3 credit hour(s)**
- COS 1192 - Nail Service Lab **2 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**

  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**

Term 2 - Spring and Summer

- COS 2040 - Advanced Nail Tech Theory I **6 credit hour(s)**
- COS 2050 - Advanced Nail Tech Theory II **6 credit hour(s)**
- COS 2493 - Manicuring/Pedicuring Lab **2 credit hour(s)**
- COS 2505 - Salon Operation Theory **2 credit hour(s)**
- COS 2511 - State Laws/Regulations **1 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 31

CRIMINAL JUSTICE

CNM Law Enforcement Academy, Certificate of Completion

School of Health, Wellness & Public Safety (HWPS)

The CNM Law Enforcement Academy is accredited by the New Mexico Law Enforcement Academy Board as a regional/satellite academy for Basic Police Officer Training and as such abides by all laws as established by the New Mexico Law Enforcement Act, Chapter 29, Article 7 NMSA 1978.
The CNMLEA utilizes the New Mexico Law Enforcement Academy Basic Police Officer Training (BPOT) curriculum that consists of 700+ hours of classroom and practical training in a wide variety of areas. The course of instruction prepares the student for the Law Enforcement Officer Certification Exam administered by the New Mexico Law Enforcement Academy.
Students who successfully complete the academy will earn 33 academic credits and a CNM Law Enforcement Academy Certificate of Completion.
Classes are scheduled Monday-Friday 6:00am - 5:00pm and may include some evening and weekend hours.

Students wanting to enter the CNM Law Enforcement Academy must be hired and sponsored by a New Mexico law enforcement agency. The CNMLEA does not currently accept self-sponsored students into the program.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Educational Option Information

- This educational option is an: Certificate of Completion
- This educational option can be completed: Full-time
- This educational option is designed for: Transfer into CNM's Criminal Justice, Associate of Applied Science
- This educational option can be started: Spring or

Fall
- Primary course location: CNM Westside Campus

Special Requirements

Applicants are mandated by New Mexico State Administrative Code to pass rigorous entrance standards. These include but are not limited to a written examination(s), physical assessment, background investigation, selection interviews, psychological testing, medical examination, drug screening and credit checks. Applicants must be at least 21 years of age, have a valid driver's license and be a US citizen.

Felony Conviction

Individuals with felony convictions are not eligible for this certification, per New Mexico Administrative Code.

Licensing

Upon successful completion of the academy, students will sit for the Law Enforcement Officer Certification Exam (LEOCE) administered by the State of New Mexico Department of Public Safety.

Additional Supplies

Additional tools, equipment and supplies will be required for individual courses during the program.

Educational Opportunities

This certificate is embedded in CNM's Criminal Justice, Associate of Applied Science curriculum allowing students to complete this certificate and continue onto their associate's degree. Many of the courses in this degree are transferable and some may be applied to two and four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

All regional law enforcement agencies are actively recruiting for cadets and frequently utilize CNM partnerships to facilitate the hiring of CNM students.

The Bureau of Labor and Statistics reports that in 2017 there were 662,390 police officer and sheriff's deputy jobs in the United States. Additionally, the Bureau of Labor and Statistics projects a 7% growth in the employment of police officers and sheriff's deputies from 2016-2026. Police officers and sheriff's deputies are traditionally employed by the local, state, and federal governments.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- **High School Diploma or Equivalent**

Courses

Term 1

- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**
- LEA 1004 - Domestic Violence: From the Crime Scene to the Courtroom **3 credit hour(s)**
- LEA 1005 - Law Enforcement I **2 credit hour(s)**
- LEA 1006 - Traffic Enforcement and Investigation **4 credit hour(s)**
- LEA 1007 - Crisis Intervention **3 credit hour(s)**
- LEA 1008 - Law Enforcement Lab **5 credit hour(s)**
- LEA 1009 - Physical Training for Law Enforcement **2 credit hour(s)**
- LEA 1010 - Patrol Procedures for Law Enforcement **4 credit hour(s)**
- LEA 1014 - Constitutional Policing for Law Enforcement **3 credit hour(s)**
- LEA 1015 - Criminal Law for Law Enforcement **3 credit hour(s)**
- LEA 1016 - Criminal Investigations for Law Enforcement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 33

Criminal Justice, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

The number of careers in the field of Criminal Justice continues to expand. These careers include law enforcement, corrections, and the courts. The U.S. Department of Labor projects continued job growth in all Criminal Justice fields of study.

The Associate of Applied Science degree in Criminal Justice provides the education needed for entry level employment in these career fields. It may also help you achieve promotion after gaining employment.

This program offers a varied schedule of courses to meet your needs, including traditional classes, on-line courses, interactive labs, and internship opportunities with local agencies. This program may also begin with dual enrollment for high school students via the Pathways programs.

See Recommended Sequence of Courses

Educational Option

- This educational option is an: Associate of Applied Science Degree
- This educational option can be completed: Full-time or Part-Time
- This educational option is designed for: Immediate employment and for transfer into a baccalaureate program
- This educational option can be started: Any Term
- Primary course location: Main Campus, Online.

Special Requirements

Some internships require a background check. In these instances, a felony conviction is a disqualifier for internship and there is no appeal process. However, internships are considered an elective and are not a prerequisite for graduation.

Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Educational Opportunities

Many of the courses in this degree are transferable and some may be applied to four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

It is well-advertised that several local policing and corrections agencies are understaffed. In addition, the rural agencies throughout most of the State of New Mexico and in agencies located in adjoining states are also considered to be understaffed. The Bureau of Labor and Statistics projects a 7% growth in the employment of police officers from 2016-2026.

Police officers are traditionally employed by the local, state, federal governments.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- CJUS 1110 - Introduction to Criminal Justice **3 credit hour(s)**
- CJUS 1120 - Criminal Law **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- SOCI 1110 - Introduction to Sociology **3 credit hour(s)**

Term 2

- CJUS 1140 - Juvenile Justice **3 credit hour(s)**
- CJUS 1143 - Report Writing **3 credit hour(s)**
- CJUS 1320 - Patrol Procedures **3 credit hour(s)**
- CJUS 1330 - Constitutional Policing **3 credit hour(s)**
- Mathematics Requirement **3 Credit hour(s) ***
- Any PHED Lab class** **1 credit hour(s)**

Term 3

- CJUS 2120 - Criminal Courts and Procedure **3 credit hour(s)**
- CJUS 2140 - Criminal Investigations **3 credit hour(s)**
- CJUS 2150 - Corrections System **3 credit hour(s)**
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**
- SOCI 2130 - Introduction to Criminology **3 credit hour(s)**

Term 4

- CJUS 2130 - Police and Society **3 credit hour(s)**
- CJUS 2255L - Investigations Laboratory **1 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Program Approved Elective **9 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

* MATH 1220 Recommended

**PHED 1630 is recommended for students considering careers in law enforcement and corrections.

Program Approved Electives

- ANTH 2130 - Introduction to Forensic Anthropology **3 credit hour(s)**
- CIST 2881 - Cybersecurity Fundamentals **3 credit hour(s)**
- CIST 2860 - Digital Forensics and Incident Response **3 credit hour(s)**
- CJUS 2110 - Professional Responsibility in Criminal Justice **3 credit hour(s)**
- CJUS 2153 - Community-Based Corrections **3 credit hour(s)**
- CJUS 2255 - Rules of Criminal Evidence **3 credit hour(s)**
- CJUS 2310 - Domestic Violence **3 credit hour(s)**
- CJUS 2350 - Organized Crime/Terrorism **3 credit hour(s)**
- CJUS 2514 - Introduction to Homeland Security **3 credit hour(s)**
- CJUS 2580 - Leadership Principles for Public Safety **3 credit hour(s)**
- CJUS 2990 - Criminal Justice Practicum **3 credit hour(s)**
- CJUS 2996 - Special Topics **1-6 credit hour(s)**
- CJUS 2997 - Independent Study **1-6 credit hour(s)**
- CJUS 2998 - Criminal Justice Internship **3 credit hour(s)**
- PHIL 1120 - Logic, Reasoning, & Critical Thinking **3 credit hour(s)**
- PSYC 2210 - Abnormal Psychology **3 credit hour(s)**

- SOCI 2140 - Juvenile Delinquency **3 credit hour(s)**
- SOCI 2250 - Sociology of Race and Ethnicity **3 credit hour(s)**
- SOCI 2310 - Contemporary Social Problems **3 credit hour(s)**

Law Enforcement, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

The Associate in Applied Science in Law Enforcement combines general education courses and law enforcement-specific coursework designed to prepare students interested in a career in law enforcement. This degree will prepare graduates for immediate entry into the workforce and will prepare students for the Law Enforcement Officer Certification Exam administered by the New Mexico Law Enforcement Academy.

The final term of the program is held at the CNM Law Enforcement Academy, which is a closed cohort consisting of LEA courses. Students wanting to enter the CNM Law Enforcement Academy must be hired and sponsored by a New Mexico law enforcement agency. The CNMLEA does not currently accept self-sponsored students into the program.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Option Information

- This educational option is an: Associate of Applied Science
- This educational option can be completed: Full-time
- This educational option is designed for: Immediate employment
- This educational option can be started: Anytime
- Primary course location: CNM Westside Campus

Special Requirements

Students attempting to enter the CNM Law Enforcement Academy must successfully meet the requirements set forth in the New Mexico Administrative Code for entry into a law enforcement academy. This includes, but is not limited to, successfully passing a background check, medical examination, and a psychological written exam and interview.

Applicants must be of good moral character and are mandated by New Mexico State Administrative Code to pass rigorous entrance standards for acceptance into a law enforcement academy program. These include but are not limited to:

- Psychological Written Exam and Interview;
- Background Check;
- Medical examination;
- Physical Assessment;
- Valid driver's license;
- Proof of U.S. citizenship;

Applicants may be subject to a screening interview and must be at least 21 years of age when applying to the CNMLEA Law Enforcement Academy.

Since the CNMLEA does not currently accept self-sponsored students into the program, students must be hired and sponsored by a New Mexico law enforcement agency with whom they will complete all the required screening.

Physical Requirements

Applicants to the program must be free of any physical condition that might adversely affect his/her performance as a police officer or prohibit him/her from successfully completing the CNM basic law enforcement training program. Students entering the CNM Law Enforcement Academy program must meet the following entrance physical standards as established in the New Mexico Administrative Code:

1.5-mile run: 15:14 minutes
1-minute sit-up: 27
1-minute push-up: 15
300-meter run: 71 seconds

Criminal Background

No individual may be certified as a police officer through the New Mexico Law Enforcement Academy who has been convicted of or pled guilty to or entered a plea of nolo contendere to: any felony charge or, within the three-year period immediately preceding their application any violation of any federal or state law or local ordinance relating to: any violation of any federal or state law or local ordinance relating to: aggravated assault, theft, driving while intoxicated, controlled substances or other crime involving moral turpitude and have not been released or discharged under dishonorable conditions from any of the armed forces of the United States.

Felony and/or Misdemeanor Conviction

Per the New Mexico Administrative Code, individuals with felony and/or some misdemeanor convictions are not eligible for this program and there is no appeal process.

Transportation

Students are responsible for their own transportation to off-campus training sites.

Licensing

Upon successful completion of the CNM Law Enforcement Academy, students will sit for the Law Enforcement Officer Certification Exam (LEOCE) administered by the New Mexico Law Enforcement Academy.

Educational Opportunities

The CNM Law Enforcement Academy Certificate of Completion program is embedded in this associate's degree program. Many of the courses in this degree

are transferable and some may be applied to two and four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

It is widely known that law enforcement agencies nationwide are struggling to recruit qualified applicants to enter the profession, leading the International Association of Chiefs of Police to state that law enforcement recruitment is in a state of crisis. The local policing agency (Albuquerque Police Department) is understaffed by a minimum of 400 officers. In addition, the rural agencies throughout most of the State of New Mexico and in agencies located in adjoining states are also considered to be understaffed. All regional law enforcement agencies are actively recruiting prospective law enforcement candidates and frequently utilize CNM partnerships to facilitate the hiring of CNM students.

The Bureau of Labor and Statistics reported that in 2022 there were 655,890 police and sheriff's patrol officers employed in the United States. Additionally, the Bureau of Labor and Statistics projects growth in the employment of police officers and sheriff's deputies from 2021-2031. Police officers and sheriff's deputies are traditionally employed by the local, state and federal governments.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)** (Recommended: MATH 1130 - Survey of Mathematics)
- Multi-Discipline/Flexible Requirement **3 credit hour(s)** (Recommended: PSYC 1110 - Introduction to Psychology)
- SOCI 1110 - Introduction to Sociology **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)** (Recommended: PHIL 1120 - Logic, Reasoning, & Critical Thinking)

Term 2

- SOCI 2130 - Introduction to Criminology **3 credit hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**
- LEA 1001 - Law Enforcement Academy Preparation **2 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 3

- LEA 1004 - Domestic Violence: From the Crime Scene to the Courtroom **3 credit hour(s)**
- LEA 1005 - Law Enforcement I **2 credit hour(s)**
- LEA 1006 - Traffic Enforcement and Investigation **4 credit hour(s)**
- LEA 1007 - Crisis Intervention **3 credit hour(s)**
- LEA 1008 - Law Enforcement Lab **5 credit hour(s)**
- LEA 1009 - Physical Training for Law Enforcement **2 credit hour(s)**
- LEA 1010 - Patrol Procedures for Law Enforcement **4 credit hour(s)**
- LEA 1014 - Constitutional Policing for Law Enforcement **3 credit hour(s)**
- LEA 1015 - Criminal Law for Law Enforcement **3 credit hour(s)**
- LEA 1016 - Criminal Investigations for Law Enforcement **3 credit hour(s)**
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

Program Approved Electives

- CJUS 1120 - Criminal Law **3 credit hour(s)**
- CJUS 1143 - Report Writing **3 credit hour(s)**
- CJUS 1330 - Constitutional Policing **3 credit hour(s)**
- CJUS 2350 - Organized Crime/Terrorism **3 credit hour(s)**
- CJUS 2514 - Introduction to Homeland Security **3 credit hour(s)**
- CJUS 2996 - Special Topics **1-6 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- PHIL 1130 - Contemporary Moral Issues **3 credit hour(s)**
- PSD 1002 - Public Safety Dispatch Foundational Skills **3 credit hour(s)**
- PSD 1102 - Public Safety Dispatch Advanced Skills **5 credit hour(s)**
- PSYC 2110 - Social Psychology **3 credit hour(s)**
- SOCI 2120 - Introduction to Criminal Justice Systems **3 credit hour(s)**
- SOCI 2140 - Juvenile Delinquency **3 credit hour(s)**
- SOCI 2310 - Contemporary Social Problems **3 credit hour(s)**
- SOCI 2250 - Sociology of Race and Ethnicity **3 credit hour(s)**

Public Safety 911 Dispatcher, Certificate of Achievement

School of Health, Wellness & Public Safety (HWPS)

The CNM Public Safety 911 Dispatcher program is New Mexico state-approved courses that consist of 130+ hours of online, classroom, and practical training in a wide variety of areas. This certificate program is designed to prepare the student for the New Mexico Public Safety Telecommunicator Certification Exam administered by the New Mexico Law Enforcement Academy.

The CNMPSD Academy abides by all requirements and guidelines as established by New Mexico Administrative Code, Title 10, Chapter 29, Part 10, and will follow all rules and regulations as set by the New Mexico Law Enforcement Academy Board.

Students are required to complete the following prerequisite online courses prior to enrolling in the CNMPSD courses:

- FEMA ICS 100 - Introduction to Incident Command System
- FEMA ICS 200 - Incident Command for Single Resource and Initial Action Incidents
- FEMA ICS 700 - National Incident Management System, an Introduction
- FEMA ICS 800 - National Response Framework, an Introduction.

This certificate program is designed for students already employed by local and regional agencies and allows them to obtain New Mexico Department of Public Safety Telecommunicator certification as required by the New Mexico Law Enforcement Academy training standards.

Classes are scheduled to meet Monday through Friday between 8:00 a.m. to 5:00 p.m. Some evening classes may be required.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- **High School Diploma or Equivalent**

Courses

- PSD 1002 - Public Safety Dispatch Foundational Skills **3 credit hour(s)**
- PSD 1102 - Public Safety Dispatch Advanced Skills **5 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 8

CRIMINOLOGY

Criminology, Associate of Arts

School of Liberal Arts (LA)

Criminology is the social-scientific study of crime, including the measurement, etiology, consequences, prevention, control, and treatment of crime and delinquency. Courses in the program help students develop a structural perspective which in turn lets them understand crime, law, and society more broadly and critically. The criminology major prepares students for further academic study and/or employment in the fields of parole and probation careers, criminal justice employment as well as law school. Information about career options for criminology majors is offered by the American Sociological Association and the American Society of Criminology.

Closely aligned with the sociology program, this criminology program is designed to meet the requirements for an Associate of Arts in Criminology from CNM. It will also prepare a student to obtain a Bachelor of Arts in Criminology or Sociology from a 4-year college or university. Students will develop critical thinking skills through comparison of major theories in the field, analysis of crime trends, and evaluation of the criminal justice system.

Educational Option Information

- This educational option is designed: To meet the requirements for an Associate of Arts in Criminology from CNM and prepare a student to obtain a Bachelor of Arts in Criminology or Sociology from a 4-year college or university.
- This educational option can be completed: Part-Time or Full-Time.
- This program can be started: Any term.
- Primary course location: Any CNM Campus. Online courses are also available.

Special Requirements:

- In addition to the UNM criminology requirements shown in the term-by-term outline, students can transfer six credit hours of CNM sociology courses listed on the UNM approved electives list for criminology majors; these include SOCI 2310 Contemporary Social Problems, SOCI 2210 Sociology of Deviance, and SOCI 2250 Sociology of Race and Ethnicity. CNM sociology courses not listed here transfer to UNM as electives. The UNM Department of Sociology will accept 6 credit hours from CNM's Criminal Justice program (courses with a CJUS prefix); the hours will transfer as electives for UNM criminology majors. The Criminal Justice (CJUS) credit hours do not count toward the CNM Liberal Arts degree.
- Graduates who intend to work in the field of law enforcement may wish to check agency requirements.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

This program listed is designed to meet the requirements for an Associate of Arts in Criminology from CNM and prepare a student to obtain a Bachelor of Arts in Criminology at University of New Mexico. However, students from CNM seeking a baccalaureate degree may also transfer to other institutions. Criminology majors interested in transfer to UNM should consult the UNM Sociology Department. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements. College catalogs are generally available online. Students should also advisor with CNM Advisement.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at

other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
  or
- Program Approved Elective **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s) ***
- SOCI 1110 - Introduction to Sociology **3 credit hour(s)**

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Modern Language Elective **4 credit hour(s) * ***
- SOCI 2120 - Introduction to Criminal Justice Systems **3 credit hour(s)**
  or
- SOCI 2130 - Introduction to Criminology **3 credit hour(s)**

Term 3

- Arts & Sciences Elective **3 credit hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab optional) **3 credit hour(s)**
- SOCI 2310 - Contemporary Social Problems **3 credit hour(s)**
  or
- SOCI 2210 - Sociology of Deviance **3 credit hour(s)**

Term 4

- Arts & Sciences Elective **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**
- SOCI 2410 - Introduction to Research Methods **3 credit hour(s)**
  or
- SOCI 2999 - Sociology and Criminology Capstone **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

This information is meant to serve as a general guide for students intending to major in Criminology. Specific requirements for transfer will vary from school to school. It is the student's responsibility to contact the four year transfer school to confirm specific admission and degree requirements.

*** MATH 1350 - Introduction to Statistics required for UNM Criminology majors.**

*** * Choose modern language from courses with the prefixes ARBC, FREN, PORT, SIGN (except 2214), SPAN (except SPAN 2280)**

Program Approved Electives

Choose from the following courses:

- CJUS 1110 - Introduction to Criminal Justice **3 credit hour(s)**
- CJUS 1120 - Criminal Law **3 credit hour(s)**
- SOCI 2120 - Introduction to Criminal Justice Systems **3 credit hour(s)**
- SOCI 2130 - Introduction to Criminology **3 credit hour(s)**
- SOCI 2140 - Juvenile Delinquency **3 credit hour(s)**
- SOCI 2250 - Sociology of Race and Ethnicity **3 credit hour(s)**
- SOCI 2310 - Contemporary Social Problems **3 credit hour(s)**

CULINARY ARTS

Baking, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Baking certificate is a two-term program. 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 in the second half of the program. Techniques of classical and contemporary pastry arts are covered, including laminated dough, tarts and specialty cakes.

The certificate program is a required part of the associate of applied science degree which is nationally accredited by the American Culinary Federation Education Foundation's Accrediting Commission. ACF accreditation assures that a program is meeting at least a minimum of

standards and competencies set for faculty, curriculum and student services. For more information about ACF, go to acfchefs.org. Students may participate in culinary competitions with ACF, SkillsUSA and other extracurricular activities.

Educational Option Information

- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in two terms.
- This educational option can be started: Any term
- Primary course location: Main Campus; some theory courses are offered online

Special Requirements

- Students are required to purchase chef's uniforms, textbooks, and tools.
- Students should be able to lift 30 pounds
- Students must be able to stand for the duration of the laboratory class.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students completing the certificate may also receive certificates in Food Service Management, and Culinary Fundamentals.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Jobs are available in restaurants, casinos, resorts, schools, retirement homes, hospitals, cruise ships, catering companies, convention centers and other areas. Types of employment range from business owners, to bakers or cooks and managers or chefs and include employment opportunities from the fast food industry to fine dining.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**

  or
- CULN 1103 - Safety and Sanitation Principles **3 credit hour(s)**
- CULN 1100 - Introduction to Culinary Skills **3 credit hour(s)**
- CULN 1110 - Culinary Skills **4 credit hour(s)**

Term 2

- CULN 1130 - Introduction to Baking Fundamentals **4 credit hour(s)**
- CULN 1132 - Applied Baking Principles **4 credit hour(s)**
- Program Approved Electives **3-5 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 22

Program Approved Electives

- **Any CULN Course** (except those required for the award)
- **Any BEV Course** (except those required for the award)
- **Any HT Course** (except those required for the award)
- CULN 1096-1996 - Special Topics **1-3 credit hour(s)**
- CULN 2096-2996 - Special Topics **1-3 credit hour(s)**
- CULN 2097 - Independent Study **1-10 credit hour(s)**
- CULN 2798 - Internship **1 credit hour(s)**
- CULN 2898 - Internship **2 credit hour(s)**
- CULN 2998 - Internship **3 credit hour(s)**

Culinary Arts (AAS), Advanced Baking and Pastry Concentration

School of Business, Hospitality & Technology (BHT)

The mission of CNM's Culinary Arts Program is to teach innovative trends in the hospitality/food service industry, while providing an atmosphere for learning that encourages student growth, teamwork and diversity, that result in life-long learning and employment in the hospitality/food service industry.

Culinary Arts is an excellent field for individuals seeking a challenging career in a rapidly growing industry. The associate degree is a four term program. Students will study baking and pastry, professional cooking, safety,

sanitation, nutrition, equipment use, human relations, supervisory skills, dining room skills, business practices and other general coursework. Classes include classroom and lab time.

This program is accredited by the American Culinary Federation Education Foundation's Accrediting Commission. Upon completion of the associate of applied science degree program, students are eligible to become certified culinarians and/or certified pastry cooks through ACF depending on the concentration chosen. ACF accreditation assures that a program is meeting at least a minimum of standards and competencies set for faculty, curriculum and student services. For more information about ACF go to acfchefs.org. Students may participate in culinary competitions with ACF, SkillsUSA and other extracurricular activities.

Educational Option Information

- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in four terms.
- This educational option can be started: Any term
- Primary course location: Main Campus; some theory courses are offered online

Special Requirements

- Students are required to purchase chef's uniforms, textbooks, and tools.
- Students should be able to lift 30 pounds
- Students must be able to stand for the duration of the laboratory class.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students completing the certificate may also receive certificates in Food Service Management, Baking, and Culinary Fundamentals.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Jobs are available in restaurants, casinos, resorts, schools, retirement homes, hospitals, cruise ships, catering companies, convention centers and other areas. Types of employment range from business owners, to bakers or cooks and managers or chefs and include employment opportunities from the fast food industry to fine dining.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**

  or
- CULN 1103 - Safety and Sanitation Principles **3 credit hour(s)**
- CULN 1100 - Introduction to Culinary Skills **3 credit hour(s)**
- CULN 1110 - Culinary Skills **4 credit hour(s)**

Term 2

- BEV 1160 - Beverage Service I **3 credit hour(s)**
- CULN 1112 - Intermediate Culinary Skills **4 credit hour(s)**
- HT 2215 - Purchasing and Cost Controls **3 credit hour(s)**
- NUTR 1010 - Personal and Practical Nutrition **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 3

- CULN 1130 - Introduction to Baking Fundamentals **4 credit hour(s)**
- CULN 1132 - Applied Baking Principles **4 credit hour(s)**
- HRTM 1130 - Introduction to Hospitality Management **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 4

- CULN 2020 - Entrepreneurial Food Operations **3 credit hour(s)**
- CULN 2232 - Advanced Baking and Pastry **4 credit hour(s)**
- CULN 2234 - Retail & Restaurant Bakery Operations **4 credit hour(s)**
- Program Approved Elective **5 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- **Any CULN Course** (except those required for the award)
- **Any BEV Course** (except those required for the award)
- **Any HT Course** (except those required for the award)
- CULN 1096-1996 - Special Topics **1-3 credit hour(s)**
- CULN 2096-2996 - Special Topics **1-3 credit hour(s)**
- CULN 2097 - Independent Study **1-10 credit hour(s)**
- CULN 2798 - Internship **1 credit hour(s)**
- CULN 2898 - Internship **2 credit hour(s)**
- CULN 2998 - Internship **3 credit hour(s)**

Culinary Arts (AAS), Beverage Management Concentration

School of Business, Hospitality & Technology (BHT)

This Beverage Management Program prepares students for a career as beverage managers working in the beverage industry. In addition to the culinary and baking foundation courses, students will explore beverage production, beverage service, purchasing, cost controls, marketing and business/hospitality law.

See Recommended Sequence of Courses

Educational Option Information

- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in four terms.
- This educational option is designed for: Culinary Arts students seeking to enhance their skill set in beverage management
- This educational option can be started: Any term
- Primary course location: Main Campus; class meetings may be held at commercial beverage producers, some theory courses are offered online

Special Requirements

- Students must be at least 21 years of age or older at the start of term for all BEV courses except BEV 1160
- Students must be able to lift 30 pounds
- Students must be able to stand for the duration of the laboratory class

This program includes identification and evaluation of alcoholic beverages. Students are urged to consider their ability to consume alcohol before enrolling in this program. If you have concerns about the role of alcohol consumption in this program, please contact an advisor.

Additional tools or supplies required for this educational option

- Students are required to purchase chef's uniforms, textbooks, personal protective equipment and clothing, and tools

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students completing the degree may also earn certificates in Baking, Beverage Management, Culinary Fundamentals, and Food Service Management. Students will also have the opportunity to earn the following industry certifications: New Mexico ServSafe® alcohol server's permit, ServSafe® Manager Training and Certification.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Jobs are available in restaurants, casinos, resorts, wineries, breweries, brewpubs, cruise ships, catering companies, convention centers and other areas. Types of employment range from business owners, to bakers or cooks and managers or chefs and include employment opportunities from the fast food industry to fine dining.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**
  or
- CULN 1103 - Safety and Sanitation Principles **3 credit hour(s)**
- CULN 1100 - Introduction to Culinary Skills **3 credit hour(s)**
- CULN 1110 - Culinary Skills **4 credit hour(s)**

- HT 1111 - Guest Service Management **1 credit hour(s)**

Term 2

- BEV 1100 - Beer Production and Styles **1 credit hour(s)**
  or
- BEV 1200 - Wine Production and Styles **1 credit hour(s)**
  or
- BEV 1300 - Distilled Spirits Production and Styles **1 credit hour(s)**

- CULN 1130 - Introduction to Baking Fundamentals **4 credit hour(s)**
- CULN 1132 - Applied Baking Principles **4 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 3

- BEV 1160 - Beverage Service I **3 credit hour(s)**
- CULN 1112 - Intermediate Culinary Skills **4 credit hour(s)**
- HT 2215 - Purchasing and Cost Controls **3 credit hour(s)**
- NUTR 1010 - Personal and Practical Nutrition **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- BEV 1192 - Draught Systems **1 credit hour(s)**
  or
- BEV 1292 - Food and Beverage Pairing **1 credit hour(s)**
  or
- BEV 1392 - Mixology **1 credit hour(s)**

- BEV 2160 - Beverage Service II **3 credit hour(s)**
  or
- BEV 2260 - Bar and Beverage Management **3 credit hour(s)**

- HRTM 1130 - Introduction to Hospitality Management **3 credit hour(s)**
- HT 2240 - Hospitality Law **3 credit hour(s)**
- Program Approved Elective **7 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- **Any CULN Course** (except those required for the award)
- **Any BEV Course** (except those required for the award)
- **Any HT Course** (except those required for the award)
- CULN 1096-1996 - Special Topics **1-3 credit hour(s)**
- CULN 2096-2996 - Special Topics **1-3 credit hour(s)**
- CULN 2097 - Independent Study **1-10 credit hour(s)**
- CULN 2798 - Internship **1 credit hour(s)**
- CULN 2898 - Internship **2 credit hour(s)**
- CULN 2998 - Internship **3 credit hour(s)**

Culinary Arts (AAS), Culinary Arts Concentration

School of Business, Hospitality & Technology (BHT)

The mission of CNM's Culinary Arts Program is to teach innovative trends in the hospitality/food service industry, while providing an atmosphere for learning that encourages student growth, teamwork and diversity, that result in life-long learning and employment in the hospitality/food service industry.

Culinary Arts is an excellent field for individuals seeking a challenging career in a rapidly growing industry. The associate degree is a four term program. Students will study baking and pastry, professional cooking, safety, sanitation, nutrition, equipment use, human relations, supervisory skills, dining room skills, business practices and other general coursework. Classes include classroom and lab time.

This program is accredited by the American Culinary Federation Education Foundation's Accrediting Commission. Upon completion of the associate of applied science degree program, students are eligible to become certified culinarians and/or certified pastry cooks through ACF depending on the concentration chosen. ACF accreditation assures that a program is meeting at least a minimum of standards and competencies set for faculty, curriculum and student services. For more information about ACF go to acfchefs.org. Students may participate in culinary competitions with ACF, SkillsUSA and other extracurricular activities.

Educational Option Information

- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in four terms.
- This educational option can be started: Any term
- Primary course location: Main Campus; some theory courses are offered online

Special Requirements

- Students are required to purchase chef's uniforms, textbooks, and tools.
- Students should be able to lift 30 pounds
- Students must be able to stand for the duration of the laboratory class.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students completing the certificate may also receive certificates in Food Service Management, and Culinary Fundamentals.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Jobs are available in restaurants, casinos, resorts, schools, retirement homes, hospitals, cruise ships, catering companies, convention centers and other areas. Types of employment range from business owners, to bakers or cooks and managers or chefs and include employment opportunities from the fast food industry to fine dining.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**

  or
- CULN 1103 - Safety and Sanitation Principles **3 credit hour(s)**
- CULN 1100 - Introduction to Culinary Skills **3 credit hour(s)**
- CULN 1110 - Culinary Skills **4 credit hour(s)**

Term 2

- CULN 1130 - Introduction to Baking Fundamentals **4 credit hour(s)**
- CULN 1132 - Applied Baking Principles **4 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- NUTR 1010 - Personal and Practical Nutrition **3 credit hour(s)**

Term 3

- BEV 1160 - Beverage Service I **3 credit hour(s)**
- CULN 1112 - Intermediate Culinary Skills **4 credit hour(s)**
- HT 1111 - Guest Service Management **1 credit hour(s)**
- HT 2215 - Purchasing and Cost Controls **3 credit hour(s)**
- Program Approved Electives **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- CULN 2210 - Garde Manger **4 credit hour(s)**
- CULN 2214 - Advanced Culinary Skills **4 credit hour(s)**
- CULN 2216 - Advanced Food and Beverage Service **3 credit hour(s)**
- HRTM 1130 - Introduction to Hospitality Management **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- **Any CULN Course** (except those required for the award)
- **Any BEV Course** (except those required for the award)
- **Any HT Course** (except those required for the award)
- CULN 1096-1996 - Special Topics **1-3 credit hour(s)**
- CULN 2096-2996 - Special Topics **1-3 credit hour(s)**
- CULN 2097 - Independent Study **1-10 credit hour(s)**
- CULN 2798 - Internship **1 credit hour(s)**
- CULN 2898 - Internship **2 credit hour(s)**
- CULN 2998 - Internship **3 credit hour(s)**

Culinary Fundamentals, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Culinary Fundamentals certificate is a two-term program. Cooking is an excellent field for students seeking a challenging career in a rapidly growing culinary and hospitality industry. Students will study cooking techniques, safety, sanitation, nutrition, knife skills, teamwork skills, equipment use, culinary math and computer skills. Classes include classroom and lab time.

The certificate program is a required part of the Associate of Applied Science Degree which is nationally accredited by the American Culinary Federation Education Foundation's Accrediting Commission. ACF accreditation assures that a program is meeting at least a minimum of standards and competencies set for faculty, curriculum and student services. For more information about ACF go to acfchefs.org. Students may participate in culinary competitions with ACF, SkillsUSA and other extracurricular activities.

Educational Option Information

- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in two terms.
- This educational option can be started: Any term

- Primary course location: Main Campus; some theory courses are offered online

Special Requirements

- Students are required to purchase chef's uniforms, textbooks, and tools.
- Students should be able to lift 30 pounds
- Students must be able to stand for the duration of the laboratory class.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Other program costs may include:

- Tools and equipment: ~$500
- Uniforms: ~$250

Educational Opportunities

Students completing the certificate may also receive certificates in Food Service Management, and Culinary Fundamentals.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Jobs are available in restaurants, casinos, resorts, schools, retirement homes, hospitals, cruise ships, catering companies, convention centers and other areas. Types of employment range from business owners, to bakers or cooks and managers or chefs and include employment opportunities from the fast food industry to fine dining.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**

  or
- CULN 1103 - Safety and Sanitation Principles **3 credit hour(s)**
- CULN 1100 - Introduction to Culinary Skills **3 credit hour(s)**
- CULN 1110 - Culinary Skills **4 credit hour(s)**

Term 2

- CULN 1112 - Intermediate Culinary Skills **4 credit hour(s)**
- Program Approved Elective **7-8 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 22

Program Approved Electives

- **Any CULN Course** (except those required for the award)
- **Any BEV Course** (except those required for the award)
- **Any HT Course** (except those required for the award)
- CULN 1096-1996 - Special Topics **1-3 credit hour(s)**
- CULN 2096-2996 - Special Topics **1-3 credit hour(s)**
- CULN 2097 - Independent Study **1-10 credit hour(s)**
- CULN 2798 - Internship **1 credit hour(s)**
- CULN 2898 - Internship **2 credit hour(s)**
- CULN 2998 - Internship **3 credit hour(s)**

Food Service Management, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Food Service Management 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 and HACCP procedures are stressed. Classroom instruction includes theory and hands-on application in food service, nutrition, human resources, beverages and business practices.

Students may sit for course examinations prepared by the National Restaurant Association Educational Foundation (NRAEF) and by the Educational Institute of the American Hotel and Lodging Association (EI). Upon successful completion, students will be awarded ServSafe® Food Protection Manager Certification from NRAEF and Course Completion Certification from EI. This is an additional certification available from a third party.

Educational Option Information

- This educational option can be completed: Part-

time or full-time. Full-time students can complete the program in two terms.
- This educational option can be started: Any term
- Primary course location: Main Campus; some theory courses are offered online

Special Requirements

- Students are required to purchase new textbooks for program courses with third party exams.
- Students are required to purchase chef's uniforms, textbooks, and tools.
- Students should be able to lift 30 pounds
- Students must be able to stand for the duration of the laboratory class.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students completing the certificate may also receive certificates in Culinary Fundamentals and Hospitality and Tourism.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Jobs are available in restaurants, casinos, resorts, schools, retirement homes, hospitals, cruise ships, catering companies, convention centers and other areas. Types of positions range from entry level to supervisory/ managerial positions, including service managers and kitchen managers.

Gainful Employment information is available from Job Connection Services.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**

  or
- CULN 1103 - Safety and Sanitation Principles **3 credit hour(s)**
- CULN 1010 - Culinary Fundamentals **3 credit hour(s)**

  or
- CULN 1110 - Culinary Skills **4 credit hour(s)**
- CULN 1100 - Introduction to Culinary Skills **3 credit hour(s)**

  or
- HRTM 1120 - Introduction to Tourism **3 credit hour(s)**

Term 2

- BEV 1160 - Beverage Service I **3 credit hour(s)**
- HT 1111 - Guest Service Management **1 credit hour(s)**
- HRTM 1130 - Introduction to Hospitality Management **3 credit hour(s)**
- HT 2215 - Purchasing and Cost Controls **3 credit hour(s)**
- NUTR 1010 - Personal and Practical Nutrition **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 23

DENTAL ASSISTANT

Dental Assisting, Certificate of Completion

School of Health, Wellness & Public Safety (HWPS)

Dental Assisting is a four-term program accredited by the Commission on Dental Accreditation (CODA) 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. It also prepares graduates for state certifications in dental radiographs, pit and fissure sealants, coronal polishing, and topical fluoride application. This program also prepares students for their Dental Assisting National Board (DANB) Exam.

Special Requirements

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health caregivers criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical

experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career 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 work in private offices, dental clinics, dental supply companies, dental laboratories, hospitals, mobile dental clinics or with school programs.

Gainful Employment information is available from Career and Job Placement.

For the graduation policy refer to the Graduating From CNM section, cnm.edu or the Students tab in my CNM.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- High School Diploma or Equivalent
- Math Skills 2 Alg
- Reading and Writing Skills 2
- Must be 18 years of age before entering due to federal radiation guidelines.
- Recommend DA 1010

Courses

Term 1 - Typically Offered Fall or Spring

- DA 1101 - Practical Application of Dental Materials **2 credit hour(s)**
- DA 1104 - Tooth Morphology Histology and Recordings **3 credit hour(s)**
- DA 1107 - Principles and Techniques of Dental Radiology I **2 credit hour(s)**
- DA 1119 - Fundamentals of Chairside Assisting I **2 credit hour(s)**
- DA 1192 - Practical Application of Dental Materials Lab **1 credit hour(s)**
- DA 1193 - Principles and Techniques of Dental Radiology I Lab **1 credit hour(s)**
- DA 1292 - Fundamentals of Chairside Assisting I Lab **1 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**

Term 2 - Typically offered Spring or Summer

- DA 1517 - Principles and Techniques of Dental Radiology II **2 credit hour(s)**
- DA 1519 - Fundamentals of Chairside Assisting II **2 credit hour(s)**
- DA 1590 - Clinical Experience I **3 credit hour(s)**
- DA 1592 - Fundamentals of Chairside Assisting II Lab **1 credit hour(s)**
- DA 1593 - Principles and Techniques of Dental Radiology II Lab **1 credit hour(s)**
- DA 2513 - Introduction to Dental Specialties **2 credit hour(s)**
- DA 2593 - Introduction to Dental Specialties Lab **1 credit hour(s)**

Term 3 - Typically Offered Summer or Fall

- DA 1512 - Dental Science II **3 credit hour(s)**

- DA 2090 - Clinical Experience II **3 credit hour(s)**
- DA 2508 - Practice Management and Oral Health Promotion **2 credit hour(s)**
- DA 2510 - DANB Preparation **2 credit hour(s)**

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 38

DEVELOPMENTAL EDUCATION

Bilingual Transition, Certificate of Completion

The Bilingual Transition Certificate program is for non-native English speaking learners looking to transition into college-level English learning environments. By pairing general studies core coursework and support labs in English for Speakers of Other Languages (ESOL), this program enables students to build academic skills while improving their English-language proficiency. It is ideal for supporting students who lack the full English-language competency to successfully take content area coursework. The program supports the development of bilingual capacity in individuals who are interested in a college career in a number of academic fields leading to an associate's degree. This program offers accessible pathways to both academic and career advancement, increasing student success and workforce readiness while highlighting the importance of bilingualism as a skillset.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- Humanities Requirement **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- ESOL 1220 - Vocabulary and Discourse in Humanities **1 credit hour(s)**
- ESOL 1240 - Vocabulary and Discourse in Communications **1 credit hour(s)**

Term 2

- Creative and Fine Arts Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- ESOL 1210 - Vocabulary and Discourse in Creative and Fine Arts **1 credit hour(s)**
- ESOL 1230 - Vocabulary and Discourse in Mathematics **1 credit hour(s)**
- ESOL 1110 - Composition I for English Learners **3 credit hour(s)**

Term 3

- Laboratory Science Requirement **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**
- ESOL 1250 - Vocabulary and Discourse in Laboratory Science **1 credit hour(s)**
- ESOL 1260 - Vocabulary and Discourse in Social and Behavioral Science **1 credit hour(s)**
- ESOL 1120 - Composition II for English Learners **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 31

Developmental Education

School of Education (ED)

The Developmental Education (DE) program helps students prepare for college in English for Speakers of Other Languages (ESOL), Integrated Reading and Writing (IRW), and Math. Courses are numbered 0100 - 0999.

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). Credits from courses numbered below 1000 do not transfer to other degree-granting institutions. However, these courses typically help students meet admissions requirements and program proficiencies.

Interested students should contact the School of Education (ED) for more information.

Educational Option Information

- This program can be completed: Part-time or full-time.
- Special requirements for this program: Students registering for Developmental Education classes need to take the Accuplacer test to determine the appropriate course level.
- Primary course location: Development Education classes are available at all CNM Campuses.

Cost and Financial Aid

Is this program eligible for financial aid?

- Eligible students may receive financial aid for up to 30 credit hours in Developmental Education courses.

Approximate cost of this educational option:

- Tuition: See table of Tuition and Fees
- Books: ~$0 - $200

Career and Educational Opportunities

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

- Required Skills

Students registering for Developmental Education classes need to take the Accuplacer test to determine the appropriate course level.

Courses

- IRW 0970 - Integrated Reading and Writing I **3 credit hour(s)**
  or

- IRW 0980 - Integrated Reading and Writing II **3 credit hour(s)**
  or
- MATH 0850 - Math Test Preparation **1 credit hour(s)**

- MATH 0970 - Algebraic Problem Solving I **3 credit hour(s)**
- MATH 0980 - Algebraic Problem Solving II **3 credit hour(s)**

ESOL (English for Speakers of Other Languages) Communication and Culture, Certificate of Completion

School of Education (ED)

The ESOL (English for Speakers of Other Languages) program is designed for students whose native language is not English and who want to increase their English language skills for a specific career. Courses in this certificate are designed to prepare non-native English speakers for college-level reading, writing, and oral communication.

Students take four college-level ESOL classes specific to a career technical field. They also take one to two introductory courses in the career or technical field to complete the 16 credits required for this Certificate of Completion.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is a Certificate of Completion.
- This educational option is designed for: Students whose native language is not English and who want to increase their English language skills for a specific career.
- This educational option can be completed: Part-Time
- This educational option can be started: Any Term
- Primary Course Location: Main Campus

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Special Requirements

Students must have certain English language proficiency before taking any of the ESOL courses. If students do not meet the required English language proficiency, they can be directed to the Adult Basic Education program. Students registering for ESOL Certificate of Completion courses must have an English 1 proficiency.

Educational Opportunities

Courses in this certificate are designed to prepare non-native English speakers for college-level reading, writing, and oral communication. This certificate builds the workplace and academic language skills necessary for a certificate or degree at CNM.

Career Opportunities

This certificate is linked to a specific career or technical field at CNM. It will prepare students to enter the specific career or technical field they choose to pursue, for instance, health care, customer service, etc.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1
- Communication and Culture for Specific Purposes Curriculum
- ESOL 1001 - Academic and Workplace Communication for Specific Purposes **3 credit hour(s)**
- ESOL 1010 - Reading and Vocabulary for Specific Purposes **3 credit hour(s)**
- ESOL 1020 - English Composition and Grammar for Specific Purposes **4 credit hour(s)**
- ESOL 1030 - U.S. Culture and Contemporary Issues for Specific Purposes **3 credit hour(s)**
- Program Approved Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 16

- Program Approved Requirements
- AT 1005 - Survey of Applied Technologies **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BUSA 2240 - Customer Service in Business **3 credit hour(s)**
- PHLS 1120 - Introduction to Community Health Care **3 credit hour(s)**

DIAGNOSTIC MEDICAL SONOGRAPHY

Diagnostic Medical Sonography, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

The goal of the CNM Diagnostic Medical Sonography program is to prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor

(skills), and affective (behavior) learning domains for the following concentrations it offers: Abdominal Sonography - Extended and Obstetrics and Gynecology Sonography. A sonographer is a health care professional who uses high-frequency sound waves as a diagnostic tool to view the human body in order to aid the physician in the determination of a diagnosis. 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," "Obstetrics and Gynecology," "Vascular" and "Breast" sonography. Successful completion of this exam results in attaining the RDMS (Registered Diagnostic Medical Sonographer) credential.

This program's first term courses are offered in the fall term only. This may delay a student's program start date. Please check with an advisor for more information.

See Recommended Sequence of Courses

The DMS program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography.

Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS).

Ensuring Quality Sonography Education That Serves the Public
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Send inquiries regarding the field of Diagnostic Medical Sonography or the program, itself, to: DMS@cnm.edu.

Educational Option Information

- This educational option is an: Associate of Applied Science
- This educational option can be completed: Full-time
- This educational option is designed for: qualifies students interested in pursuing a career in sonography
- This educational option can be started: Fall
- Primary course location: South Valley

Special Requirements

Program Entry Registration Screening

This is a "Coordinated Program Entry" program; students must complete a pre-registration screening process administered through the Coordinated Program Entry Office before being eligible to register for program courses.

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health Caregivers Criminal History Screening Program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Felony Conviction

Students will be asked to declare any felony convictions which may impact clinical placement while in the program. Each case will need to be reviewed by program officials and CNM administration

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Cost and Financial Aid

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Additional Supplies

Through student fees each student will be provided with an iPad and case with keyboard, Apple pencil with cover, scrubs and patches, Complete Anatomy and Typhon clinical tracking resources.

Educational Opportunities

Credits may be transferred to UNM for Radiologic Sciences BS. Upon program completion students are eligible to sit for national board exams in Abdominal Sonography and Obstetric and Gynecological Sonography.

Career Opportunities

There is currently a nationwide demand for registered sonographers. Graduates will be employed as sonographers in hospitals, physician's offices and private sonography practices.

Gainful Employment information is available from Career and Job Placement.

- **For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in my CNM.**

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Coordinated Entry Program
- Math Skills 3
- Reading and Writing Skills 2
- BIOL 1140
- BIOL 1140L

- CHEM 1120
  or
- CHEM 1215

Courses

Some core program courses are offered in specific terms only. This may delay a student's program start date. Please check with an advisor for more information.

Term 1

- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
  or
- BIOL 2151 - Medical Imaging Anatomy & Physiology I **4 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Mathematics Elective **3 credit hour(s)**

Term 2

- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
  or
- BIOL 2161 - Medical Imaging Anatomy & Physiology II **4 credit hour(s)**
- PHIL 2120 - Biomedical Ethics **3 credit hour(s)**
- PHYS 1115 - Survey of Physics **3 credit hour(s)**
  or
- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**

Term 3 -Typically Offered Fall Term Only

- DMS 1115 - Sonographic Cross Sectional Anatomy **2 credit hour(s)**
- DMS 1120 - Abdominal Sonography **3 credit hour(s)**
- DMS 1125 - Gynecological Sonography **2 credit hour(s)**
- DMS 1130 - Sonographic Physics I **2 credit hour(s)**
- DMS 1193 - Sonographics Concepts Lab I **2 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**

Term 4 - Typically Offered Spring Term Only

- DMS 1520 - Abdominal Sonography II **2 credit hour(s)**
- DMS 1525 - Obstetrical Sonography **2 credit hour(s)**
- DMS 1530 - Sonographic Physics II **2 credit hour(s)**
- DMS 1590 - Clinical Sonography I **4 credit hour(s)**
- DMS 1593 - Sonographic Concepts Lab II **2 credit hour(s)**

Term 5 - Typically Offered Summer Term Only

- DMS 2020 - Fetal Echo, Neonatal and Pediatric Sonography **2 credit hour(s)**
- DMS 2030 - Sonographic Physics III **1 credit hour(s)**
- DMS 2090 - Clinical Sonography II **5 credit hour(s)**
- DMS 2093 - Sonographics Concepts Lab III **2 credit hour(s)**
- DMS 2110 - Vascular Sonography **2 credit hour(s)**

Term 6 - Typically Offered Fall Term Only

- DMS 2290 - Clinical Sonography III **6 credit hour(s)**
- DMS 2999 - Registry Review **2 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

Mathematics Elective

- MATH 1220 - College Algebra **3 credit hour(s)**
- MATH 1220P - College Algebra Plus **4 credit hour(s)**
- MATH 1240 - Pre-Calculus **4 credit hour(s)**
- MATH 1350 - Introduction to Statistics **3 credit hour(s)**
- MATH 1430 - Applications of Calculus I **3 credit hour(s)**

DIESEL EQUIPMENT TECHNOLOGY

Diesel Equipment Technology, Certificate of Completion

School of Skilled Trades & Arts (STA)

Students study a variety of vehicle systems in classes combining theory and laboratory exercises that prepare graduates to work on a variety of medium- and heavy-duty trucks and equipment. The program provides extensive hands-on training opportunities to ensure competency at program completion.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Employment Information

Career opportunities exist in government, independent repair facilities and dealerships for all aspects of the industry including line technician, field service technician, service writer, service manager, warranty and parts and overhaul specialist. The national shortage of technicians in the diesel truck and heavy equipment fields ensures plentiful employment opportunities with excellent pay and benefits.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- DETC 1110 - Introduction to Diesel Equipment **3 credit hour(s)**
- DETC 1120 - Medium/Heavy Duty Brake Systems **4 credit hour(s)**
- DETC 1130 - Medium/Heavy Duty Suspension and Steering **3 credit hour(s)**
- DETC 1150 - Diesel Equipment Electrical Systems **4 credit hour(s)**

Term 2

- DETC 1210 - Medium/Heavy Duty Engine Repair **4 credit hour(s)**
- DETC 1220 - Heavy Duty Automatic Transmission and Hydraulics **4 credit hour(s)**
- DETC 1230 - Medium/Heavy Duty Heating, Ventilation and Air Conditioning **2 credit hour(s)**
- DETC 1240 - Medium/Heavy Duty Electronic Systems **3 credit hour(s)**

Term 3

- DETC 2120 - Diesel Engine Performance **4 credit hour(s)**
- DETC 2198 - Diesel Equipment Internship **1 credit hour(s)**
- DETC 2110 - Preventive Maintenance **4 credit hour(s)**
- DETC 2135 - Manual Transmissions & Automated Manual Transmissions **4 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 40

Transportation Technology (AAS), Diesel Equipment Technology Concentration

School of Skilled Trades & Arts (STA)

Students who earn certificates in their chosen concentration are encouraged to earn an Associate Degree in Transportation Technology by taking academic and related trades classes, including welding, OSHA compliance, environmental protection, communication, English and physical science. Upon completion of the associate degree program, graduates will be eligible for entry level employment at automotive or medium/heavy duty equipment dealerships and independent repair facilities. Graduates have the potential to work in management and other related areas of service operations.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career and Educational Opportunities

Career opportunities exist in government, independent repair facilities and dealerships for all aspects of the industry including line technician, field service technician, service writer, service manager, warranty and parts specialist and overhaul specialist. The national shortage of technicians in the both the automotive and the diesel truck and heavy equipment fields ensures plentiful employment opportunities with excellent pay and benefits.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- DETC 1110 - Introduction to Diesel Equipment **3 credit hour(s)**
- DETC 1120 - Medium/Heavy Duty Brake Systems **4 credit hour(s)**
- DETC 1130 - Medium/Heavy Duty Suspension and Steering **3 credit hour(s)**
- DETC 1150 - Diesel Equipment Electrical Systems **4 credit hour(s)**

Term 2

- DETC 1210 - Medium/Heavy Duty Engine Repair **4 credit hour(s)**
- DETC 1220 - Heavy Duty Automatic Transmission and Hydraulics **4 credit hour(s)**
- DETC 1230 - Medium/Heavy Duty Heating, Ventilation and Air Conditioning **2 credit hour(s)**
- DETC 1240 - Medium/Heavy Duty Electronic Systems **3 credit hour(s)**

Term 3

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- DETC 2110 - Preventive Maintenance **4 credit hour(s)**
- DETC 2120 - Diesel Engine Performance **4 credit hour(s)**
- DETC 2135 - Manual Transmissions & Automated Manual Transmissions **4 credit hour(s)**
- DETC 2198 - Diesel Equipment Internship **1 credit hour(s)**

Term 4

- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- OSH 2006 - Occupational Safety for Construction I **1 credit hour(s)**

  or
- OSH 2016 - Occupational Safety I **1 credit hour(s)**
- Program Approved Elective **4 credit hour(s)**
- WELD 1110 - Introduction to Welding Fundamentals **3 credit hour(s)**

Term 5

- Mathematics Requirement **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Program Approved Electives **2 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

Program Approved Electives

- AT 1005 - Survey of Applied Technologies **3 credit hour(s)**
- AUTC 1310 - Automotive Restoration and Modification **2 credit hour(s)**
- AUTC 1315 - Introduction to Hybrid and Electric Vehicles **2 credit hour(s)**
- AUTC 1320 - Parts Specialist **2 credit hour(s)**
- AUTC 1325 - Light Duty Diesel Service and Diagnosis **2 credit hour(s)**
- AUTC 2096-2996 - Special Topics **1-7 credit hour(s)**
- AUTC 2250 - Transportation Alternative Fuels **2 credit hour(s)**
- DETC 1160 - Fixed Power Systems **2 credit hour(s)**
- DETC 2096-2996 - Special Topics **1-7 credit hour(s)**

EARLY CHILDHOOD MULTICULTURAL EDUCATION

Child Development, Certificate of Achievement

School of Education (ED)

CNM's Child Development Certificate meets the entry level professional requirements to work in an early

learning setting.

This certificate fulfills the coursework for the New Mexico Child Development Certificate. Students who complete the Child Development Certificate will be able to continue their coursework to pursue an Associate of Arts degree in Early Childhood Multicultural Education (ECME) in the following degree concentrations:

Birth - 3rd Teacher: This concentration is designed for educators working in early care and education as teachers, public school educational assistants or interested in becoming a licensed PreK- 3rd grade teacher in an elementary school by continuing to receive a bachelor's degree in Early Childhood.

Early Childhood Program Administration: This concentration is designed for administrators of early education programs. Students completing this degree can continue to a bachelor's degree in Early Childhood.

Special Requirements

A background check will be required to complete all programs in Early Childhood, including the Child Development Certificate.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Career Opportunities

Students who receive the Child Development Certificate are immediately employable upon graduation. Well-qualified educators are needed as early care and education teachers, educational assistants, Head Start assistant teachers, administrators, early interventionists, and home visitors. Students are encouraged to continue with the associate's degree in Early Childhood Multicultural Education for additional career opportunities.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading and Writing Skills 2

Courses

Program Requirements

- ECED 1110 - Child Growth, Development and Learning **3 credit hour(s)**
- ECED 1115 - Health, Safety and Nutrition **2 credit hour(s)**
  or
- ECED 1120 - Guiding Young Children **3 credit hour(s)**
- ECED 1125 - Assessment of Children and Evaluation of Programs **3 credit hour(s)**
- ECED 1130 - Family and Community Collaboration **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 11

Early Childhood Multicultural Education (AA), Birth-3rd Grade Teacher Concentration

School of Education (ED)

The Early Childhood Multicultural Education Birth-3rd Grade Teacher Concentration is designed for educators in the field of early childhood, which includes PreK-3rd grade in the elementary schools. This Associate of Arts degree is fully transferable to any college or university in New Mexico with an early childhood associate or bachelor's degree. CNM offers early childhood coursework in English and in Spanish.

Special Requirements

A background check is required for students enrolled in the Early Childhood Multicultural Education practicum courses which are required for the successful completion of this degree or certificate.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Students in early childhood are immediately employable upon graduation. Well-qualified educators are needed as early care and education teachers, public school educational assistants, Head Start teachers, administrators, early interventionists, and home visitors. Students are encouraged to continue with a bachelor's degree in early childhood to become qualified for additional career opportunities, such as teaching PreK-3rd

grade in the public schools.

For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in my CNM.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg **or** Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- ECED 1110 - Child Growth, Development and Learning **3 credit hour(s)**
- ECED 1115 - Health, Safety and Nutrition **2 credit hour(s)**
- ECED 1120 - Guiding Young Children **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- MATH 1130 - Survey of Mathematics **3 credit hour(s)**
  or
- MATH 1220 - College Algebra **3 credit hour(s) or higher**
  or
- MATH 1220P - College Algebra Plus **4 credit hour(s) or higher**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- ECED 1125 - Assessment of Children and Evaluation of Programs **3 credit hour(s)**
- ECED 1130 - Family and Community Collaboration **3 credit hour(s)**
- ECED 2110 - Professionalism **2 credit hour(s)**
- ECED 2115 - Introduction to Language, Literacy and Reading **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**

Term 3

- Creative and Fine Arts Requirement **3 credit hour(s)**
- ECED 2120 - Curriculum Development through Play Birth through Age 4 (PreK) **3 credit hour(s)**
- ECED 2121 - Curriculum Development through Play Birth through Age 4 (PreK) Practicum **2 credit hour(s)**
- EDUC 2375 - Technology Integration in the Classroom **3 credit hour(s) (Recommended) ***
  or
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
  or
- COMM 2150 - Communication for Teachers **3 credit hour(s)**
- ECED 2130 - Curriculum Development and Implementation Age 3 (PreK) through Grade 3 **3 credit hour(s)**
- ECED 2131 - Curriculum Development and Implementation Age 3 (PreK) through Grade 3 Practicum **2 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 64

*** Recommended for transfer to a 4-year program.**

Early Childhood Multicultural Education (AA), Early Childhood Program Administration Concentration

School of Education (ED)

The Early Childhood Program Administration Concentration is designed for students who would like to run their own business in early childhood or work as program directors, assistant directors, or lead teachers in an early childhood setting. Individuals will graduate with a strong background in early childhood and early childhood administration. CNM offers early childhood coursework in English and in Spanish. Students pursuing an associate degree in Early Childhood Program Administration can earn an Early Childhood Program Administration Certificate of Achievement while working towards the Associate degree.

See Recommended Sequence of Courses

Special Requirements

- A background check is required for students enrolled in the Early Childhood Multicultural Education practicum courses which are required for the successful completion of this degree or certificate.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Students in early childhood are immediately employable upon graduation. Well-qualified educators are needed as early care and education teachers, public school educational assistants, Head Start teachers, administrators, early interventionists, and home visitors. Students are encouraged to continue with a bachelor's degree in early childhood to become qualified for additional career opportunities.

For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in my CNM.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg **or** Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- ECED 1110 - Child Growth, Development and Learning **3 credit hour(s)**
- ECED 1115 - Health, Safety and Nutrition **2 credit hour(s)**
- ECED 1120 - Guiding Young Children **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- MATH 1130 - Survey of Mathematics **3 credit hour(s)**
  or
- MATH 1220 - College Algebra **3 credit hour(s) or higher**
  or
- MATH 1220P - College Algebra Plus **4 credit hour(s) or higher**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
  or
- COMM 2150 - Communication for Teachers **3 credit hour(s) (Recommended) ***
- ECED 1125 - Assessment of Children and Evaluation of Programs **3 credit hour(s)**
- ECED 1130 - Family and Community Collaboration **3 credit hour(s)**
- ECED 2215 - Program Management **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**

Term 3

- Creative and Fine Arts Requirement **3 credit hour(s)**
- ECED 2140 - Effective Program Development for Diverse Learners and their Families **3 credit hour(s)**
- ECED 2141 - Effective Program Development for Diverse Learners and their Families Practicum **2 credit hour(s)**
- EDUC 2375 - Technology Integration in the Classroom **3 credit hour(s) (Recommended) ***
  or
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- Laboratory Sciences Requirement (Lab Required) **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- ECED 2110 - Professionalism **2 credit hour(s)**
- ECED 2280 - Professional Relationships **3 credit hour(s)**
- ECED 2281 - Professional Relationships Practicum **2 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 64

*** Recommended for transfer to a 4-year program.**

Early Childhood Program Administration, Certificate of Completion

School of Education (ED)

The Early Childhood Program Administration Certificate is designed for students who would like to run their own business in early childhood or work as program directors, assistant directors, or lead teachers in an early childhood setting. Individuals will graduate with a strong background in early childhood and early childhood administration. For current early childhood program professionals, this certificate will increase your leadership abilities and help you take your early childhood program to the next level.

Special Requirements

- A background check is required for students enrolled in the Early Childhood Multicultural Education practicum courses which are required for the successful completion of this degree or certificate

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

A certificate in Early Childhood Program Administration is intended for students interested in becoming an early childhood center director, assistant director, or running a home-based child care program. For professionals currently in the field, this certificate will enhance their ability to run a high quality early childcare program. Students pursuing this certificate are encouraged to complete the Early Childhood Multicultural Education associates degree with a concentration in Program Administration.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading and Writing Skills 2

Courses

- ECED 1110 - Child Growth, Development and Learning **3 credit hour(s)**
- ECED 2140 - Effective Program Development for Diverse Learners and their Families **3 credit hour(s)**
- ECED 2141 - Effective Program Development for Diverse Learners and their Families Practicum **2 credit hour(s)**
- ECED 2215 - Program Management **3 credit hour(s)**
- ECED 2280 - Professional Relationships **3 credit hour(s)**
- ECED 2281 - Professional Relationships Practicum **2 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 16

ELECTRICAL TRADES

Electrical Trades (AAS), Photovoltaic (PV) Concentration

School of Skilled Trades & Arts (STA)

The Associate of Applied Science Degree in Electrical Technologies-Photovoltaic concentration provides students with the knowledge and technical skills necessary to gain entry level employment in the electrical and photovoltaic installation industry.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ELTR 1120 - Electrical Theory I **4 credit hour(s)**
- ELTR 1015 - Electrical Math I **4 credit hour(s)**
- ELTR 1125 - Electrical AC/DC/L **3 credit hour(s)**
- ELTR 1145 - AC Circ Motors Gen **3 credit hour(s)**

Term 2

- ELTR 1210 - Electrical Theory II **4 credit hour(s)**
- ELTR 1215 - Blueprint Reading I **4 credit hour(s)**
- ELTR 1220 - Introduction to Wiring Lab **3 credit hour(s)**
- ELTR 1230 - Residential Wiring II **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 3

- ELTR 2110 - Electrical Theory III **4 credit hour(s)**
- ELTR 2115 - Elec Motor Control Theory **4 credit hour(s)**
- ELTR 2020 - Ind Motor Control L **3 credit hour(s)**
- ELTR 2130 - Indust Power Dist **3 credit hour(s)**

Term 4

- ELTR 2605 - Photovoltaic Fund/Applications **4 credit hour(s)**
- ELTR 2615 - PV Code Compliant Systems **2 credit hour(s)**
- ELTR 2630 - Advanced PV **4 credit hour(s)**

  or
- ELTR 2645 - Large-Scale Solar **4 credit hour(s)**
- ELTR 2692 - PV Install Lab **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

Term 5

- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**

  or
- Humanities Requirement **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 70

Electrical Trades (AAS), Programmable Logic Controls (PLC) Concentration

School of Skilled Trades & Arts (STA)

The Associate of Applied Science Degree in Electrical Technologies-Programmable Logic Controls concentration provides students with the knowledge and technical skills necessary to gain entry level employment in the electrical and programmable logic controls industry.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ELTR 1120 - Electrical Theory I **4 credit hour(s)**
- ELTR 1015 - Electrical Math I **4 credit hour(s)**
- ELTR 1125 - Electrical AC/DC/L **3 credit hour(s)**
- ELTR 1145 - AC Circ Motors Gen **3 credit hour(s)**

Term 2

- ELTR 1210 - Electrical Theory II **4 credit hour(s)**
- ELTR 1215 - Blueprint Reading I **4 credit hour(s)**
- ELTR 1220 - Introduction to Wiring Lab **3 credit hour(s)**
- ELTR 1230 - Residential Wiring II **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 3

- ELTR 2110 - Electrical Theory III **4 credit hour(s)**
- ELTR 2115 - Elec Motor Control Theory **4 credit hour(s)**
- ELTR 2020 - Ind Motor Control L **3 credit hour(s)**
- ELTR 2130 - Indust Power Dist **3 credit hour(s)**

Term 4

- ELTR 2210 - Programmable Logic Controller T **4 credit hour(s)**
- ELTR 2220 - PLC Install & Oper **3 credit hour(s)**
- ELTR 2230 - PLC Sys Oper/Trbl **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

Term 5

- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
  or
- Humanities Requirement **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 67

Electrical Trades, Certificate of Completion

School of Skilled Trades & Arts (STA)

The Electrical Trades Certificate Program provides students the opportunity to gain the knowledge and technical skills necessary to enter the field of electrical trades. A certificate is obtained by the student after successful completion of three terms and is accepted by the State of New Mexico Construction Industries Division toward the four-year experience requirement for the State of New Mexico Journeyman Electrical Certificate (JE98).

Theory and lab courses are designed to be taken together to give students an in-depth understanding of the concepts of electrical trades.

First term students obtain knowledge and hands-on training for personal and tool safety, meter reading, electrical circuitry, electrical formulas, electrical calculations, material identification and AC/DC motor operation and troubleshooting.

Second term students are taught residential blueprint reading, application of the National Electrical Code (NEC), NM Electrical Code (NMEC) and local electrical codes, installation of branch circuits and feeders, residential services, single pole, three and four-way switch circuits, door chime installation, dryer, range and swamp cooler circuitry and conduit bending.

Third term students receive safety training, technical skills, power distribution systems, 3-phase services, hazardous locations, commercial blueprint reading, circuitry, 3-phase motor starters, timers, mechanical and hydraulic conduit bending, power threaders, cutting and threading of rigid metal conduit, knock-out punches, hammer-drill operation, powder actuated fasteners, cable installation, wire pulling and application of the NEC.

Special Requirements

Students must have normal color differentiation. Electricians work with identified colored wires requiring accurate connections. The moving and installation of electrical materials and equipment necessitate that the electrical worker be able to lift at least 50 pounds. Electrical workers may work in various internal and external environments and should be free of chronic respiratory diseases and allergies. Most employers require a valid driver's license and clean driving record. Please contact the School of Skilled Trades & Arts (STA) for required tool list.

Fees: Course fees are published in the *Schedule of Classes*. These fees cover the cost of tools required for lab activities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career and Educational Opportunities

The New Mexico Department of Workforce Solutions predicts a continued increase in the demand for electrical workers for years to come. The Department of Workforce Solutions reports that the starting wages for electrical workers range from $14.51 to $24.68 per hour or $30,180 to $51,318 annually. Coursework from Electrical Trades/Residential Wiring may be applied toward the Associate of Applied Science Degree in Construction Technology.

Gainful Employment information is available from Career and Job Placement.

For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in my CNM.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- ELTR 1120 - Electrical Theory I **4 credit hour(s)**
- ELTR 1015 - Electrical Math I **4 credit hour(s)**
- ELTR 1125 - Electrical AC/DC/L **3 credit hour(s)**
- ELTR 1145 - AC Circ Motors Gen **3 credit hour(s)**

Term 2

- ELTR 1215 - Blueprint Reading I **4 credit hour(s)**
- ELTR 1210 - Electrical Theory II **4 credit hour(s)**
- ELTR 1220 - Introduction to Wiring Lab **3 credit hour(s)**
- ELTR 1230 - Residential Wiring II **3 credit**

hour(s)

Term 3

- ELTR 2110 - Electrical Theory III **4 credit hour(s)**
- ELTR 2115 - Elec Motor Control Theory **4 credit hour(s)**
- ELTR 2020 - Ind Motor Control L **3 credit hour(s)**
- ELTR 2130 - Indust Power Dist **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 42

Programmable Logic Controls (PLC) Systems, Certificate of Completion

School of Skilled Trades & Arts (STA)

The Programmable Logic Controls (PLC) Systems Certificate provides students with skills in the electrical industry which includes controller installation, numbering systems, logic fundamentals, basics of programming, intricate industrial wiring, motor controls and troubleshooting.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- ELTR 1120 - Electrical Theory I **4 credit hour(s)**
- ELTR 1015 - Electrical Math I **4 credit hour(s)**
- ELTR 1125 - Electrical AC/DC/L **3 credit hour(s)**
- ELTR 1145 - AC Circ Motors Gen **3 credit hour(s)**

Term 2

- ELTR 1210 - Electrical Theory II **4 credit hour(s)**
- ELTR 1215 - Blueprint Reading I **4 credit hour(s)**
- ELTR 1220 - Introduction to Wiring Lab **3 credit hour(s)**
- ELTR 1230 - Residential Wiring II **3 credit hour(s)**

Term 3

- ELTR 2110 - Electrical Theory III **4 credit hour(s)**
- ELTR 2115 - Elec Motor Control Theory **4 credit hour(s)**
- ELTR 2020 - Ind Motor Control L **3 credit hour(s)**
- ELTR 2130 - Indust Power Dist **3 credit hour(s)**

Term 4

- ELTR 2210 - Programmable Logic Controller T **4 credit hour(s)**
- ELTR 2220 - PLC Install & Oper **3 credit hour(s)**
- ELTR 2230 - PLC Sys Oper/Trbl **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 52

Residential Wiring, Certificate of Completion

School of Skilled Trades & Arts (STA)

The Residential Wiring program provides students the opportunity to gain the knowledge and technical skills necessary to enter the electrical trade. A certificate is obtained by the student after successful completion of two terms and is accepted by the State of New Mexico Construction Industries Division toward the two-year experience requirement for the State of New Mexico Residential Wireman's Certificate of Competence.

Residential Wiring emphasizes the applications of the National Electrical Code (NEC), NM State Electrical Code, (NMSEC) and local electrical codes. Students learn electrical theory, material identification and use, Occupational Safety Hazard Administration (OSHA) compliance, residential wiring and services, conduit bending, installation, blueprint reading and electrical troubleshooting. Theory and lab courses are designed to be taken together to give students an in-depth understanding of the concepts of the residential electrical trade. First term students obtain knowledge and hands on training for personal and tool safety, meter reading, electrical circuitry, electrical formulas, electrical calculations, material identification, AC/DC motor operation and troubleshooting. Second term students are taught residential blueprint reading, applications of the NEC, NMSEC and local electrical codes, installation of branch circuits and feeders, residential services, single pole, three-way and four-way switch circuits, door chime installation, dryer and range circuits, swamp cooler circuitry and hand bending of electrical metallic tubing.

Special Requirements

Students must have normal color differentiation as electricians work with identified colored wires requiring accurate connections. The moving and installation of electrical materials and equipment necessitate that the electrical worker be able to lift at least 50 pounds. Electrical workers may work in various internal and external environments and should be free of chronic respiratory diseases and allergies. Most employers require a valid driver's license and clean driving record. Please contact Program Director for a list of required tools.

Fees: Program fees are published in the *Schedule of Classes*. These fees cover the cost of tools required for lab activities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

For the graduation policy refer to the Graduating From CNM section, cnm.edu or the Students tab in my CNM.

Career Opportunities

The New Mexico Department of Workforce Solutions predicts a continued increase in the demand for electrical workers for years to come. One hundred percent of CNM Electrical Trades graduates obtained employment in the electrical trade in 2007- 2008. The Department of Workforce Solutions reports that the starting wages for electrical workers range from $14.51 to $24.68 per hour or $30,180 to $51,318 annually. Coursework from Electrical Trades/Residential Wiring may be applied toward the Associate of Applied Science Degree in Construction Technology.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- ELTR 1120 - Electrical Theory I **4 credit hour(s)**
- ELTR 1015 - Electrical Math I **4 credit hour(s)**
- ELTR 1125 - Electrical AC/DC/L **3 credit hour(s)**
- ELTR 1145 - AC Circ Motors Gen **3 credit hour(s)**

Term 2

- ELTR 1210 - Electrical Theory II **4 credit hour(s)**
- ELTR 1215 - Blueprint Reading I **4 credit hour(s)**
- ELTR 1220 - Introduction to Wiring Lab **3 credit hour(s)**
- ELTR 1230 - Residential Wiring II **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 28

Solar Electric (PV), Certificate of Achievement

School of Skilled Trades & Arts (STA)
Solar Electric Certificate of Achievement provides students the opportunity to gain knowledge and technical skills needed to enter and explore possible careers in the field of Solar Electric (Photovoltaic). Students receive an overview of residential, commercial, large commercial, and industrial systems. Students will learn how solar electricity is created and how to achieve the best production. There is an emphasis on code compliant design, installation, commissioning, operation, and maintenance practices.

Educational Option Information

- This educational option is an: Certificate of Achievement
- This educational option can be completed: Part-time
- This educational option is design for new student's/upskilling students, and professionals seeking to gain additional credentials.
- This educational option can be started: Fall
- Primary course location: ATC, Main, Montoya, Westside, Rio Rancho

Special Requirements

Physical Requirements

The moving and installation of electrical materials and equipment necessitate that the worker be able to lift at least 50 pounds.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://

www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Educational Opportunities

Stackable certificate which compliments current Photovoltaic Systems, Certificate of Completion and electrical Trades (AAS), Photovoltaic (PV) Concentration.

Career Opportunities

The New Mexico Department of Workforce Solutions predicts a continued increase in the demand for electrical workers for years to come.

Solar Electric (PV) is a fast-growing industry supporting sustainability with forecasts indicating US solar installations are expect to increase exponentially.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- ELTR 2605 - Photovoltaic Fund/Applications **4 credit hour(s)**
- ELTR 2615 - PV Code Compliant Systems **2 credit hour(s)**
- ELTR 2630 - Advanced PV **4 credit hour(s)**
  or
- ELTR 2645 - Large-Scale Solar **4 credit hour(s)**
- ELTR 2692 - PV Install Lab **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 13

ELECTRONEURODIAGNOSTIC TECHNOLOGY

Electroneurodiagnostic Technology, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

The Electroneurodiagnostic Technology (ENDT) program offers courses designed to provide students with the education, technical skills, and clinical experience necessary for a career as an EEG Technologist. EEG Techs are healthcare professionals who apply electrodes to the head to record brainwaves which is electrical activity, to assist physicians in treating neurological and seizure disorders. EEGs evaluate the nervous system's function and may be performed on all patient populations from neonate to geriatric and for a variety of durations from 30 minutes to multiple days. According to the U.S. Bureau of Labor Statistics, the field of electroencephalography will grow 11.1% by 2032, representing a need for credentialed professionals at all levels of certification.

This program provides didactic lecture and skills laboratory instruction as well as hands-on clinical experience in both the outpatient and inpatient settings through clinical partners such as UNMH, Presbyterian and the VA (Veterans Affairs). The successful graduate will be able to apply and record EEGs, provide appropriate patient care, evaluate, and describe normal and abnormal waveforms as crucial members of a comprehensive medical team. Upon completion of this program, students will be prepared to take the board exam for national certification through the American Board of Registration of Electroencephalographic and Evoked Potential Technologists (ABRET). Passing this national exam will result in a Registered EEG Technologist (REEGT) credential and qualification to progress to advanced levels of neurodiagnostic testing.

The CNM ENDT is accredited by the Commission on Accreditation of Allied Health Education Programs (http://www.caahep.org) upon the recommendation of Committee on Accreditation for Education in Neurodiagnostic Technology.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is an: Associates of Applied Science
- This educational option can be completed: In 5 terms
- This educational option is designed for: The Electroneurodiagnostic Technology (ENDT) program is designed to provide students with the education, technical skills, and clinical experience for a career as Electroencephalograph (EEG) Technologists. EEG Techs are trained healthcare professionals who record brainwave activity over a period of 30 minutes to multiple days. The EEG is used to assist physicians in diagnosing and treating neurological disorders, trauma and seizure disorders. EEGs techs see all patient populations from neonate to geriatric.
- This educational option can be started: This program's first term courses are offered fall term only.
- Primary course location: South Valley Campus

Special Requirements

Physical Requirements

Students must be in good physical and psychological health. May require students to be able to safely lift and/or move a minimum of 50 pounds.

Criminal Background

This program will require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to

beginning the program or beginning clinical education.

This program will require students to undergo the New Mexico Department of Health caregiver's criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences

Felony Convictions

This program will require students to undergo the New Mexico Department of Health caregivers criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Transportation

Students are responsible for their own transportation to off-campus training sites. (Clinical courses at hospitals, internships, etc.)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students planning to continue their education beyond the associates degree level may pursue other academic programs in the healthcare field.

Some of the prerequisites courses in this program are transferable and may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Upon completion of this program, students will be prepared to take the board exam for national certification through the American Board of Registration of Electroencephalographic and Evoked Potential Technologists (ABRET). Passing this national exam will result in a Registered EEG Technologist (REEGT) credential and qualification to advance education and credentials in other neurodiagnostic testing.

Additional career information is available from ASET- The Neurodiagnostic Society (https://www.aset.org/) and ABRET-The Board of Registered Electroencephalographic technologists (https://www.abret.org/)

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- High School Diploma or Equivalent
- At least 18 year of age to enroll in Term 3
- Math Skills 2 Alg
- Reading and Writing Skills 2
- BIOL 1140 **+** BIOL 1140L
- CHEM 1120 **or** CHEM 1215

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**

Term 2

- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
- ENDT 1010 - Introduction to Neurodiagnostic Technology **2 credit hour(s)**
- ENDT 1020 - EEG I **2 credit hour(s)**
- ENDT 1040 - Neuroanatomy & Neurophysiology **2 credit hour(s)**
- ENDT 1092 - Neurodiagnostic Technology Skills Lab I **2 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
- HLTH 1010 - Medical Ethics and Law **1 credit hour(s)**

Term 3

- ENDT 1090 - Neurodiagnostic Clinical I **3 credit hour(s)**
- ENDT 1510 - EEG IT Essentials **2 credit hour(s)**
- ENDT 1520 - EEG II **2 credit hour(s)**
- ENDT 1530 - Electrical Concepts in Neurodiagnostic Technology I **2 credit hour(s)**
- ENDT 1550 - Introduction to Long Term Monitoring **2 credit hour(s)**
- ENDT 1592 - Neurodiagnostic Technology Skills Lab II **2 credit hour(s)**

Term 4

- ENDT 1540 - Neurological Disorders **2 credit hour(s)**
- ENDT 2020 - EEG III **2 credit hour(s)**

- ENDT 2030 - Electrical Concepts in Neurodiagnostic Technology II **2 credit hour(s)**
- ENDT 2040 - Evoked Potentials **2 credit hour(s)**
- ENDT 2090 - Neurodiagnostic Clinical II **3 credit hour(s)**
- ENDT 2092 - Neurodiagnostic Technology Skills Lab III **1 credit hour(s)**

Term 5

- ENDT 2080 - Pediatric and Neonatal Neurodiagnostic Technology **2 credit hour(s)**
- ENDT 2120 - EEG IV **2 credit hour(s)**
- ENDT 2150 - Nerve Conduction & PSG **2 credit hour(s)**
- ENDT 2190 - Neurodiagnostic Clinical III **3 credit hour(s)**
- ENDT 2250 - Intraoperative Neuromonitoring (IONM) **2 credit hour(s)**
- ENDT 2999 - Neurodiagnostic Technology Capstone **1 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 65

EMERGENCY MEDICAL SERVICES

Emergency Medical Services (AAS), Paramedic Concentration

School of Health, Wellness & Public Safety (HWPS)

EMT-Paramedics provide the highest level of care in the prehospital setting and are currently in high demand. The EMS-Paramedic program's first term courses are typically offered spring and fall term only. This may delay a student's program start date. Please check with an advisor for more information.

See Required Sequence of Courses

Special Requirements

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health Caregivers Criminal History Screening Program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

This program allows students to take the National Registry paramedic certification exam.

The CNM Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- **Department Approval**

- **Math Skills 2 Alg**
- **Reading and Writing Skills 2**

Courses

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- EMS 1053 - EMT Basic Theory **6 credit hour(s)**
  and
- EMS 1093 - EMT Basic Lab **2 credit hour(s)**
  and
- EMS 1190 - EMT Basic Clinical **1 credit hour(s)**
  or
- EMS 1412 - Advanced EMT (EMT-I) Theory **6 credit hour(s)**
  and
- EMS 1493 - Advanced EMT (EMT-I) Lab **2 credit hour(s)**
  and
- EMS 1890 - Advanced EMT (EMT-I) Clinical **2 credit hour(s) ***
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**
- Program Approved Laboratory Science Requirement **3 credit hour(s)**

Term 2

- EMS 2103 - Human Systems Pathophysiology and Development **3 credit hour(s)**
- EMS 2105 - EMS Program Success Course **3 credit hour(s)**
- EMS 2192 - Drug Calculations Lab **2 credit hour(s)**
- EMS 2207 - Legal Issues and Report Writing **2 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)****

Term 3

- EMS 2213 - Endocrine and GI/GU Theory **1 credit hour(s)**
- EMS 2217 - Pharmacology Theory **3 credit hour(s)**
- EMS 2223 - Advanced Trauma Theory **3 credit hour(s)**
- EMS 2291 - Paramedic Lab I **2 credit hour(s)**
- EMS 2313 - Neurological Theory **2 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- EMS 2303 - Cardiovascular Theory **3 credit hour(s)**
- EMS 2307 - Respiratory Theory **2 credit hour(s)**
- EMS 2390 - Hospital Clinical I **2 credit hour(s)**
- EMS 2393 - Paramedic Lab II **3 credit hour(s)**
- EMS 2513 - Behavioral Emergencies and Communication **1 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**

Term 5

- EMS 2503 - Pediatric and Gynecology Theory **3 credit hour(s)**
- EMS 2507 - Environmental Theory **3 credit hour(s)**
- EMS 2590 - Hospital Clinical II **1 credit hour(s)**
- EMS 2593 - Paramedic Lab III **2 credit hour(s)**
- EMS 2790 - Paramedic Field Experience **5 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 71

*** EMS 1890 Advanced EMT [EMT-I] Clinical would be taken in Term 2**

** MATH 1220 - College Algebra **recommended if planning on transferring to a 4-year paramedic degree at UNM.**

- Program Approved Laboratory Sciences Requirement
- BIOL 1130 - Introductory Anatomy and Physiology **3 credit hour(s)**
- BIOL 1140 - Biology for Health Sciences **3 credit hour(s)**
- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**
- CHEM 1120 - Introduction to Chemistry **3 credit hour(s)**
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- NUTR 1010 - Personal and Practical Nutrition **3 credit hour(s)**
- PHYS 1115 - Survey of Physics **3 credit hour(s)**

Emergency Medical Services (Certificate of Completion), Intermediate Concentration

School of Health, Wellness & Public Safety (HWPS)

The EMT-Intermediate program offers additional skills and training for EMS personnel. These courses may be taken by students wishing to gain additional medical skills, but not wishing to pursue a paramedic license. These courses may also provide additional training prior to entrance into the paramedic program. These courses are recommended for students with field experience as an EMT. This is a recommended pre-requisite to the paramedic program.

Special Requirements

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health Caregivers Criminal History Screening Program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to

starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Educational Opportunities

*For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in my*CNM*.*

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- EMS 1053 - EMT Basic Theory **6 credit hour(s)**
- EMS 1093 - EMT Basic Lab **2 credit hour(s)**
- EMS 1190 - EMT Basic Clinical **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**

Term 2

- EMS 1412 - Advanced EMT (EMT-I) Theory **6 credit hour(s)**
- EMS 1493 - Advanced EMT (EMT-I) Lab **2 credit hour(s)**
- EMS 1890 - Advanced EMT (EMT-I) Clinical **2 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)** *

Minimum Credit Hours Required to Complete Certificate: 26

*** MATH 1220 - College Algebra recommended if planning on transferring to a 4-year degree.**

Emergency Medical Technician (EMT-B), Certificate of Achievement

School of Health, Wellness & Public Safety (HWPS)

EMT-Basics provide entry-level of care in the prehospital setting. The EMT-Basic level of training is required for students wishing to pursue EMT-Intermediate or EMT-Paramedic level training.

Special Requirements

Criminal Background

Most of the health programs in HWPS require students

undergo the New Mexico Department of Health Caregivers Criminal History Screening Program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

- EMS 1053 - EMT Basic Theory **6 credit hour(s)**
- EMS 1093 - EMT Basic Lab **2 credit hour(s)**
- EMS 1190 - EMT Basic Clinical **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 13

First Responder

School of Health, Wellness & Public Safety (HWPS)

Provides classroom and laboratory instruction needed to assist in patient emergencies in the workplace and non-transport settings. Includes instruction on preparatory topics, airway management, patient assessment, medical emergencies, trauma emergencies, pediatric care and EMS operations. Meets or exceeds the cognitive objectives of the National EMS Education Standards and incorporates the NM First Responder Scope of Practice. Some fire/volunteer services allow First Responder state licensure as a minimum requirement for employment; most prehospital EMS services require EMT-Basic licensure.

Completion of the First Responder coursework is not required to advance to any other level of EMS training at CNM.

Ten Year Rule

Program Requirements

- Reading & Writing Skills 1

Courses

- EMS 1001 - EMS First Responder Theory **2 credit**

hour(s)
- EMS 1091 - EMS First Responder Lab **1 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**

Minimum Credit Hours Required to Complete Program: 4

ENGINEERING

Engineering, Associate of Science

School of Math, Science & Engineering (MSE)

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 specified 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 catalog of their intended transfer institution before making course selections.

Educational Option Information

- This educational option is an Associate of Science degree program
- This educational option can be completed Part-Time or Full-Time
- This educational option can be started Any Term
- Scheduling Information: Follow course catalog recommendations to avoid scheduling problems.
- Primary course location: Main Campus

Special Requirements

Students are expected to purchase textbooks, lab manuals and safety goggles.

Information for people with felony convictions

- A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career and Educational Opportunities

This educational option is designed for

- Immediate employment and/or transfer into a baccalaureate program

Educational Opportunities

Many of our courses are transferable to universities and CNM currently has transfer agreements with many colleges in New Mexico.

Program Requirements

- Math Skills 6
- Reading and Writing Skills 2

Courses

Term 1

- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- MATH 1510 - Calculus I **4 credit hour(s)**
- Unrestricted Elective **4 credit hour(s)**‡

Term 2

- MATH 1520 - Calculus II **4 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- PHYS 1310 - Calculus-Based Physics I **4 credit hour(s)**
- PHYS 1310L - Calculus-Based Physics I Laboratory **1 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)****

Term 3

- MATH 2530 - Calculus III **4 credit hour(s)**
- PHYS 1320 - Calculus-Based Physics II **4 credit hour(s)**
- PHYS 1320L - Calculus-Based Physics II Laboratory **1 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Program Approved Elective **(recommend CSCI option) 4 credit hour(s)**

Term 4

- Creative and Fine Arts Requirement **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Program Approved Electives **3 credit hour(s)**
- Program Approved Electives **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

Program Approved Electives

- BIOL 1110 - General Biology **3 credit hour(s)**
- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**
- BIOL 2110L - Principles of Biology: Cellular and Molecular Biology Lab **1 credit hour(s)**

- CAD 1001 - Basics of CAD **1 credit hour(s) * and**
- CM 1205 - Introduction to Building Information Modeling **3 credit hour(s) ***
- CM 1210 - Mechanical Electrical Systems and Construction **3 credit hour(s)**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- CHEM 1225L - General Chemistry II Laboratory for STEM Majors **1 credit hour(s)**
- CHEM 2130 - Organic Chemistry I **3 credit hour(s)**
- CHEM 2130L - Organic Chemistry I Laboratory **1 credit hour(s)**
- CSCI 1220 - Computer Programming Fundamentals: Python **3 credit hour(s)**
- CSCI 1230 - C Programming **4 credit hour(s)**
- CSCI 1260 - Computer Programming Fundamentals Java I **4 credit hour(s)**
- CSCI 1153 - Programming in Matlab **4 credit hour(s)**
- ENGR 1101 - Survey of Engineering Fields **3 credit hour(s)**
- ENGR 2088 - Engineering Specialty **1-16 credit hour(s)** ***
- ENGR 2150 - Explosives Technology & Safety **3 credit hour(s)**
- ENGR 2710 - Thermodynamics **3 credit hour(s)**
- ENGR 2810 - Engineering Statics **3 credit hour(s)**
- ENGR 2815 - Engineering Dynamics **3 credit hour(s)**
- ENGR 2910 - Circuit Analysis I **3 credit hour(s)**
- ENGR 2915 - Circuit Analysis II **3 credit hour(s)**
- GEOL 1110 - Physical Geology **3 credit hour(s)**
- GEOL 1110L - Physical Geology Laboratory **1 credit hour(s)**
- MATH 2410 - Applied Ordinary Differential Equations **3 credit hour(s)**
- MATH 2420 - Applied Linear Algebra **3 credit hour(s)**
- MATT 1060 - Machine Tool Technology Skills **3 credit hour(s)** ****
- PHYS 2310 - Calculus-based Physics III **4 credit hour(s)**
- WELD 1110 - Introduction to Welding Fundamentals **3 credit hour(s)** ****

For all program approved electives, check with your intended transfer university. Not all are accepted for degree requirements at all universities.

* Students must take both of these courses in order for them to transfer to UNM. Please see CNM's Engineering Transfer agreement with UNM to understand specifically how these courses transfer.

** Recommend ECON 2110 or ECON 2120. Check with your intended transfer university for their preferred social/behavioral science course.

*** This course is used to transfer approved courses from other colleges and universities.

**** These courses are required for students pursuing the Explosi**ves Technician Certificate**

Notes

‡ Students who plan to take CSCI 1230 or CSCI 1260 in Term 3 should take either BCIS 1110 or CSCI 1108. The prerequisite for both courses is either BCIS 1110 or CSCI 1108.

Explosives Technician, Certificate of Completion

School of Math, Science & Engineering (MSE)

Students completing this certificate will be prepared for employment as interns at Sandia National Lab and Los Alamos National Lab. They will have the hands on skills necessary to work under the direction of research scientists in prepping and executing experiments related to explosives technology. Completion of the certificate will serve as the credential necessary for an internship and will advance students down the path to earning their A.S. in Engineering.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is an: Certificate of Completion
- This educational option can be completed: Part-Time
- This educational option is designed for: Students pursuing their A.S. in Engineering who want to have credentials for an internship at Sandia National Lab or Los Alamos National Lab.
- This educational option can be started: Anytime
- Primary course location: Main Campus

Special Requirements

Criminal Background

Students may need to pay for a drug screening and a criminal background check prior to employment at Sandia National Laboratory or Los Alamos National Laboratory

Information for people with felony convictions

A felony conviction may prevent employment. A criminal background check may be performed prior to employment at Sandia National Laboratory or Los Alamos National Laboratory

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students completing this certificate may continue their educational path, earning an A.S. in Engineering

Career Opportunities

Students completing this certificate will be prepared for employment as interns at Sandia National Lab and Los Alamos National Lab.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- ENGR 1101 - Survey of Engineering Fields **3 credit hour(s)**
- MATH 1220 - College Algebra **3 credit hour(s)**

Term 2

- ENGR 2150 - Explosives Technology & Safety **3 credit hour(s)** **
- ENGL 1120 - Composition II **3 credit hour(s)**
- MATH 1230 - Trigonometry **3 credit hour(s)**

  or
- MATH 1240 - Pre-Calculus **4 credit hour(s)**

  or
- MATH 1250 - Trigonometry & Pre-Calculus **5 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 3

- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 31

Program Approved Electives

- CIST 1605 - Internet of Things **3 credit hour(s)** *
- MATT 1060 - Machine Tool Technology Skills **3 credit hour(s)**
- WELD 1110 - Introduction to Welding Fundamentals **3 credit hour(s)**
- Notes

CNM Ingenuity's Deep Dive Internet of Things Coding and Hardware Design program has an existing credit-for-prior-learning (CPL) agreement. Learners who complete the Ingenuity program can apply credits for BCIS 1110 and CIST 1605 toward completion of the Explosives Technician Certificate.

*Prerequisite course - BCIS 1110

** Only offered in spring terms

ENGINEERING TECHNOLOGY

Engineering Technician, Certificate of Completion

School of Math, Science & Engineering (MSE)

Earning a certificate in Engineering Technology prepares the learner to apply for jobs and internships in industries that that focus on the manufacture/fabrication of semiconductors, solar cells, nano-materials, structures and components.

Learners will gain the foundational understanding and hands-on skills needed for working in the manufacturing settings and research facilities that create these products.

Educational Option Information

- This educational option is an: Certificate of Completion
- This educational option is design for: Students interested in gaining credentials leading to gainful employment.
- This educational option can be completed Part-time or Full-time.
- The educational option can be started: Anytime
- Primary course location: Main

Special Requirements

Program learners are expected to purchase textbooks, lab manuals, and safety gear as required.

Additional Requirements

Depending on location of employment, security clearance may need to be obtained. Persons with criminal backgrounds or felony convictions may not be able to obtain clearance, or pass background checks.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *pending* Financial Aid approval.

- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Certification

Career Opportunities

Multiple employers in the local Albuquerque area , the greater New Mexico region, and across the nation are in need of persons with skills in engineering technology.

Local Industry partners include, but are not limited to, Sandia National Labs, Los Alamos National Labs, Air Force Researach Laboratory, Ebon Solar, Maxeon, RocketLab, Blue Halo, 3D-Glass Soln., Intel and other workforce partners. These partners have a high interest in learners with knowledge and skills in semiconductors, nanofabrication, and related abilities that supports learners pursuing a credential that specifically prepares them for these fields of work.

Job postings in New Mexico for persons with these skills are expected to range from 200-300 per year.

Program Requirements

- Reading and Writing Skills 2
- Math Skills 3 Alg

Courses

Term 1

- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- Program Approved Communication **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- ENGT 1996A - Methods in Engineering Tech I **3 credit hour(s)**
- Program Approved Math **3 credit hour(s)**

Term 2

- Program Approved Communication **3 credit hour(s)**
- ENGT 2996A - Methods in Engineering Tech II **3 credit hour(s)**
- ENGT 2996B - Methods in Engineering Tech III **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 22

- Program Approved Communication
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**

- ENGL 1110 - Composition I **3 credit hour(s)**

or

- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- ENGL 1120 - Composition II **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- Program Approved Math
- MATH 1220 - College Algebra **3 credit hour(s)**
- MATH 1220P - College Algebra Plus **4 credit hour(s)**
- MATH 1230 - Trigonometry **3 credit hour(s)**
- MATH 1240 - Pre-Calculus **4 credit hour(s)**
- MATH 1250 - Trigonometry & Pre-Calculus **5 credit hour(s)**
- MATH 1430 - Applications of Calculus I **3 credit hour(s)**
- MATH 1510 - Calculus I **4 credit hour(s)**

ENGLISH

English, Associate of Arts

School of Liberal Arts (LA)

This program is designed to meet the requirements for an Associate of Arts in English from CNM and prepare a student to obtain a Bachelor of Arts in English from a 4-year college or university.

Educational Option Information

- This educational option is an Associate of Arts Degree.
- This educational option can be completed Part-time or full-time.
- This educational option can be started Any term.
- Primary course location: Main, Montoya, Rio Rancho, South Valley and Westside Campuses; all AA degree courses are available online.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.
- Other: Individual courses associated with this program may require students to purchase additional materials.

Educational Opportunities

Students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- Creative and Fine Arts Requirement **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 3

- Arts & Sciences Elective **3 credit hour(s)**
- ENGL 2510 - Analysis of Literature **3 credit hour(s)**

- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
  or
- ENGL 2610 - American Literature I **3 credit hour(s)**
  or
- ENGL 2630 - British Literature I **3 credit hour(s)**
  or
- ENGL 2650 - World Literature I **3 credit hour(s)**

- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 4

- Arts & Sciences Elective **4 credit hour(s)**

- ENGL 2120 - Intermediate Composition **3 credit hour(s)**
  or
- ENGL 2620 - American Literature II **3 credit hour(s)**
  or
- ENGL 2640 - British Literature II **3 credit hour(s)**
  or
- ENGL 2660 - World Literature II **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Social and Behavioral Sciences Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

This information is meant to serve as a general guide for students intending to major in English. Specific requirements for transfer will vary from school to school. It is the student's responsibility to contact the four year transfer school to confirm specific admission and degree requirements.

Program Approved Electives

- ENGL 1160 - Introduction to Digital Storytelling **3 credit hour(s)**
- ENGL 2088 - English Specialty **1-12 credit hour(s)**
- ENGL 2120 - Intermediate Composition **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- ENGL 2260 - Digital Storytelling Creation I **3 credit hour(s)**
- ENGL 2261 - Digital Storytelling Creation II **3 credit hour(s)**
- ENGL 2310 - Introduction to Creative Writing **3 credit hour(s)**
- ENGL 2320 - Introduction to Fiction Writing **3 credit hour(s)**
- ENGL 2330 - Introduction to Poetry Writing **3 credit hour(s)**
- ENGL 2520 - Film as Literature **3 credit hour(s)**
- ENGL 2570 - Modern Latin American Literature **3 credit hour(s)**
- ENGL 2610 - American Literature I **3 credit hour(s)**
- ENGL 2620 - American Literature II **3 credit hour(s)**
- ENGL 2630 - British Literature I **3 credit hour(s)**
- ENGL 2640 - British Literature II **3 credit hour(s)**
- ENGL 2650 - World Literature I **3 credit hour(s)**
- ENGL 2660 - World Literature II **3 credit hour(s)**

ENVIRONMENTAL SCIENCE

Environmental Science, Certificate of Completion

School of Math, Science & Engineering (MSE)

Environmental Science is an interdisciplinary field where general science meets cutting-edge environmental solutions. The dynamic courses in this program blend a solid science foundation with a focus on tackling real-world environmental challenges. Completion of this certificate sets the learner up to apply for both industry and government jobs. The learner will also be positioned to transfer to associates or bachelor's degree programs in a variety of science fields.

Educational Option Information

- This educational option is an: Certificate of Completion

- This educational option can be completed: Full-Time
- This educational option can be started: Any Term
- Primary course location: Main Campus

Special Requirements

Physical Requirements

Learners in one of the required courses (ENVS 1210) are required to attend two off-campus field trips and, depending on selected locations, may need to access uneven/rough terrain and/or hike into/out of areas while engaged in course related activities.

Transportation

Learners should plan for up to 10 field trips per course and are responsible for transportation to/from sites.

Approximate Cost FA pending

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *pending* Financial Aid approval.
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Coursework is transferable toward science and math associates and bachelor's degree programs.

Career Opportunities

In New Mexico in 2023 there were approximately 300 job postings at the *Associates or below* degree level. Common employers in our region include county or city government, DOT, Sandia National Labs, Los Alamos National Labs, Vesper Energy, Terracon Consultants, Curia, Canacre, Pueblo governments, among many others.

As of May 2023, Bureau of Labor Statistics estimates 410-730 environmental science related jobs in the state of New Mexico with a projected 7% growth rate. New Mexico and Wyoming lead the nation in the concentration of jobs in environmental science. For New Mexico, the average hour wage is $39.47.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- MATH 1220 - College Algebra **3 credit hour(s)**

  or
- Program Approved Math **3-5 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- ENVS 1110 - Environmental Science I **3 credit hour(s)**
- ENVS 1110L - Environmental Science I Lab **1 credit hour(s)**
- Program Approved Science Elective with Lab **4-5 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 3

- ENVS 1210 - Field Methods in Environmental Science **4 credit hour(s)**
- Program Approved Communication **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 34

- Program Approved Communication
- COMM 1130 - Public Speaking **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- Program Approved Math
- MATH 1220 - College Algebra **3 credit hour(s)**
- MATH 1220P - College Algebra Plus **4 credit hour(s)**
- MATH 1230 - Trigonometry **3 credit hour(s)**
- MATH 1240 - Pre-Calculus **4 credit hour(s)**
- MATH 1250 - Trigonometry & Pre-Calculus **5 credit hour(s)**
- MATH 1430 - Applications of Calculus I **3 credit hour(s)**
- MATH 1510 - Calculus I **4 credit hour(s)**
- Program Approved Science Elective with Lab
- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**
- BIOL 2110L - Principles of Biology: Cellular and Molecular Biology Lab **1 credit hour(s)**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- CHEM 1225L - General Chemistry II Laboratory for STEM Majors **1 credit hour(s)**
- GEOG 1110 - Physical Geography **3 credit hour(s)**
- GEOG 1110L - Physical Geography Lab **1 credit hour(s)**
- GEOL 1110 - Physical Geology **3 credit hour(s)**
- GEOL 1110L - Physical Geology Laboratory **1 credit hour(s)**

- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**
- PHYS 1230L - Algebra-Based Physics I Laboratory **1 credit hour(s)**
- PHYS 1310 - Calculus-Based Physics I **4 credit hour(s)**
- PHYS 1310L - Calculus-Based Physics I Laboratory **1 credit hour(s)**
- Program Approved Elective
- ARCH 1215 - Introduction to Environmental Problems **3 credit hour(s)**
- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- GEOG 1110 - Physical Geography **3 credit hour(s)**
- GEOL 1110 - Physical Geology **3 credit hour(s)**
- GIS 1002 - Fundamentals of Geospatial Technology **3 credit hour(s)**
- GIS 1118 - Geographic Information Systems I **3 credit hour(s)**
- OSH 2016 - Occupational Safety I **1 credit hour(s)**
- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**
- PHYS 1310 - Calculus-Based Physics I **4 credit hour(s)**
- STEM 2998 - STEM Internship **1-3 credit hour(s)**

EXERCISE SCIENCE AND WELLNESS

Exercise Science and Wellness, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

The Exercise Science and Wellness associate's degree is a four term program that provides students with an in-depth understanding of the science of human movement. Coursework includes anatomy and physiology, exercise kinesiology, health and wellness principles, fitness assessment/prescription, exercise testing, exercise and disease prevention. The curriculum is designed to prepare students for employment in the following areas:

- Personal Trainers
- Health and Wellness Coach
- Fitness Consultant
- Group Fitness Instructor
- Kinesiology Taping Practitioner
- Health Club Management
- Employee Wellness Education

As students progress through the program, they are eligible to sit for the following industry certifications:

- Fitness Certificate
- Corrective Exercise Specialist
- Group Fitness Instructor
- Health and Fitness Special Populations
- Kinesiology Taping Technician
- Health and Wellness Coach

Students who complete their degree in the Exercise Science and Wellness program are prepared to enter the fitness health and wellness workforce.

Educational Option Information

- This educational option is an: Associate of Applied Science
- This educational option can be completed: Full-time
- This educational option is design for: Exercise Science and Wellness career
- This educational option can be started: Anytime
- Primary course location: Main

See Recommended Sequence of Courses

Special Requirements

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

This is a terminal degree.

Career Opportunities

Graduates of the program are encouraged to apply for certification to earn a nationally recognized personal trainer Certified Personal Trainer (CPT) or group exercise certification through organizations such as the American College of Sports Medicine (ACSM), Athletics and Fitness Association of America (AFAA), National Strength and Conditioning Association (NSCA), and American Council on Exercise (ACE). Nationally recognized certification provides an entry-level credential for those seeking gainful employment as Personal Trainers or Fitness Instructors at local health clubs and fitness centers.

Program Requirements

- **High School Diploma or Equivalent**

- **Math Skills 2 Alg**
- **Reading and Writing Skills 2**

Courses

Term 1

- BIOL 1130 - Introductory Anatomy and Physiology **3 credit hour(s)**
- BIOL 1130L - Introduction to Anatomy and Physiology Lab **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**
- EXSC 1160 - IM Group Exercise **2 credit hour(s)**
- HLED 1130 - Concepts of Health & Wellness **3 credit hour(s)**
- PHED 1460 - Conditioning: Personal Fitness **1 credit hour(s)**
- Program Approved Elective **1 credit hour(s)**

Term 2

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- EXSC 1180 - IM Training Techniques Review **2 credit hour(s)**
- EXSC 2110 - Exercise Physiology **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- NUTR 1020 - Sports Nutrition **3 credit hour(s)**
  or
- NUTR 2110 - Human Nutrition **3 credit hour(s)**

Term 3

- BUSA 1110 - Introduction to Business **3 credit hour(s)**
  or
- ENTR 1110 - Entrepreneurship **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- EXSC 2120 - Structural Kinesiology **3 credit hour(s)**
- EXSC 2160 - Fitness & Exercise Testing **3 credit hour(s)**
- HLED 1160 - Stress Management **3 credit hour(s)**
- Program Approved Elective **1 credit hour(s)**

Term 4

- EXSC 2150 - Prevention and Care Exercise Injury **3 credit hour(s)**
- EXSC 2990 - Practicum **3 credit hour(s)**
- HLED 1170 - Fitness Concepts for Special Populations **3 credit hour(s)**
- HLED 1225 - Weight Management and Exercise **3 credit hour(s)**
- Program Approved Elective **1 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s) * ***

Minimum Credit Hours Required to Complete Degree: 61

*** * PSYC 1110 - Introduction to Psychology recommended**

Program Approved Electives

- PHED 1230A - Individual Sport: Ultimate Frisbee **1 credit hour(s)**
- PHED 1230B - Individual Sport: Beginning Bowling **1 credit hour(s)**
- PHED 1410A - Yoga: Beginning Yoga **1 credit hour(s)**
- PHED 1410D - Yoga: Healing Hatha Yoga Stretch and Breathe **1 credit hour(s)**
- PHED 1420 - Stretch/Relax: Flexibility Training **1 credit hour(s)**
- PHED 1430 - Pilates **1 credit hour(s)**
- PHED 1510A - Training: Circuit Training **1 credit hour(s)**
- PHED 1510B - Training: Body Sculpting **1 credit hour(s)**
- PHED 1510D - Training: Resistance Training **1 credit hour(s)**
- PHED 1510E - Training: Kickboxing **1 credit hour(s)**
- PHED 1510F - Training: Fit Ball Training **1 credit hour(s)**
- PHED 1620A - Fitness: Core Fitness I **1 credit hour(s)**
- PHED 1620B - Fitness: Walking for Fitness **1 credit hour(s)**
- PHED 1630 - Career Fitness: Fitness for Public Safety Professionals **2 credit hour(s)**
- PHED 1670A - Aerobics: Beginning Step Aerobics **1 credit hour(s)**
- PHED 1670B - Aerobics: Step/Circuit Combo **1 credit hour(s)**
- PHED 1670D - Aerobics: Step/Kick Combo **1 credit hour(s)**
- PHED 1830 - Running: Running for Fitness **1 credit hour(s)**
- PHED 2280 - Volleyball II: Sand Volleyball **1 credit hour(s)**
- PHED 2410 - Yoga II: Fitness Yoga **1 credit hour(s)**
- PHED 2460 - Conditioning II: Extreme Conditioning **1 credit hour(s)**
- PHED 2620 - Fitness II: Fast Track Fitness **1 credit hour(s)**
- PHED 2670 - Aerobics II: Step Challenge **1 credit hour(s)**

Fitness, Certificate of Completion

School of Health, Wellness & Public Safety (HWPS)

The Fitness Certificate is a three-term program that prepares students to enter the fitness industry.

Coursework includes exercise physiology, kinesiology, nutrition, fitness assessment, exercise prescription, and the business aspects of personal fitness training.

Students will 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 and Guidelines of the Aerobics and Fitness Association of America's Primary Certification group for fitness leaders. The curriculum is designed to prepare students for employment in the following areas:

- Personal Training
- Fitness Consultant
- Health Club Management
- Employee Wellness Education

The certificate includes the foundational courses to start the Exercise Science and Wellness AAS degree.

Information Sessions are scheduled during the term prior to enrollment in the Fitness Technician (FITT) Certificate Program. These sessions provide general information about the profession of personal fitness.

Educational Option Information

- This educational option is an: Certificate of Completion
- This educational option can be completed: Full-time
- This educational option is designed for: Fitness career
- This educational option can be started: Anytime
- Primary course location: Main Campus

See Recommended Sequence of Courses

Special Requirements

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

AAS Degree

Career Opportunities

Graduates of the program are encouraged to apply for certification to earn a nationally recognized personal trainer Certified Personal Trainer (CPT) or group exercise certification through organizations such as the American College of Sports Medicine (ACSM), Athletics and Fitness Association of America (AFAA), National Strength and Conditioning Association (NSCA), and American Council on Exercise (ACE). Nationally recognized certification provides an entry-level credential for those seeking gainful employment as Personal Trainers or Fitness Instructors at local health clubs and fitness centers.

For the graduation policy refer to the Graduating From CNM section, cnm.edu or the Students tab in my CNM.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

This program's first term courses are offered in the fall and spring terms only. This may delay a student's program start date. Please check with an advisor for more information.

- BIOL 1130 - Introductory Anatomy and Physiology **3 credit hour(s)**
- BIOL 1130L - Introduction to Anatomy and Physiology Lab **1 credit hour(s)**

- BUSA 1110 - Introduction to Business **3 credit hour(s)**
  or
- ENTR 1110 - Entrepreneurship **3 credit hour(s)**

- EXSC 1160 - IM Group Exercise **2 credit hour(s)**
- EXSC 2110 - Exercise Physiology **3 credit hour(s)**
- PHED 1460 - Conditioning: Personal Fitness **1 credit hour(s)**
- EXSC 2160 - Fitness & Exercise Testing **3 credit**

hour(s)

Term 2

- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
  or
- COMM 2180 - Business and Professional Communication **3 credit hour(s)**
- HLED 1170 - Fitness Concepts for Special Populations **3 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**
- NUTR 1020 - Sports Nutrition **3 credit hour(s)**
  or
- NUTR 2110 - Human Nutrition **3 credit hour(s)**
- EXSC 2120 - Structural Kinesiology **3 credit hour(s)**

Term 3

- EXSC 2990 - Practicum **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 32

FILM AND DIGITAL MEDIA

Digital Media, Associate of Applied Science

School of Skilled Trades & Arts (STA)

Digital Media is an Associates of Applied Science degree program combining technology and design. The program offers training in areas such as graphic design/2D modeling, desktop/electronic publishing, web design, and audio and video editing. Digital Media offers individuals the education and tools necessary to bring classic media like text, graphics, photos and research into the digital arena.

The Digital Media program is designed for students who want to learn about graphic design for web and print output. Students learn through hands-on experience the current software used in the graphics industry today. Students also learn how to communicate visually and apply that to various hands-on projects.

Educational Option Information

- This program can be completed: Part-time or full-time. Full-time students can complete the program in four terms.
- This program can be started: Any term.
- Primary course location: ATC.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Other costs:

- Students will want to subscribe to Adobe Creative Cloud at a cost of about $30 a month.

Educational Opportunities

- Students can take the Adobe certification exams after completion of coursework.

Career Opportunities

The Digital Media AAS Degree program is current and relevant to today's technology needs.

Potential job duties include: Design graphics, give presentations, manipulate photographs, research, organization skills, communication, team project management, content provider, time management. Job titles common in the field include: Graphic Designer, Graphic Artist, Photo Manipulator, Researcher, Technical Writer, Project Manager, Media Sales, Content Designer, Web Designer, Social Media Coordinator, Digital Marketing Specialist, Educator/Technical Trainer, Digital Media Consultant.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
  or
- ENTR 1110 - Entrepreneurship **3 credit hour(s)**
- ENGL 1160 - Introduction to Digital Storytelling **3 credit hour(s)**
- FDMA 1260 - Introduction to Digital Media **3 credit hour(s)**
- FDMA 1630 - Principles of Design **3 credit**

hour(s)

Term 2

- ARTS 1610 - Drawing I **3 credit hour(s)**
  or
- ARTS 1240 - Design I **3 credit hour(s)**

- Communications Requirement **3 credit hour(s)**
- FDMA 1515 - Introduction to Digital Image Editing-Photoshop **3 credit hour(s)**
- FDMA 1716 - 2D Animation and Sound **3 credit hour(s)**

Term 3

- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- FDMA 1120 - Desktop Publishing I **3 credit hour(s)**
- FDMA 1220 - Introduction to Digital Video Editing **3 credit hour(s)**
- FDMA 1535 - Introduction to Illustrator **3 credit hour(s)**
- FDMA 2325 - Advanced Photoshop **3 credit hour(s)**
- MKTG 2250 - Social Media Strategies **3 credit hour(s)**

Term 4

- FDMA 1540 - Introduction to Motion Graphics **3 credit hour(s)**
- FDMA 2287 - Digital Design Studio **3 credit hour(s)**

- Humanities Requirement **3 credit hour(s)**
  or
- Social and Behavioral Science Requirement **3 credit hour(s)**

- Mathematics Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- ARTS 1410 - Introduction to Photography **3 credit hour(s)**
- BFIN 1110 - Personal Financial Planning for College Students **3 credit hour(s)**
- BHT 1005 - Survey of Business, Hospitality & Technology **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**
- BUSA 1198 - Project Management Fundamentals **3 credit hour(s)**
- FDMA 2996 - FDMA Special Topics **1-7 credit hour(s)**
- FDMA 2997 - Independent Study **1-6 credit hour(s)**
- FDMA 2998 - Internship **1-4 credit hour(s)**
- FILM 1002 - Shooting for Digital Media Applications **2 credit hour(s)**
- MKTG 2110 - Principles of Marketing **3 credit hour(s)**
- MKTG 2220 - Digital Marketing **3 credit hour(s)**
- MKTG 2230 - Marketing Analytics and Performance Optimization **3 credit hour(s)**

Film Crew Technician, Certificate of Completion

School of Skilled Trades & Arts (STA)

The Film Crew Technician Program Certificate is designed as a two-term cohort program. The first term courses will provide students with an overview of the moving image production process while affording them an opportunity for hands-on experiences. The second term focuses on development of technical and production skills in one or more "below the line" film craft areas, including art, hair, make-up, wardrobe, craft services, grip, electric, sound, locations, and production office.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Graduates from the Film Crew Technician Program will be prepared for entry-level crew positions in motion pictures, television and electronic media production. The Film Crew Technician Program is offered in collaboration with the New Mexico Film Office and IATSE Local 480. Graduates from the Post Production Technician Program will be prepared to enter careers in many areas of developing visual media production across a wide variety of delivery platforms and formats.

For the graduation policy refer to the Graduating From CNM section, cnm.edu or the Students tab in my CNM.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- FDMA 2120 - Film Crew I/ Introduction to Film and Media Workflow **3 credit hour(s)**
- FILM 1003 - Introduction to Cinematography **3 credit hour(s)**
- FILM 1015 - Film On-Set **4 credit hour(s)**
- FILM 1110 - Film Location **4 credit hour(s)**

Term 2

- FILM 1210 - The Business of Film / Production Planning & Preparation **3 credit hour(s)**
- FILM 1220 - Pre-Production **4 credit hour(s)**
- FILM 1230 - Production **4 credit hour(s)**
- FILM 1240 - Post-Production **3 credit hour(s)**

  or
- FILM 2098 - Internship **1-12 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 28

Film Production, Associate of Applied Science

School of Skilled Trades & Arts (STA)

The Film Production A.A.S. degree is designed as a four-term cohort program. The Film Technician and Post-Production Technician certificates are embedded in the first 3 terms of the degree; terms 4 and 5 present more specialized topics including directing and advanced prop and set fabrication. Students completing the degree are well-suited for employment in one or more "below the line" film craft areas, including art, hair, make-up, wardrobe, craft services, grip, electric, sound, locations, production office or post-production. Students may also choose to transfer to a 4-year program.

Educational Option Information

- This educational option is an Associate of Applied Science degree.
- This educational option can be completed Part-Time or Full Time. A full-time student can complete this program in 5 terms.
- This educational option is designed for Immediate employment and transfer into a baccalaureate program.
- This educational option can be started Any term.
- Primary course location: Advanced Technology Center.

Special requirements:

- Should be able to lift 30 pounds.

Additional tools or supplies required:

There is a $30 tool fee for the Fabrication for Film course (Film 2001).

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students completing the first term of this degree will have also completed the first term of the CNM Film Technician Certificate of Completion, and Post-Production Technician Certificate of Completion.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

The Associate of Applied Science Degree transfers all credits to the Eastern New Mexico University Bachelors of Applied Arts and Sciences (B.A.A.S.) degree. Many courses may also transfer into the B.A.A.S. Film Concentration. Contact the School of Applied Technologies for more information.

Employment Opportunities

Graduates from the Film Production A.A.S. degree will be prepared for entry-level crew positions in motion pictures, television and electronic media production. The Film Program is offered in collaboration with the New Mexico Film Office and IATSE Local 480.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- FDMA 2120 - Film Crew I/ Introduction to Film and Media Workflow **3 credit hour(s)**
- FILM 1003 - Introduction to Cinematography **3 credit hour(s)**
- FILM 1015 - Film On-Set **4 credit hour(s)**
- FILM 1110 - Film Location **4 credit hour(s)**

Term 2

- FDMA 1260 - Introduction to Digital Media **3 credit hour(s)**

- FILM 1210 - The Business of Film / Production Planning & Preparation **3 credit hour(s)**
- FILM 1220 - Pre-Production **4 credit hour(s)**
- FILM 1230 - Production **4 credit hour(s)**
- FILM 1240 - Post-Production **3 credit hour(s)**

  or
- FILM 2098 - Internship **1-12 credit hour(s)**

Term 3

- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- FILM 1325 - Camera Operation **2 credit hour(s)**
- FILM 1335 - Post-Production Editing **3 credit hour(s)**
- FILM 1345 - Sound Recording and Design **2 credit hour(s)**
- PSYC 2360 - Psychology and Film **3 credit hour(s)** *

  or
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- FILM 1004 - Shooting Your Story **3 credit hour(s)**
- FILM 2001 - Fabrication for Film **3 credit hour(s)**

  or
- FILM 2002 - Directing for the Camera **3 credit hour(s)**
- FILM 2005 - Advanced Film Editing **3 credit hour(s)**
- FDMA 1110 - Film History **3 credit hour(s)**

  or
- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

* PSYC 2360 recommended for Film-related subject matter.

Film, Associate of Arts

School of Skilled Trades & Arts (STA)

The Film A.A. degree is designed as a 4-term program, primarily intended for transfer to a 4-year college or university. Students will learn basic technical film production skills with an emphasis on working together as a team to deliver aesthetic content, while satisfying general education requirements for university transfer. Please consult an advisor for information about this program.

Educational Option Information

- This educational option is an Associate of Arts Degree.
- This educational option can be completed: In 4-5 Terms
- This educational option is designed for: Students who wish to transfer directly to a Bachelor's of Arts in Film program.
- This educational option can be started: Fall or spring term
- Primary course location: CNM Advanced Technology Center

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

The program listed below is designed to meet the requirements for an Associate of Arts in Film from CNM and prepare a student to obtain a Bachelor of Arts and Masters of Arts in Film from Seattle Film Institute (SFI). SFI classes are currently offered in Seattle and New Mexico. CNM students will choose from one of three concentrations: Filmmaking, Motion Picture and Graphic Effects, or Film Acting, all of which correspond with SFI concentrations.

Students interested in transferring to SFI should consult an SFI advisor. Students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students should always refer to the catalog of their intended transfer institution for specific admission and curricular requirements. Students should also consult an advisor with CNM Advisement.

Students completing this degree should be planning to transfer to a 4-year and possibly graduate level work in Film. This educational track could lead to a career in Directing, Producing, Screen Writing, or other above-the-line occupations.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they

were offered. Cohorted programs may have additional restrictions.

Program Requirements

- MATH 1101 [Inactive] or Math 1111-1114 Series [Inactive] or MATH 1215 or MATH 1215P or Math Skills 3
- Reading and Writing Skills 2

Courses

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- FDMA 2120 - Film Crew I/ Introduction to Film and Media Workflow **3 credit hour(s)**
- Mathematics Requirement **3-4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- FILM 1003 - Introduction to Cinematography **3 credit hour(s)**
- FILM 1015 - Film On-Set **4 credit hour(s)**
- FILM 1110 - Film Location **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 3

- COMM 1130 - Public Speaking **3 credit hour(s)**

  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**

- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 4

- Creative and Fine Arts Requirement **3 credit hour(s)**
- Laboratory Science Requirement **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Social and Behavioral Science Requirement **6 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

Program Approved Electives

- Filmmaking Core

Students planning to transfer to Seattle Film Institute B.A. in Film, Filmmaking Concentration should select classes from this group.

- FILM 1004 - Shooting Your Story **3 credit hour(s)**
- FILM 1325 - Camera Operation **2 credit hour(s)**
- FILM 2002 - Directing for the Camera **3 credit hour(s)**
- FILM 2096-2996 - Special Topics **3 credit hour(s)**
- Motion Graphics and Visual Effects Core

Students planning to transfer to Seattle Film Institute B.A. in Film, Motion Graphics and Visual Effects Concentration should select classes from this group.

- FILM 1335 - Post-Production Editing **3 credit hour(s)**
- FILM 2005 - Advanced Film Editing **3 credit hour(s)**
- FILM 2096-2996 - Special Topics **3 credit hour(s)**
- Film Acting Core

Students planning to transfer to Seattle Film Institute B.A. in Film, Acting for Film Concentration should select classes from this group.

- FILM 2096-2996 - Special Topics **3 credit hour(s)**
- THEA 1220 - Beginning Acting **3 credit hour(s)**
- THEA 2210 - Acting for the Camera **3 credit hour(s)**
- THEA 2420 - Voice and Movement **3 credit hour(s)**

Post Production Technician, Certificate of Completion

School of Skilled Trades & Arts (STA)

The Post Production Technician Program Certificate is designed as a two-term 27 credit cohort program. The first term courses will provide students with an overview of the moving image production process while affording them an opportunity for hands-on experiences. The second term focuses on development of basic technical and production skills which could lead to careers in many areas of developing visual media production. Skill areas include: post-production editing, sound capture and design, special effects, camera operation and storyboarding. The final course helps students develop a professional media portfolio in preparation for entering the workforce.

Special Requirements

Many class assignments will require sitting for long periods of time.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Graduates will be prepared to enter careers in many areas of developing visual media production across a wide variety of delivery platforms and formats.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- FDMA 2120 - Film Crew I/ Introduction to Film and Media Workflow **3 credit hour(s)**
- FILM 1003 - Introduction to Cinematography **3 credit hour(s)**
- FILM 1015 - Film On-Set **4 credit hour(s)**
- FILM 1110 - Film Location **4 credit hour(s)**

Term 2

- FDMA 1260 - Introduction to Digital Media **3 credit hour(s)**
- FILM 1325 - Camera Operation **2 credit hour(s)**
- FILM 1335 - Post-Production Editing **3 credit hour(s)**
- FILM 1345 - Sound Recording and Design **2 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 27

FINE ARTS

Fine Arts (AA), Art History Concentration

School of Skilled Trades & Arts (STA)

The Fine Arts program offers a rich variety of courses which are designed to acquaint students with the range of visual arts, elements of drawing and design, the history of art, as well as the important role which art and architecture play in society.

Educational Option Information

- This educational option is an Associate of Arts Degree.
- This educational option is designed for Meeting the requirements for an Associate of Fine Arts, with Concentration in Art History, from CNM and prepare a student to obtain a Bachelor of Fine Arts or related degree.
- This educational option can be completed Part-Time or Full-Time.
- This educational option can be started during any term.
- Primary course location: All CNM Campuses.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.
- Note: Individual courses associated with this program may require students to purchase additional materials.

Educational Opportunities

The Associates Degree is an important milestone for student pursuing either a baccalaureate degree or a graduate degree in the field. Core requirements for the baccalaureate are met through completion of the CNM Associate of Arts degree.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ARTH 2110 - History of Art I **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s) ***
- Mathematics Requirement **3 credit hour(s) * ***
- Program Approved Art Studio Elective **3 credit hour(s)**

Term 2

- ARTH 2120 - History of Art II **3 credit hour(s)**
- Creative and Fine Arts Elective **3 credit hour(s) * * * ***
- ENGL 1120 - Composition II **3 credit hour(s)**
- Program Approved Art Studio Elective **3 credit hour(s) * * ***
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 3

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**

- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
- Program Approved Art History Elective **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- Arts & Sciences Elective **1-3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)***
- Laboratory Science Requirement (Lab Optional) **3-4 credit hour(s)**
- Program Approved Art History Elective **6 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

This information is meant to serve as a general guide for students intending to major in Art History. Specific requirements for transfer will vary from school to school. It is the student's responsibility to contact the four year transfer school to confirm specific admission and degree requirements.

* HIST 1150 or HIST 1160 recommended for UNM transfer

* * MATH 1140 recommended

* * * ARTS 1220 recommended for UNM transfer

* * * * THEA or MUS courses recommended for UNM transfer

- Program Approved Art History Electives
- ARCH 2120 - World Architecture I **3 credit hour(s)**
- ARCH 2125 - World Architecture II **3 credit hour(s)**
- ARTH 1116 - History of Design **3 credit hour(s)**
- ARTH 2130 - Modern Art **3 credit hour(s)**
- ARTH 2140 - Art of the American Southwest **3 credit hour(s)**
- ARTH 2201 - History of Women Artists **3 credit hour(s)**
- ARTH 2310 - Art History Careers **3 credit hour(s)**
- ARTH 2996 - Special Topics **3 credit hour(s)**
- FDMA 1260 - Introduction to Digital Media **3 credit hour(s)**
- Program Approved Art Studio Electives
- **Any ARTS Course** (except ARTS 1111)
- FDMA 1260 - Introduction to Digital Media **3 credit hour(s)**

Fine Arts (AA), Art Studio Concentration

School of Skilled Trades & Arts (STA)

The Fine Arts program offers a rich variety of courses which are designed to acquaint students with the range of visual arts, elements of drawing and design, the history of art, as well as the important role which art and architecture play in society.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is an Associate of Arts Degree.
- This educational option can be completed Part-Time or Full-Time.
- This educational option is designed for meeting the requirements for an Associate of Fine Arts, with Concentration in Art Studio, from CNM and prepare a student to obtain a Bachelor of Fine Arts or related degree.
- This educational option can be started any term.
- Primary course location: Main Campus, Westside Campus and Montoya Campus have full art studios.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Additional costs:

- Students may be required to purchase materials for art studio courses.
- This cost is approximately $300.

Educational Opportunities

The Associates Degree is an important milestone for student pursuing either a baccalaureate degree or a graduate degree in the field. Core requirements for the baccalaureate are met through completion of the CNM Associate of Arts degree.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Sample Job Titles

- Professional Artists/Craftsman
- Museum Preparator
- Gallery Attendant
- Custom Framer
- Art Supply Sales
- Tattoo Artist
- Sign Painter

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ARTS 1610 - Drawing I **3 credit hour(s)**
- ARTS 1240 - Design I **3 credit hour(s)**
  or
- ARTS 1220 - Art Practices I **3 credit hour(s) (Recommended) ***
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Mathematics Requirement **3 credit hour(s) ****
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- ARTS 1230 - Art Practices II **3 credit hour(s) (Recommended) ***
  or
- ARTS 1250 - Design II **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
- Program Approved Art Studio Elective **3 credit hour(s)**

Term 3

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Program Approved Art History Elective **6 credit hour(s)**
- Program Approved Art Studio Elective **3 credit hour(s)**

Term 4

- Arts & Sciences Elective **1-3 credit hour(s)**
- ARTS 2010 - Portfolio Development **3 credit hour(s)**
  or
- ARTS 2820 - Jewelry and Small Metal Construction Portfolio **3 credit hour(s)**
  or
- ARTS 2998 - Arts Internship **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s) (Recommended) *****
- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**
- Program Approved Art Studio Elective **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

This information is meant to serve as a general guide for students intending to major in Art Studio. Specific requirements for transfer will vary from school to school. It is the student's responsibility to contact the four year transfer school to confirm specific admission and degree requirements.

* ARTS 1220 and ARTS 1230 recommended for transfer to UNM for the BA or BFA Art Studio degree.

* * MATH 1140 recommended for transfer to UNM.

* * * HIST 1150 or HIST 1160 recommended for transfer to UNM.

Program Approved Electives

Art History Program Approved Electives

- ARCH 2120 - World Architecture I **3 credit hour(s)**
- ARCH 2125 - World Architecture II **3 credit hour(s)**
- ARTH 1116 - History of Design **3 credit hour(s)**
- ARTH 2110 - History of Art I **3 credit hour(s)**
- ARTH 2120 - History of Art II **3 credit hour(s)**
- ARTH 2130 - Modern Art **3 credit hour(s)**
- ARTH 2140 - Art of the American Southwest **3 credit hour(s)**
- ARTH 2201 - History of Women Artists **3 credit hour(s)**
- FDMA 1260 - Introduction to Digital Media **3 credit hour(s)**

Art Studio Program Approved Electives

- ARTS 1320 - Ceramics I **3 credit hour(s)**
- ARTS 1410 - Introduction to Photography **3 credit hour(s)**
- ARTS 1620 - Life Drawing I **3 credit hour(s)**
- ARTS 1630 - Painting I **3 credit hour(s)**
- ARTS 1710 - Introduction to Printmaking **3 credit hour(s)**
- ARTS 1810 - Jewelry and Small Metal Construction I **3 credit hour(s)**
- ARTS 2131 - Illustration Arts **3 credit hour(s)**
- ARTS 2211 - Portraiture **3 credit hour(s)**
- ARTS 2310 - Ceramics II **3 credit hour(s)**
- ARTS 2420 - Visualizing Ideas **3 credit hour(s)**
- ARTS 2610 - Drawing II **3 credit hour(s)**
- ARTS 2620 - Life Drawing II **3 credit hour(s)**
- ARTS 2630 - Painting II **3 credit hour(s)**
- ARTS 2710 - Intermediate Printmaking **3 credit hour(s)**
- ARTS 2810 - Jewelry and Small Metal Construction II **3 credit hour(s)**
- ARTS 2818 - Jewelry Casting **3 credit hour(s)**
- ARTS 2820 - Jewelry and Small Metal Construction Portfolio **3 credit hour(s)** (if not used elsewhere)
- ARTS 2994 - Illustration Arts Portfolio **3 credit hour(s)**
- FDMA 1260 - Introduction to Digital Media **3 credit hour(s)**

FIRE SCIENCE

CNM Fire Academy, Certificate of Completion

School of Health, Wellness & Public Safety (HWPS)

This certification of completion provide students with the technical competencies required of an entry-level firefighter. Successful students will earn IFSAC Hazardous Materials Awareness and Operations, IFSAC Firefighter I & II, NWCG Basic Wildland Firefighting, and EMT- Basic certifications.

See Recommended Sequence of Courses

Educational Option

- This educational option is an: Certificate of Completion
- This educational option can be completed: Full-time or Part-Time
- This educational option is designed for: Immediate employment and for transfer into CNM's Fire Science, Associate of Applied Science.
- This educational option can be started: Any Term
- Primary course location: Westside Campus, Rio Rancho Campus, Online, Main Campus, Offsite.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Special Requirements

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health caregiver's criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting the Emergency Medical Technician or EMT portion of the program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Licensing

Students completing various Fire Science courses will be allowed to sit for the associated IFSAC or NWCG certification exams. Additionally, upon completion of the EMT portion of the program the student will be allowed to take the National Registry EMT exam.

Additional Supplies

Additional tools, and supplies may be required for individual courses during the program.

Educational Opportunities

This certificate is embedded in CNM's Fire Science, Associate of Applied Science allowing students to complete this certificate and continue seamlessly into their associates degree. Many of the courses in this degree are transferable and some may be applied to two and four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

The Bureau of Labor and Statistics reports that in 2016 there were 327,300 firefighter jobs in the United States. Additionally, the Bureau of Labor and Statistics projects a 7% growth in the employment of firefighters from 2016-2026.

Firefighters are traditionally employed by the local, state, federal governments.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- **High School Diploma or Equivalent for employment**
- **At least 18 years of age to attend IFSAC Certification Courses**
- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- EMS 1053 - EMT Basic Theory **6 credit hour(s)**
- EMS 1093 - EMT Basic Lab **2 credit hour(s)**
- EMS 1190 - EMT Basic Clinical **1 credit hour(s)**

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- FS 1820 - Hazardous Materials Awareness and Operations **3 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**

Term 2

- FS 1010 - Principles of Emergency Services **3 credit hour(s)**
- FS 1504 - Wildland Firefighting **3 credit hour(s)**
- FS 2215 - Firefighter I & II Theory **4 credit hour(s)**
- FS 2292 - Firefighter I & II Lab **2 credit hour(s)**
- PHED 1630 - Career Fitness: Fitness for Public Safety Professionals **2 credit hour(s)**
  or
- FS 1015 - Physical Fitness for Firefighters **2 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 30

Fire Science, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

Fire Science Associate of Applied Science Degree gives students the educational background needed for employment in a fire service career. It may also help students achieve promotions within a Fire Department after gaining employment.

Students in the Fire Science program will benefit from faculty who bring up-to-date industry experience into the classroom. The curriculum has been validated by several subject matter experts throughout the country and is based on a national model developed by the National Fire Academy (NFA). The curriculum includes Fire Behavior and Combustion, Building Construction for Fire Protection, Fire Protection Hydraulics and Water Supply, Fire Protection Systems, Introduction to Fire Science, Wildland Firefighting, Fire Inspections, Fire Administration, Safety and Survival, Tactics and Strategy and Hazardous Materials. The Fire Science program provides graduates with a sense of community service and what it takes to be successful in the fire service.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is an: Associate of Applied Science Degree
- This educational option can be completed: Full-time or Part-Time
- This educational option is designed for: Immediate employment and for transfer into a baccalaureate program.
- This educational option can be started: Any Term
- Primary course location: Westside Campus, Rio Rancho Campus, Online, Offsite.

Special Requirements

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Felony Conviction

Most of the health programs in HWPS require students undergo the New Mexico Department of Health caregiver's criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting the Emergency Medical Technician or EMT portion of the program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Licensing

Students completing various Fire Science courses will be allowed to sit for the associated IFSAC or NWCG certification exams. Additionally, upon completion of the EMT portion of the program the student will be allowed to take the National Registry EMT exam.

Additional Supplies

Additional tools, and supplies may be required for individual courses during the program.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this degree are transferable and some may be applied to four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

The Bureau of Labor and Statistics reports that in 2019 there were 335,500 firefighter jobs in the United States. Additionally, the Bureau of Labor and Statistics projects a 6% growth in the employment of firefighters from 2019-2029.

Firefighters are traditionally employed by the local, state, federal governments.

Gainful Employment information is available from Job Connection Services.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- **High School Diploma or Equivalent for employment**
- **At least 18 years of age to attend IFSAC Certification Courses**
- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- Communications Requirement **3 credit hour(s)** *
- EMS 1053 - EMT Basic Theory **6 credit hour(s)**
- EMS 1093 - EMT Basic Lab **2 credit hour(s)**
- EMS 1190 - EMT Basic Clinical **1 credit hour(s)**
- FS 1010 - Principles of Emergency Services **3 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**

  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**

Term 2

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- FS 1504 - Wildland Firefighting **3 credit hour(s)**
- FS 1512 - Building Construction for Fire Prevention **3 credit hour(s)**
- FS 1820 - Hazardous Materials Awareness and Operations **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)** **

Term 3

- CHEM 1120 - Introduction to Chemistry **3 credit hour(s)**

  and
- CHEM 1120L - Introduction to Chemistry Laboratory **1 credit hour(s)**

  or
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**

  and
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**

  or
- BIOL 1215 - Biology for Environmental Sciences **3 credit hour(s)**

  and
- BIOL 1215L - Biology for Environmental Sciences Lab **1 credit hour(s)**

  or
- BIOL 1140 - Biology for Health Sciences **3 credit hour(s)**

  and
- BIOL 1140L - Biology for Health Sciences Lab **1 credit hour(s)**
- FS 1610 - Principles of Fire and Emergency Services Safety and Survival **3 credit hour(s)**
- FS 2215 - Firefighter I & II Theory **4 credit hour(s)**

  and
- FS 2292 - Firefighter I & II Lab **2 credit hour(s)**

  or
- FS 2820 - Wildland Leadership **3 credit hour(s)**

  and
- FS 2825 - Wildland Fire Advanced Firefighter Development **3 credit hour(s)**
- PHED 1630 - Career Fitness: Fitness for Public Safety Professionals **2 credit hour(s)**

  or
- FS 1015 - Physical Fitness for Firefighters **2 credit hour(s)**

Term 4

- FS 2001 - Fire Protection Systems **3 credit hour(s)**
- FS 2422 - Fire Behavior and Combustion **3 credit hour(s)**
- FS 2814 - Fire Prevention **3 credit hour(s)**
- FS 2999 - Fire Science Capstone Course **1 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)** ***
- Program Approved Elective **1 credit hour(s)**

Minimum Credit Hours Required to Complete

Degree: 60

*ENGL 1110 or ENGL 1110P recommended as they are Pre- or corequisites for EMS 1053.

**MATH 1220 recommended

***Any POLS , PSYC, or SOCI course

Program Approved Electives

Any course from this list not required in the degree plan.

FS Program Approved Electives

- FS 1096-1996 - Special Topics **1-6 credit hour(s)**
- FS 1544 - Fire Service Instructor I **3 credit hour(s)**
- FS 2008 - Fire Protection Hydraulics and Water Supply **3 credit hour(s)**
- FS 2096-2996 - Special Topics **1-6 credit hour(s)**
- FS 2215 - Firefighter I & II Theory **4 credit hour(s)**
- FS 2292 - Firefighter I & II Lab **2 credit hour(s)**
- FS 2419 - Strategy and Tactics **3 credit hour(s)**
- FS 2530 - Fire Officer 1 **3 credit hour(s)**
- FS 2625 - Fire Officer 2 **3 credit hour(s)**
- FS 2640 - Legal Aspects of Emergency Services **3 credit hour(s)**
- FS 2815 - Intermediate Wildland Fire Behavior **3 credit hour(s)**
- FS 2820 - Wildland Leadership **3 credit hour(s)**
- FS 2825 - Wildland Fire Advanced Firefighter Development **3 credit hour(s)**
- FS 2997 - Independent Study **1-6 credit hour(s)**
- FS 1817 - National Incident Management System **3 credit hour(s)**

EMS Program Approved Electives

- EMS 1001 - EMS First Responder Theory **2 credit hour(s)**
- EMS 1091 - EMS First Responder Lab **1 credit hour(s)**
- EMS 1412 - Advanced EMT (EMT-I) Theory **6 credit hour(s)**
- EMS 1493 - Advanced EMT (EMT-I) Lab **2 credit hour(s)**
- EMS 1890 - Advanced EMT (EMT-I) Clinical **2 credit hour(s)**

CJ Program Approved Electives

- CJUS 1110 - Introduction to Criminal Justice **3 credit hour(s)**
- CJUS 1120 - Criminal Law **3 credit hour(s)**
- CJUS 1140 - Juvenile Justice **3 credit hour(s)**
- CJUS 1143 - Report Writing **3 credit hour(s)**
- CJUS 1320 - Patrol Procedures **3 credit hour(s)**
- CJUS 1330 - Constitutional Policing **3 credit hour(s)**
- CJUS 2140 - Criminal Investigations **3 credit hour(s)**
- CJUS 2150 - Corrections System **3 credit hour(s)**
- CJUS 2420 - Public Policies and Strategies **3 credit hour(s)**
- CJUS 2530 - Management for Criminal Justice Professionals **3 credit hour(s)**

GEOGRAPHIC INFORMATION TECHNOLOGY

Geographic Information Technology, Associate of Applied Science

School of Skilled Trades & Arts (STA)

The Geographic Information Technology (GIT) Degree program offers a rigorous curriculum in geospatial technology, encompassing the areas of GIS, survey, remote sensing, database and programming in addition to general education courses. Students completing the degree will be prepared to work in the geospatial industry or continue on to 4-year studies in geography at UNM or NMSU.

Students will study Geographic Information Systems (GIS) and related geospatial technologies including satellite-based mapping systems, remote sensing, and land survey. Practical, lab-based applications are emphasized. Both the certificate and degree options are offered as stand-alone choices for the student. Students who complete the GIT degree may choose to enter the work force or continue their education at a 4-year institution. It is critical to meet with an advisor or program Chair to design your academic schedule as some courses may be offered only in certain terms.

See Recommended Sequence of Courses

Educational Option Information

- This program can be completed part-time or full-time.
- This program can be started: Any term.
- It is critical to meet with an advisor or program Chair to design your academic schedule as some courses may be offered only in certain terms.
- Primary course location: Advanced Technology Center (ATC) and field locations.

Special requirements for this program

- The technologies taught in this program are based fundamentally on computer software applications. Students should be willing to spend a good deal of time working with computers and associated equipment.
- Some field work is also required.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

- Students completing the degree will be prepared to work in the geospatial industry or continue on to 4-year studies in geography at UNM or NMSU.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Employment Information

The geospatial industry has been identified by the Department of Labor as a high-growth emerging industry. GIS and related software and technologies are commonly used by numerous government and private organizations, and there are a wide range of fields including land survey, environmental, land management, business, and others in which degree and certificate graduates can find employment.

Gainful Employment information is available from Job Connection Services.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- GIS 1002 - Fundamentals of Geospatial Technology **3 credit hour(s)**
- GIS 1005 - CAD for Surveying and GIS **3 credit hour(s)**
- GIS 1118 - Geographic Information Systems I **3 credit hour(s)**
- GIS 2008 - GPS Field Mapping **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- SUR 1002 - Math for Surveying and Mapping **1 credit hour(s)**

Term 2

- ENGL 1110 - Composition I **3 credit hour(s)**

  or

- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- GIS 1008 - Land Information Systems **3 credit hour(s)**
- GIS 2228 - Geographic Information Systems II **3 credit hour(s)**
- GIS 2020 - Trends in Geospatial Technology **3 credit hour(s)**
- GIS 2030 - GIS Project Design **3 credit hour(s)**

Term 3

- GIS 2011 - Remote Sensing and Image Processing **3 credit hour(s)**

- GEOG 1110 - Physical Geography **3 credit hour(s)**

  or

- GEOG 1130 - Human Geography **3 credit hour(s)**

- MATH 1350 - Introduction to Statistics **3 credit hour(s)**

  or

- MATH 1350P - Introduction to Statistics Plus **4 credit hour(s)**

- SUR 2205 - Fundamentals of Land Surveying **3 credit hour(s)**
- UAS 1010 - Introduction to Unmanned Aircraft Systems **3 credit hour(s)**

Term 4

- GEOG 2110 - Introduction to Maps and Geospatial Information **3 credit hour(s)**

  or

- Program Approved Elective **3 credit hour(s)**

- Humanities Requirement **3 credit hour(s)**
- Program Approved Elective 6 **credit hour(s)**
- UAS 2020 - UAS Data Modeling & 3D Visualization **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

Program Approved Electives

- CSCI 1220 - Computer Programming Fundamentals: Python **3 credit hour(s)**
- GEOG 1110 - Physical Geography **3 credit hour(s)** (*If not already taken*)
- GEOG 1130 - Human Geography **3 credit hour(s)** (*If not already taken*)
- GIS 2098 - Internship **1-7 credit hour(s)**
- GIS 2996 - Special Topics **1-7 credit hour(s)**
- UAS 1011 - UAS Standards, Regulations and Law and Exam Prep **1 credit hour(s)**
- UAS 1020 - Crew Resource Management for UAS **1 credit hour(s)**
- UAS 1030 - UAS Flight Training I **2 credit hour(s)**
- UAS 1031 - UAS Flight Training II **2 credit hour(s)**
- UAS 2996 - Special Topics **1-6 credit hour(s)**

Geographic Information Technology, Certificate of Completion

School of Skilled Trades & Arts (STA)

The GIS concentration emphasizes applications of GIS software and includes courses in latest GIS applications

and analysis methods. Students pursuing this certificate concentration will learn the latest industry technology as applied to a range of topics including environmental, hydrological and business applications.

See Recommended Sequence of Courses

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Employment Information

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- GIS 1002 - Fundamentals of Geospatial Technology **3 credit hour(s)**
- GIS 1005 - CAD for Surveying and GIS **3 credit hour(s)**
- GIS 1118 - Geographic Information Systems I **3 credit hour(s)**
- GIS 2008 - GPS Field Mapping **3 credit hour(s)**

Term 2

- GIS 2030 - GIS Project Design **3 credit hour(s)**
- GIS 2228 - Geographic Information Systems II **3 credit hour(s)**

- GIS 1008 - Land Information Systems **3 credit hour(s)**

or

- GIS 2011 - Remote Sensing and Image Processing **3 credit hour(s)**

or

- GIS 2020 - Trends in Geospatial Technology **3 credit hour(s)**

or

- SUR 2205 - Fundamentals of Land Surveying **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 21

GEOGRAPHY

Geography and Environmental Studies, Associate of Arts

School of Math, Science & Engineering (MSE)

Geography is the field of science describing, analyzing, and understanding the distribution and spatial interaction of Earth's physical and cultural landscapes. Using tools such as mapping, it focuses on the complex interrelationships between Earth and human systems, sustainability of global and local resources, and social and demographic phenomena. This program is designed to meet the requirements for an Associate of Arts in Geography from CNM and prepare a student to obtain a Bachelor of Arts or a Bachelor of Science in Geography at the University of New Mexico. However, students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students interested in transfer to UNM should consult the UNM Geography Department. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements. College catalogs are generally available online. Students should also consult an advisor at CNM.

Educational Option Information

- This educational option is an Associate of Arts Degree
- This educational option can be completed Part-Time or Full-Time
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program.
- This educational option can be started: Any Term
- Scheduling Information: Follow course catalog recommendations to avoid scheduling problems.
- Primary course location: Main Campus

Special Requirements

Students are expected to purchase textbooks, lab manuals and lab safety equipment.

Information for people with felony convictions

- A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 3
- Reading and Writing Skills 2

Courses

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- GEOG 1110 - Physical Geography **3 credit hour(s)**
- GEOG 1110L - Physical Geography Lab **1 credit hour(s)** *
- Program Approved Math **3 credit hour(s)***
- Program Approved Elective **3 credit hour(s)****
- Unrestricted Elective **3 credit hour(s) ****

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- GEOG 1130 - Human Geography **3 credit hour(s)** ***
- GEOL 1110 - Physical Geology **3 credit hour(s)**
  or
- Program Approved Science **3 credit hour(s)***
- Program Approved Communication **3 credit hour(s)**
- Unrestricted Elective **3 credit hour(s)**

Term 3

- GEOG 1120 - World Regional Geography **3 credit hour(s)** **
  or
- Program Approved Elective **3 credit hour(s)***
- Humanities Requirement **3 credit hour(s)**
- Program Approved Communication **3 credit hour(s)**
  or
- Modern Language **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- Unrestricted Elective **3 credit hour(s)**

Term 4

- GEOG 2110 - Introduction to Maps and Geospatial Information **3 credit hour(s)** *
  or
- Program Approved Elective **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)***
- Program Approved Elective **3 credit hour(s)***
- Unrestricted Elective **3 credit hour(s)**
- Unrestricted Elective **3 credit hour(s) *****

Minimum Credit Hours Required to Complete Degree: 61

- Program Approved Communications Elective
- COMM 1130 - Public Speaking **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- Program Approved Math
- MATH 1220 - College Algebra **3 credit hour(s)**
- MATH 1220P - College Algebra Plus **4 credit hour(s)**
- MATH 1230 - Trigonometry **3 credit hour(s)**
- MATH 1240 - Pre-Calculus **4 credit hour(s)**
- MATH 1250 - Trigonometry & Pre-Calculus **5 credit hour(s)**
- MATH 1350 - Introduction to Statistics **3 credit hour(s)**
- MATH 1350P - Introduction to Statistics Plus **4 credit hour(s)**
- MATH 1430 - Applications of Calculus I **3 credit hour(s)**
- MATH 1440 - Applications of Calculus II **3 credit hour(s)**
- MATH 1510 - Calculus I **4 credit hour(s)**
- MATH 1520 - Calculus II **4 credit hour(s)**
- Program Approved Science
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- GEOL 1110 - Physical Geology **3 credit hour(s)**
- GEOL 1110L - Physical Geology Laboratory **1 credit hour(s)**
- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**
- PHYS 1310 - Calculus-Based Physics I **4 credit hour(s)**
- PHYS 1240 - Algebra-Based Physics II **4 credit hour(s)**
- PHYS 1320 - Calculus-Based Physics II **4 credit hour(s)**

Program Approved Electives

- GEOG 1120 - World Regional Geography **3 credit**

hour(s) ****
- GEOG 1140 - Human's Role in Changing the Face of the Earth **3 credit hour(s) ******
- GEOG 1960 - Geography of Food **3 credit hour(s)**
- GEOG 2510 - Meteorology **3 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)** *
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)** *
- ECON 2110 - Macroeconomic Principles **3 credit hour(s)** *****
- GEOG 2110 - Introduction to Maps and Geospatial Information **3 credit hour(s)**
- GEOL 1110 - Physical Geology **3 credit hour(s)** *
- GEOL 1110L - Physical Geology Laboratory **1 credit hour(s)** *
- GEOL 2110 - Historical Geology **3 credit hour(s)**
- GEOL 2140 - Geology of New Mexico **3 credit hour(s)**
- GIS 1002 - Fundamentals of Geospatial Technology **3 credit hour(s)** **
- GIS 1005 - CAD for Surveying and GIS **3 credit hour(s)** **
- GIS 1118 - Geographic Information Systems I **3 credit hour(s)** **
- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)** *
- PHYS 1310 - Calculus-Based Physics I **4 credit hour(s)** *
- PHYS 1240 - Algebra-Based Physics II **4 credit hour(s)** *
- PHYS 1320 - Calculus-Based Physics II **4 credit hour(s)** *
- Notes

* NM universities offer different Bachelor of Arts and Bachelor of Science degrees in geography. Please review those programs before choosing your CNM math and science classes. Students are encouraged to consult with an advisor at the 4-year institution to which they wish to transfer to best determine which courses to take.

** Autocad and GIS are sought after skills in NM geoscience job market. Consider taking GIS 1118 course as an unrestricted elective in term 1 or 2. GIS 1005 is also recommended for an unrestricted elective; however, there is a 1-credit prerequisite of CAD 1001. GIS 1002 does not have any pre-requisite courses.

*** GEOG 1130 Human Geography meets the General Education requirement for a Social/Behavioral Science.

**** GEOG 1120 and GEOG 1140 are required for The University of New Mexico's BA and BS degrees in Geography.

***** ECON 2110 recommended. A background in macroeconomics is essential not only for study in economic geography but also provides foundational knowledge in very marketable applications of the geography major, including town planning, location analysis, market research, and sustainability and conservation work.

GEOLOGY

Geology, Associate of Science

School of Math, Science & Engineering (MSE)

Earth and Planetary Science is the study of the Earth and other bodies in the solar system. At CNM, Geology is the focus of our Earth and Planetary Science program. Introductory courses study the planet Earth, including the materials that make up the Earth, the processes that act on these materials, the evolution of the continents and life through time, and the science behind environmental issues. This program is designed to meet the requirements for an Associate of Science in Earth and Planetary Science from CNM and prepare a student to obtain a Bachelor of Science in Earth and Planetary Science at the University of New Mexico. However, students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students interested in transfer to UNM should consult the UNM Earth and Planetary Science Department. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements. College catalogs are generally available online. Students should also consult an advisor at CNM.

Educational Option Information

- This educational option is an: Associate of Science Degree
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program
- This educational option can be started: Any Term
- Scheduling Information: Follow course catalog recommendations to avoid scheduling problems
- Primary course location: Main Campus

Special Requirements

- Students are expected to purchase textbooks, lab manuals and lab safety equipment

Information for people with felony convictions

- A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements

with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**

  or

- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- GEOL 1110 - Physical Geology **3 credit hour(s)**
- GEOL 1110L - Physical Geology Laboratory **1 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Program Approved Math **3-4 credit hour(s)***
- Unrestricted Elective **3 credit hour(s)******

Term 2

- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Program Approved Math **3-4 credit hour(s)***
- Unrestricted Elective **3 credit hour(s)******

Term 3

- Creative and Fine Arts Requirement **3 credit hour(s)**

- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**

  or

- PHYS 1310 - Calculus-Based Physics I **4 credit hour(s)** **

- GEOL 2110 - Historical Geology **3 credit hour(s)**
- GEOL 2110L - Historical Geology Laboratory **1 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)*****

- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**

  or

- Program Approved Elective **3 credit hour(s)****

Term 4

- ENGL 2120 - Intermediate Composition **3 credit hour(s)**

  or

- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**

- GEOL 2140 - Geology of New Mexico **3 credit hour(s)**

  or

- Program Approved Elective **3 credit hour(s)***

- Program Approved Communication **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)***
- Unrestricted Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

- Program Approved Communications Elective
- COMM 1130 - Public Speaking **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**

Students may use ENGL 2210 (if not used elsewhere) to fulfill this communications requirement only if they have successfully completed ENGL 2120 - Intermediate Composition to satisfy the requirement in term 4.

- Program Approved Math
- MATH 1220 - College Algebra **3 credit hour(s)**
- MATH 1220P - College Algebra Plus **4 credit hour(s)**
- MATH 1230 - Trigonometry **3 credit hour(s)**
- MATH 1240 - Pre-Calculus **4 credit hour(s)**
- MATH 1250 - Trigonometry & Pre-Calculus **5 credit hour(s)**
- MATH 1430 - Applications of Calculus I **3 credit hour(s)**
- MATH 1440 - Applications of Calculus II **3 credit hour(s)**
- MATH 1510 - Calculus I **4 credit hour(s)** **
- MATH 1520 - Calculus II **4 credit hour(s)** **
- Program Approved Elective
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)** **
- GEOG 1110 - Physical Geography **3 credit hour(s)**
- GEOG 1110L - Physical Geography Lab **1 credit hour(s)**
- GEOG 2110 - Introduction to Maps and Geospatial Information **3 credit hour(s)**
- GEOG 2510 - Meteorology **3 credit hour(s)**
- GEOL 1130 - Dinosaurs and Their World **3 credit hour(s)**
- GEOL 2140 - Geology of New Mexico **3 credit hour(s)**
- GIS 1002 - Fundamentals of Geospatial Technology **3 credit hour(s)** ****
- GIS 1005 - CAD for Surveying and GIS **3 credit hour(s)** ****
- GIS 1118 - Geographic Information Systems I **3 credit hour(s)** ****
- PHYS 1240 - Algebra-Based Physics II **4 credit hour(s)**
- PHYS 1320 - Calculus-Based Physics II **4 credit hour(s)** **
- Notes

* NM universities offer different Bachelor of Arts and Bachelor of Science degrees in Geology, Environmental Studies, and EPS. Please review those programs before choosing your CNM classes. Students are encouraged to consult with an advisor at a 4-year institution to which

they wish to transfer to best determine which courses to take.

** Students intending to transfer to a Bachelor of Science program at UNM or NMTech, are recommended to take MATH 1510, MATH 1520, PHYS 1310, PHYS 1320, CHEM 1215, and CHEM 1225. Both schools require chemistry labs. Labs for physics requirement depends on the program and school. Students intending to transfer to NMSU should consult with an advisor regarding which physics courses to take for your preferred degree.

*** Social Behavioral Gen Ed Recommendation: 1) ECON 2110 Macroeconomics, see Bachelor degree requirements for UNM; 2) GEOG 1130 Human Geography

**** Autocad and GIS are sought after skills in NM geoscience job market. Consider taking the BCIS 1110 and GIS 1118 courses as an unrestricted elective in terms 1 and 2; BCIS 1110 is a pre-requisite for GIS 1118. GIS 1005 is also recommended for an unrestricted elective; however, there is a 1-credit prerequisite of CAD 1001. GIS 1002 does not have any pre-requisite courses.

HEALTH INFORMATION MANAGEMENT

Health Services Management, Associate of Applied Science

School of Business & Information Technology (BIT)
School of Health, Wellness & Public Safety (HWPS)

The Health Services Management Associates in Applied Science (A.A.S.) degree provides its students with a broad, solid foundation for attaining entry level management positions in a variety of health settings. Students will be prepared to use critical thinking in making relevant management decisions in today's dynamic and expanding health services environment.

Educational Option Information

- This educational option is an: Associates of Applied Science
- This educational option can be completed: In four terms
- This educational option is designed for: The Health Services Management Associates in Applied Science (A.A.S.) degree provides students a broad, solid foundation for attaining entry level management positions in a variety of health settings. Students will be prepared to use critical thinking in making relevant management decisions in today's dynamic and expanding health services environment.

Health services managers plan, direct, and coordinate medical and health services in both the public and private sectors. They may manage an entire facility, a specific clinical area or department, or a medical practice for a group of physicians. Health services managers must adapt to changes in healthcare laws, regulations and technology.

- This educational option can be started: Any Term
- Primary course location: Main Campus and online

Special Requirements

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities.

Felony Conviction

Most of the health programs in HWPS require students undergo the New Mexico Department of Health caregivers criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

This program provides the basic foundation needed to become a health services manager. After completion, students may transfer to a bachelor's degree program for advancement in health care disciplines such as Healthcare Administration.

Career Opportunities

US Department of Labor O'Net data lists Health Services managers with a Bright Outlook and a 17% growth rate (much faster than average) nationally. Research locally with industry partners also supports the need for this degree program to help funnel students into this career pathway.

Graduates may find employment in the day-to-day operations of hospitals, long-term care facilities, home health agencies, specialized clinics and physicians' offices. CNM students are encouraged to continue their education toward a bachelor degree in order to pursue more advanced leadership positions in healthcare and/or to obtain specialty credentials.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the

past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 3
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- HIT 1020 - Medical Terminology and Anatomy **3 credit hour(s)**
- HIT 1030 - Health Data Content and Structure **3 credit hour(s)**
- HLTH 1010 - Medical Ethics and Law **1 credit hour(s)**
- HLTH 1020 - Introduction to Healthcare Careers **3 credit hour(s)**

Term 2

- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

  or
- ENGL 1210 - Technical Communications **3 credit hour(s)**
- HIT 1060 - Health Information Management Systems **3 credit hour(s)**
- MATH 1350 - Introduction to Statistics **3 credit hour(s)**
- MGMT 2110 - Principles of Management **3 credit hour(s)**

Term 3

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- BIOL 1130 - Introductory Anatomy and Physiology **3 credit hour(s)**
- BUSA 2220 - Human Resource Management **3 credit hour(s)**
- HIT 1070 - Legal/Ethical Aspects of Health Information **3 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**

  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- BFIN 2210 - Healthcare Finance **3 credit hour(s)**
- CIST 1858 - Introduction to Cyber Security **3 credit hour(s)**
- HIT 2040 - Health Information Data Analysis **3 credit hour(s)**
- HIT 2050 - Health Information Supervision **3 credit hour(s)**
- HLTH 2990 - Health Services Management Practicum **1 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

HEALTH, WELLNESS & PUBLIC SAFETY

Health, Wellness, and Public Safety (HWPS), Certificate of Completion

School of Health, Wellness & Public Safety (HWPS)

The Health, Wellness and Public Safety (HWPS) major is a Certificate of Completion program that prepares students for many HWPS programs at CNM. It helps students fulfill the General Education requirements for Associate of Applied Science degrees required by the State of New Mexico and the CNM core curriculum. Individual HWPS programs may require that students take specific courses within the General Education core requirements for the purpose of transfer or for meeting industry standards and accreditation guidelines. This Certificate of Completion is intended as a pass through certification to demonstrate student progress towards the completion of requirements for a HWPS Associate of Applied Science degree.

See Recommended Sequence of Courses

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Career Opportunities

Gainful Employment information is available from Job Connection Services.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they

are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Required Courses

- Mathematics Requirement **3 - 4 credit hour(s)***
- Communications Requirement **3 credit hours****
- Humanities Requirement **3 credit hours*****

- Laboratory Science Requirement **3 credit hours or**
- Creative and Fine Arts Requirement **3 credit hours**

- Program Approved Elective **1-6 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s) ******

Minimum Credit Hours Required to Complete Certificate: 16

*** MATH 1220 or MATH 1350 recommended**

**** COMM 2120 or ENGL 1110 or ENGL 1110P recommended**

***** PHIL 2120**

******PSYC 1110 or SOCI 2250 recommended**

- Program Approved Elective (1-6 credit hours)
- BPCS 1092 - Basic Patient Care Skills **1 credit hour(s)**
- CJUS 1110 - Introduction to Criminal Justice **3 credit hour(s)**
- COS 1010 - Orientation **2 credit hour(s)**
- DA 1010 - Dental Science I **3 credit hour(s)**
- EMS 1001 - EMS First Responder Theory **2 credit hour(s)**
- EMS 1053 - EMT Basic Theory **6 credit hour(s)**
- EMS 1412 - Advanced EMT (EMT-I) Theory **6 credit hour(s)**
- ENDT 1010 - Introduction to Neurodiagnostic Technology **2 credit hour(s)**
- EXSC 2110 - Exercise Physiology **3 credit hour(s)**
- HLED 1130 - Concepts of Health & Wellness **3 credit hour(s)**
- FS 1010 - Principles of Emergency Services **3 credit hour(s)**
- HIT 1020 - Medical Terminology and Anatomy **3 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**
- HLTH 1010 - Medical Ethics and Law **1 credit hour(s)**
- HLTH 1020 - Introduction to Healthcare Careers **3 credit hour(s)**
- PHLS 1120 - Introduction to Community Health Care **3 credit hour(s)**
- HWPS 1005 - Survey of Health, Wellness and Public Safety **3 credit hour(s)**
- MLT 1001 - Preparation for Medical Lab Sciences **3 credit hour(s)**
- PHLB 1010 - Phlebotomy Theory **3 credit hour(s)**
- PL 1110 - Introduction to Paralegal Studies **3 credit hour(s)**
- PT 1011 - Pharmacy Technician Introduction **3 credit hour(s)**
- PTA 1010 - The Profession of Physical Therapy **1 credit hour(s)**
- RT 1020 - Physics of Respiratory Therapy **3 credit hour(s)**
- SPT 1010 - Basics of Sterile Processing **2 credit hour(s)**
- ST 1001 - Introduction to Surgical Technology **2 credit hour(s)**
- VT 1003 - Preparation for Professional Success **1 credit hour(s)**
- VT 1005 - Veterinary Reception Basic Skills **3 credit hour(s)**
- VT 1011 - Introduction to the Veterinary Profession **3 credit hour(s)**

HEATING, VENTILATING, AIR CONDITIONING AND REFRIGERATION (HVAC)

Commercial, Industrial HVAC & Building Performance, Certificate of Completion

School of Skilled Trades & Arts (STA)

With the Commercial, Industrial HVAC/R & Green Building Performance Certificate of Completion students will have an in-depth background in commercial and industrial refrigeration, steam and hot water boilers and boiler controls, chillers and chiller controls, green building performance and building automation controls. Students will create system designs which will include calculating building loads; duct design, performance analysis, and code enforcement.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Completion of this certificate will allow students to pursue the Heating, Ventilating, Air Conditioning and Refrigeration Technology Associate of Applied Science degree. This associate degree prepares students for further studies that will ultimately qualify them for faster career advancement and greater earning potential.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Graduates are employed by local service and installation contractors as well as local manufacturers, hospitals and facilities. As a result of completing the two (2) certificates, students have acquired the training for successful acceptance in the HVAC/R industry. With additional on the job training, students can apply for the New Mexico Journeyman's exams.

Gainful Employment information is available from Job Connection Services.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading and Writing Skills 2

Courses

Term 1

- HVAC 1105 - Introduction to Fundamentals of Refrigeration **3 credit hour(s)**
- HVAC 1110 - Basic Electricity **3 credit hour(s)**
- HVAC 1115 - Refrigeration Management **3 credit hour(s)**
- HVAC 1120 - Motors & Controls **3 credit hour(s)**
- HVAC 1130 - Code and Safety I **1 credit hour(s)**

Term 2

- HVAC 1235 - AC AND CONTROLS **3 credit hour(s)**
- HVAC 1240 - Air Flow Principles/Duct Design **4 credit hour(s)**
- HVAC 1245 - Gas Heating Furnaces **3 credit hour(s)**

Term 3

- HVAC 1321 - ADV HYDR/CONTRLS I **3 credit hour(s)**
- HVAC 1323 - WTR/STM GEN CON II **3 credit hour(s)**
- HVAC 1325 - Chilled Water Systems **2 credit hour(s)**
- HVAC 1330 - Controls III **2 credit hour(s)**
- HVAC 1335 - CODE AND SAFETY II **1 credit hour(s)**

Term 4

- HVAC 1405 - REFRIG APPLICATION **2 credit hour(s)**
- HVAC 1410 - Commercial Refrigeration Systems **2 credit hour(s)**
- HVAC 1415 - INDUSTRIAL REFRIG **2 credit hour(s)**
- HVAC 1420 - EN EFF GREN BLD I **3 credit hour(s)**
- HVAC 1425 - EN EFF GREN BLD II **3 credit hour(s)**
- HVAC 1430 - EFFIC/GRN BLD CODE **1 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 47

Heating, Ventilating, Air Conditioning and Refrigeration Technology, Associate of Applied Science

School of Skilled Trades & Arts (STA)

The Heating, Ventilating, Air Conditioning and Refrigeration (HVAC) Technology program provides students the opportunity to gain knowledge and technical skills for entry into the Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) field in the areas of service, maintenance, installation, energy efficiency and green building standards.

- The program prepares the students in proper safety practices of mechanical equipment, proper refrigeration and hydronic piping practices, electrical circuitry and troubleshooting, service and maintenance of various types of heating, ventilation, air conditioning, heat pump, commercial and industrial refrigeration and HVAC/R accessories.
- The program offers students an in-depth background in HVAC/R fundamentals through hands-on labs. Training is provided in service and maintenance on heating (natural gas and electric), air conditioning and heat pumps (packaged and split systems), steam and hot water boilers and boiler controls, chillers and chiller controls, green building performance and building automation controls.
- Students will gain an understanding of wiring diagrams to be able to troubleshoot equipment problems and create a sequence of operation from the wiring diagrams. Create system designs which will include calculating building loads; duct design, performance analysis, and code enforcement.

With the Residential HVAC Certificate of Completion (Term 1 & 2, 32 credit hours) students will have the basic knowledge to enter the Residential HVAC work force. This certificate covers the areas of proper safety practices of mechanical equipment, proper refrigeration practices, electrical circuitry, troubleshooting, service, maintenance and installation of various types of heating, ventilation,

air conditioning, heat pump in the residential HVAC industry.

With the Commercial, Industrial HVAC/R & Green Building Performance Certificate of Completion (Terms 1, 2, 3 & 4, 58 credit hours) students will have (in addition to the Residential HVAC, Certificate of Completion) an in-depth background in commercial and industrial refrigeration, steam and hot water boilers and boiler controls, chillers and chiller controls, green building performance and building automation controls. Students will create system designs which will include calculating building loads, duct design, performance analysis, and code enforcement.

Special Requirements

- Students are required to purchase textbooks, and pay certification exam fees.
- Graduates will be required to earn their EPA Universal 608 Refrigeration Handling Certification.
- Graduates are required to take a list of the HVAC Excellence Employment Ready Certification Exams.
- Certification exam fees are included in the program and course fees.
- Fees: Course fees are published in the Schedule of Classes. HVAC Tools and personal protective equipment (to be used in labs) will be purchased for the student with this fee.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career and Educational Opportunities

Graduates are employed by local service and installation contractors as well as local manufacturers, hospitals and facilities. As a result of completing the two (2) certificates, students have acquired the training for successful acceptance in the HVAC/R industry. With additional on the job training, students can apply for the New Mexico Journeyman's exams. The associate degree prepares students for further studies that will ultimately qualify them for faster career advancement and greater earning potential.

For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in myCNM.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- HVAC 1105 - Introduction to Fundamentals of Refrigeration **3 credit hour(s)**
- HVAC 1110 - Basic Electricity **3 credit hour(s)**
- HVAC 1115 - Refrigeration Management **3 credit hour(s)**
- HVAC 1120 - Motors & Controls **3 credit hour(s)**
- HVAC 1130 - Code and Safety I **1 credit hour(s)**

Term 2

- ENGL 1110 - Composition I **3 credit hour(s)**

  or

- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- HVAC 1235 - AC AND CONTROLS **3 credit hour(s)**
- HVAC 1240 - Air Flow Principles/Duct Design **4 credit hour(s)**
- HVAC 1245 - Gas Heating Furnaces **3 credit hour(s)**

Term 3

- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- HVAC 1321 - ADV HYDR/CONTRLS I **3 credit hour(s)**
- HVAC 1323 - WTR/STM GEN CON II **3 credit hour(s)**
- HVAC 1325 - Chilled Water Systems **2 credit hour(s)**
- HVAC 1330 - Controls III **2 credit hour(s)**
- HVAC 1335 - CODE AND SAFETY II **1 credit hour(s)**

Term 4

- HVAC 1405 - REFRIG APPLICATION **2 credit hour(s)**
- HVAC 1410 - Commercial Refrigeration Systems **2 credit hour(s)**
- HVAC 1415 - INDUSTRIAL REFRIG **2 credit hour(s)**
- HVAC 1420 - EN EFF GREN BLD I **3 credit hour(s)**
- HVAC 1425 - EN EFF GREN BLD II **3 credit hour(s)**
- HVAC 1430 - EFFIC/GRN BLD CODE **1 credit hour(s)**

Term 5

- Humanities Requirement **3 credit hour(s)**
- HVAC 2098 - Heating, Ventilating, Air Conditioning and Refrigeration Internship **3 credit hour(s)**

- Mathematics Requirement **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 65

Residential HVAC, Certificate of Completion

School of Skilled Trades & Arts (STA)

The Heating, Ventilating, Air Conditioning and Refrigeration (HVAC) Technology program provides students the opportunity to gain knowledge and technical skills for entry into the Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) field in the areas of service, maintenance, installation, energy efficiency and green building standards. The program prepares the students in proper safety practices of mechanical equipment, proper refrigeration and hydronic piping practices, electrical circuitry and troubleshooting, service and maintenance of various types of heating, ventilation, air conditioning, heat pump, commercial and industrial refrigeration and HVAC/R accessories. The program offers students an in-depth background in HVAC/R fundamentals through hands-on labs. Training is provided in service and maintenance on heating (natural gas and electric), air conditioning and heat pumps (packaged and split systems), steam and hot water boilers and boiler controls, chillers and chiller controls, green building performance and building automation controls. Students will gain an understanding of wiring diagrams to be able to troubleshoot equipment problems and create a sequence of operation from the wiring diagrams. Create system designs which will include calculating building loads; duct design, performance analysis, and code enforcement.

With the Residential HVAC Certificate of Completion (Terms 1 & 2, 28 credit hours) students will have the basic knowledge to enter the Residential HVAC work force. This certificate covers the areas of proper safety practices of mechanical equipment, proper refrigeration practices, electrical circuitry, troubleshooting, service, maintenance and installation of various types of heating, ventilation, air conditioning, heat pump in the residential HVAC industry.

With the Commercial, Industrial HVAC/R & Green Building Performance Certificate of Completion (Terms 1, 2, 3 & 4, 58 credit hours) students will have (in addition to the Residential HVAC, Certificate of Completion) an in-depth background in commercial and industrial refrigeration, steam and hot water boilers and boiler controls, chillers and chiller controls, green building performance and building automation controls. Students will create system designs which will include calculating building loads; duct design, performance analysis, and code enforcement.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Graduates are employed by local service and installation contractors as well as local manufacturers, hospitals and facilities. As a result of completing the two (2) certificates, students have acquired the training for successful acceptance in the HVAC/R industry. With additional on the job training, students can apply for the New Mexico Journeyman's exams. The associate degree prepares students for further studies that will ultimately qualify them for faster career advancement and greater earning potential. For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in *my***CNM**.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading and Writing Skills 2

Courses

Term 1

- HVAC 1105 - Introduction to Fundamentals of Refrigeration **3 credit hour(s)**
- HVAC 1110 - Basic Electricity **3 credit hour(s)**
- HVAC 1115 - Refrigeration Management **3 credit hour(s)**
- HVAC 1120 - Motors & Controls **3 credit hour(s)**
- HVAC 1130 - Code and Safety I **1 credit hour(s)**

Term 2

- HVAC 1235 - AC AND CONTROLS **3 credit hour(s)**
- HVAC 1240 - Air Flow Principles/Duct Design **4 credit hour(s)**
- HVAC 1245 - Gas Heating Furnaces **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 23

HISTORY

History, Associate of Arts

School of Liberal Arts (LA)

History is the study of change over time, encompassing

a wide range of recorded human experiences. While every field of study has a history, the history discipline falls mainly within the humanities. A bachelor's degree in history prepares students for careers in law, public service, foreign affairs, teaching, and similar fields that value critical thinking, research, and writing skills coupled with knowledge of history.

Students of History at CNM will read the work of published historians and documents from the past to understand historical change and how the world we live in came to be. They will develop the abilities to assess historical evidence and conflicting interpretations, and to analyze both the changes and the continuity of the past. Students will gain a better understanding of why history is important and how learning about the past provides us with the background to compare our times and our concerns with those of people who lived before us, learning to evaluate their ideas and interpret their historical meaning.

Our faculty have expertise in cultural, economic, intellectual, political, religious and social history and interests ranging from ancient history, through the medieval and early modern era, to the present.

Educational Option Information

- This educational option is designed for: Meeting the requirements for an Associate of Arts in History from CNM and preparing a student to obtain a Bachelor of Arts in History from a 4-year college or university.
- This educational option can be started: Any term.
- This educational option can be completed: Part-Time or Full-Time.
- Primary course location: Main, Montoya, Rio Rancho, South Valley and Westside campuses. Some courses are offered online.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

History courses satisfy humanity requirements for some programs of study and also are accepted as electives.

This program is designed to meet the requirements for an Associate of Arts in History from CNM and prepare a student to obtain a Bachelor of Arts in History from a 4-year college or university.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Students planning to transfer to UNM should keep in mind that the UNM History Program offers four regional concentrations of study: United States, Latin America, Europe, or Asia. History majors at UNM must complete one entire survey series (i.e., 1110 and 1120, 1150 and 1160, or 1170 and 1180) and two additional lower-division History courses of their choosing (this can include HIST 2110).

Career Opportunities

A bachelor's degree in history prepares students for careers in law, public service, foreign affairs, teaching, and similar fields that value critical thinking, research, and writing skills coupled with knowledge of history.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
  or
- Program Approved Elective **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- HIST 1103 - Introduction to Historical Study **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- HIST 1150 - Western Civilization I **3 credit hour(s)**
  or
- HIST 1110 - United States History I **3 credit hour(s)**
  or
- HIST 1170 - Survey of Early Latin America **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**

Term 3

- Arts & Sciences Elective **3 credit hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**

- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**
- HIST 1160 - Western Civilization II **3 credit hour(s)**
  or
- HIST 1120 - United States History II **3 credit hour(s)**
  or
- HIST 1180 - Survey of Modern Latin America **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- Arts & Sciences Elective **6 credit hour(s)**
- HIST 2510 - Uses of History **3 credit hour(s)**
- Program Approved Elective **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

This information is meant to serve as a general guide for students intending to major in History. Specific requirements for transfer will vary from school to school. It is the student's responsibility to contact the four-year transfer school to confirm specific admission and degree requirements.

* Students planning to transfer to UNM must complete one whole survey (two courses) of either HIST 1110 and HIST 1120, OR HIST 1150 and HIST 1160, OR HIST 1170 and HIST 1180.

Program Approved Electives

Choose from the following list of courses:

- HIST 1110 - United States History I **3 credit hour(s)**
- HIST 1120 - United States History II **3 credit hour(s)**
- HIST 1150 - Western Civilization I **3 credit hour(s)**
- HIST 1160 - Western Civilization II **3 credit hour(s)**
- HIST 1170 - Survey of Early Latin America **3 credit hour(s)**
- HIST 1180 - Survey of Modern Latin America **3 credit hour(s)**
- HIST 2088 - History Specialty **1-12 credit hour(s)**
- HIST 2110 - Survey of New Mexico History **3 credit hour(s)**
- HIST 2240 - History of Vietnam **3 credit hour(s)**
- HIST 2996 - Special Topics **3 credit hour(s)**
- HIST 2998 - Internship in History **1-3 credit hour(s)**

HOSPITALITY AND TOURISM

Hospitality and Tourism, Associate of Applied Science

School of Business, Hospitality & Technology (BHT)

The Associate of Applied Science in Hospitality and Tourism program will provide students with the foundational coursework for hospitality management. Classes in the program will cover the hospitality industry, hospitality operations, marketing, event planning, food safety and production.

Students completing their Associate of Applied Science in degree in Hospitality and Tourism at CNM, may consider a pathway to a bachelor degree in hospitality.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**
- HRTM 1120 - Introduction to Tourism **3 credit hour(s)**
- HT 1111 - Guest Service Management **1 credit hour(s)**

Term 2

- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**
- HRTM 1130 - Introduction to Hospitality Management **3 credit hour(s)**
- HT 2215 - Purchasing and Cost Controls **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 3

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- HT 2232 - Event Planning **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**

  or
- Creative and Fine Arts Requirement **3 credit hours(s)**

  or
- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**
- MKTG 2110 - Principles of Marketing **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- BUSA 2460 - Business Ethics **3 credit hour(s)**
- HT 2235 - Leadership and Management in the Hospitality Industry **3 credit hour(s)**
- HT 2240 - Hospitality Law **3 credit hour(s)**
- HT 2999 - Capstone Course **1 credit hour(s)**
- Program Approved Electives **6 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- **Any HT Course** (except those required for the award)
- **Any BEV Course** (except those required for the award)
- **Any CULN Course** (except those required for the award)
- HT 1096-1996 - Special Topics **1-3 credit hour(s)**
- HT 2096-2996 - Special Topics **1-3 credit hour(s)**
- HT 2097 - Independent Study **1-8 credit hour(s)**
- HT 2798 - Internship **1 credit hour(s)**
- HT 2898 - Internship **2 credit hour(s)**
- HT 2998 - Internship **3 credit hour(s)**

Hospitality and Tourism, Associate of Arts

School of Business, Hospitality & Technology (BHT)

This is an Associate of Arts degree designed to substantially fulfill the freshman and sophomore course requirements for admission to bachelor's degree programs in Hospitality Management at New Mexico State and other colleges and universities. The degree's general education curriculum is accepted for transfer toward the general education core. Go here for articulation agreements.

Students are encouraged to communicate with the School of Business, Hospitality & Technology 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.

The Hospitality & Tourism degree provides the foundational coursework for hospitality management. An overview of the hospitality industry and various employment and educational opportunities will be explored. In addition, students will study hospitality operations, marketing, event planning, food safety and food production. Organizational behavior, human resources, leadership and management skills will be developed and applied in theory and lab settings.

Educational Option Information

- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in four terms.
- This educational option can be started: Any term
- Primary course location: Main Campus; many courses are offered online

Special Requirements

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

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students completing the certificate may also receive certificates in Hospitality and Tourism, and Food Service Management.

Note - NMSU: Students should contact NMSU's HRTM department one or two terms prior to their expected start date in order to begin the application process.

Note - ENMU Students should contact ENMU's College of Business at for more information.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Jobs are available in lodging, casinos, restaurants, resorts, cruise ships, event planning, convention services, sales and marketing, bed and breakfasts, and other areas. Types of employment range from front office, marketing, guest services, to management and leadership positions. Many hospitality careers have

competitive benefits and wages with the opportunity for rapid advancement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- HRTM 1120 - Introduction to Tourism **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- MATH 1220 - College Algebra **3 credit hour(s)**
  or
- MATH 1220P - College Algebra Plus **4 credit hour(s)**
  or
- MATH 1130 - Survey of Mathematics **3 credit hour(s)**
  or
- MATH 1350 - Introduction to Statistics **3 credit hour(s)**
  or
- MATH 1350P - Introduction to Statistics Plus **4 credit hour(s)**
  or
- MATH 1510 - Calculus I **4 credit hour(s)**

Term 2

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry **1 credit hour(s)**
  or
- CULN 1103 - Safety and Sanitation Principles **3 credit hour(s)**
- ECON 1110 - Survey of Economics **3 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**
  or
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- HRTM 1130 - Introduction to Hospitality Management **3 credit hour(s)**

Term 3

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**
- CULN 1010 - Culinary Fundamentals **3 credit hour(s)**
- FREN 1110 - French I **4 credit hour(s) or higher**
  or
- SPAN 1110 - Spanish I **4 credit hour(s) or higher**
- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- HT 2235 - Leadership and Management in the Hospitality Industry **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Program Approved Electives **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
  or
- Creative and Fine Arts Requirement **3 credit hour(s)**
  or
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- **Any HT Course** (except those required for the award)
- **Any BEV Course** (except those required for the award)
- **Any CULN Course** (except those required for the award)
- HT 1096-1996 - Special Topics **1-3 credit hour(s)**
- HT 2096-2996 - Special Topics **1-3 credit hour(s)**
- HT 2097 - Independent Study **1-8 credit hour(s)**
- HT 2798 - Internship **1 credit hour(s)**
- HT 2898 - Internship **2 credit hour(s)**
- HT 2998 - Internship **3 credit hour(s)**

- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**

Hospitality and Tourism, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Hospitality and Tourism Certificate of Completion is a two-term program that prepares students for careers in the dynamic hospitality and tourism industry. The courses provide a solid foundation of skills required in the hospitality industry. Students will study hospitality operations, marketing, event planning, customer service and interpersonal relations. An overview of the hospitality industry and various employment and educational opportunities will also be explored.

Educational Option Information

- This educational option can be completed: Part-time or full-time. Full-time students can complete the program in two terms.
- This educational option can be started: Any term
- Primary course location: Main Campus; many courses are offered online

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students completing the certificate may also receive a certificate in Food Service Management.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Students wanting to continue their education beyond the certificate should meet with an advisor for more information about the Hospitality and tourism Associate of Arts degree and other transfer programs.

Career Opportunities

Jobs are available in lodging, restaurants, casinos, resorts, cruise ships, event planning, convention services, sales and marketing and other areas. Types of employment range from front office, marketing and guest services, to management and leadership positions. Many hospitality careers have competitive benefits and with the opportunity for rapid advancement.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**

  or
- ENGL 1110 - Composition I **3 credit hour(s) ***

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- HRTM 1120 - Introduction to Tourism **3 credit hour(s)**

  or
- CULN 1100 - Introduction to Culinary Skills **3 credit hour(s)**
- HT 1111 - Guest Service Management **1 credit hour(s)**
- Program Approved Electives **3 credit hour(s)**

Term 2

- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- HT 2141 - Marketing Services **3 credit hour(s)**

  or
- MKTG 2110 - Principles of Marketing **3 credit hour(s)**
- HRTM 1130 - Introduction to Hospitality Management **3 credit hour(s)**
- HT 2235 - Leadership and Management in the Hospitality Industry **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 28

* Hospitality and Tourism degree students must choose ENGL 1110 or ENGL 1110P.

Program Approved Electives

- **Any HT Course** (except those required for the award)
- **Any BEV Course** (except those required for the

award)
- **Any CULN Course** (except those required for the award)
- HT 1096-1996 - Special Topics **1-3 credit hour(s)**
- HT 2096-2996 - Special Topics **1-3 credit hour(s)**
- HT 2097 - Independent Study **1-8 credit hour(s)**
- HT 2798 - Internship **1 credit hour(s)**
- HT 2898 - Internship **2 credit hour(s)**
- HT 2998 - Internship **3 credit hour(s)**

HUMAN SERVICES

Human Services, Associate of Arts

School of Health, Wellness & Public Safety (HWPS)

The Human Services degree is designed for students wanting to work in a variety of settings focused on helping others. Students may use the degree as entry-level education to begin work in these settings or transfer the Human Services associate degree to a bachelor's level Social Work or Human Services program. CNM's Human Services associate degree is articulated for transfer to most bachelor's level Social Work programs in New Mexico.

See Recommended Sequence of Courses

Students have the option of embedding a certificate in Child Development, Community Health Worker or Substance Abuse Counselor into the Human Services Degree by selecting the appropriate Program Approved Electives. These students are advised to fulfill their Program Approved electives for the degree by following the term-by-term information in their chosen certificate and degree. Students pursuing the Community Health Worker and Substance Abuse Counselor certificates must complete the certificate requirements before taking their field experience course.

Students pursuing the Human Services degree and Substance Abuse Counselor certificate are advised to carefully review the catalog certificate page for important information specific to New Mexico licensing requirements for the Licensed Substance Abuse Associate (LSAA) credential with the state.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

- This educational option is an Associate of Arts degree.
- This educational option is designed for immediate employment and transfer into a baccalaureate degree.
- This educational option can be completed Part-time or Full-time.
- A Full-time student can complete this program in 4 terms.
- This educational option can be started any term.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Related Certificates:

Child Development, Certificate of Achievement

Community Health Worker, Certificate of Achievement

Substance Abuse Counselor, Certificate of Completion

The Human Services degree also allows students to use Approved Program Electives to explore their interests and take courses in substance abuse counseling, child development, family studies, sociology, psychology, and criminal justice.

- Child Development Approved Electives *
- Community Health Worker Approved Electives * * *
- Substance Abuse Counselor Electives * * * *

Career Opportunities

An associate degree in Human Services is often required to obtain entry level employment in human services. Students entering the workforce with a Human Services associate degree can be hired for a variety of positions. They might assist a credentialed provider, provide services such as life skills programs, complete intake applications, do outreach, help clients apply for social benefit programs like Medicaid, and assist with group treatment services, to name a few.

Human Services careers offer many opportunities for advancement and creativity based on the individual's level of education and experience.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**

or

- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- HMSV 1140 - Professional Skills in Human Services I **3 credit hour(s)**
- HMSV 1150 - Motivational Interviewing **3 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**

Term 2

- COMM 1130 - Public Speaking **3 credit hour(s)**

  or

- COMM 2120 - Interpersonal Communication **3 credit hour(s)**

- ENGL 1120 - Composition II **3 credit hour(s)**
- Program Approved Elective **6 credit hour(s)***
- SOWK 2110 - Introduction to Human Services and Social Work **3 credit hour(s)**

Term 3

- HMSV 2330 - Professional Skills in Human Services II **3 credit hour(s)**

  or

- HMSV 2340 - Case Management and Professional Skills in Substance Abuse Treatment **3 credit hour(s)**

- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)***
- Social and Behavioral Science Requirement **3 credits**

Term 4

- Creative and Fine Arts Requirement **3 credit hour(s)**
- HMSV 2990 - Human Services Practicum **2 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**

- MATH 1220 - College Algebra **3 credit hour(s)**

  or

- MATH 1220P - College Algebra Plus **4 credit hour(s)**

  or

- MATH 1130 - Survey of Mathematics **3 credit hour(s)**

  or

- MATH 1350 - Introduction to Statistics **3 credit hour(s)**

  or

- MATH 1350P - Introduction to Statistics Plus **4 credit hour(s)**

- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

- Program Approved Electives: 9 Hours
- Cultural Studies Electives
- Any AFST Course
- Any CCST Course
- Any AMST Course
- Any NATV Course
- Any GNDR Course
- SPAN 1110 - Spanish I **4 credit hour(s) or higher**
- Criminal Justice Electives
- CJUS 1120 - Criminal Law **3 credit hour(s)**
- CJUS 1140 - Juvenile Justice **3 credit hour(s)**
- SOCI 2120 - Introduction to Criminal Justice Systems **3 credit hour(s)**
- SOCI 2130 - Introduction to Criminology **3 credit hour(s)**
- SOCI 2140 - Juvenile Delinquency **3 credit hour(s)**
- SOCI 2210 - Sociology of Deviance **3 credit hour(s)**
- SOCI 2310 - Contemporary Social Problems **3 credit hour(s)**
- Family and Youth Electives
- CEPY 2110 - Learning in the Classroom **3 credit hour(s)**
- COMM 2282 - Family Communication Studies **3 credit hour(s)**
- ECED 1110 - Child Growth, Development and Learning **3 credit hour(s)** *
- ECED 1115 - Health, Safety and Nutrition **2 credit hour(s)** *
- ECED 1120 - Guiding Young Children **3 credit hour(s)** *
- ECED 1125 - Assessment of Children and Evaluation of Programs **3 credit hour(s)** *
- ECED 1130 - Family and Community Collaboration **3 credit hour(s)** *
- ECED 2096 - Special Topics **1-6 credit hour(s)**
- SPED 2110 - Introduction to Students with Exceptionalities **3 credit hour(s)**
- Community Health Worker Electives
- CHW 1010 - Community Health Worker Fundamentals **2 credit hour(s)** * * *
- CHW 1020 - Health Promotion **2 credit hour(s)** * * *
- CHW 1190 - Community Health Worker Practicum **1 credit hour(s)** ***
- PHLS 1120 - Introduction to Community Health Care **3 credit hour(s)** * * *
- Substance Abuse Counseling Electives
- ANTH 2265 - The Anthropology of Drugs **3 credit hour(s)**
- HMSV 1210 - Foundations of Substance Abuse Services **3 credit hour(s)** * * * *
- HMSV 1220 - Physiological and Pharmacological Foundations of Substance Abuse Counseling **3 credit hour(s)** * * * *
- HMSV 2120 - Clinical Evaluation of Substance Abuse and Treatment **3 credit hour(s)** * * * *
- HMSV 2240 - Counseling in the Substance Abuse Field **3 credit hour(s)** * * * *

- HMSV 2340 - Case Management and Professional Skills in Substance Abuse Treatment **3 credit hour(s)** * * * *
- Psychology Electives
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**
- PSYC 2110 - Social Psychology **3 credit hour(s)**
- PSYC 2120 - Developmental Psychology **3 credit hour(s)**
- PSYC 2280 - Introduction to Clinical Psychology **3 credit hour(s)**
- PSYC 2320 - Health Psychology **3 credit hour(s)**
- PSYC 2330 - Psychology of Human Sexuality **3 credit hour(s)**
- PSYC 2360 - Psychology and Film **3 credit hour(s)**
- PSYC 2380 - Death and Dying **3 credit hour(s)**
- PSYC 2510 - Statistical Principles for Psychology **3 credit hour(s)**
- PSYC 2996 - Special Topics **3 credit hour(s)**
- Sociology Electives
- SOCI 1110 - Introduction to Sociology **3 credit hour(s)**
- SOCI 2220 - Sociology of Gender **3 credit hour(s)**
- SOCI 2240 - Sociology of Intimate Relationships and Family **3 credit hour(s)**
- SOCI 2250 - Sociology of Race and Ethnicity **3 credit hour(s)**
- SOCI 2330 - Society and Personality **3 credit hour(s)**
- SOCI 2410 - Introduction to Research Methods **3 credit hour(s)**
- SOCI 2996 - Special Topics **3 credit hour(s)**

Substance Abuse Counselor, Certificate of Completion

School of Health, Wellness & Public Safety (HWPS)

The Substance Abuse Counselor Certificate is a 20-credit hour academic Certificate of Completion that teaches important entry-level to mid-range skills, knowledge, and attitudes required of service providers in the field of Alcohol and Substance Abuse Counseling.

The Certificate can be embedded in the Human Services associate degree, allowing students to earn both the Substance Abuse Counseling certificate and the Human Services degree by selecting the appropriate Approved Program Electives. When embedded in the Human Services Associate degree, the certificate and degree combination may meet the education requirements required for the Licensed Substance Abuse Associate (LSAA) credential. Currently New Mexico regulations require any applicant seeking the LSAA credential to have at least an associate degree with coursework in substance abuse counseling. For specific requirements regarding eligibility, internship hours, procedures and licensing in New Mexico, contact the New Mexico Counseling and Therapy Practice Board (NMCTPB).

Professionals in the fields of Social Work and Counseling may be interested in applying the Certificate of Completion coursework toward a credential in Substance Abuse Counseling or using it as Continuing Education Units (CEUs) to maintain their professional licenses.

See Recommended Sequence of Courses

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Human Services careers are expected to continue to grow in the areas of substance abuse counseling, case management, and mental health. Students completing the Human Services associate degree with the embedded Substance Abuse Counseling certificate often enter the workforce as para-professional case managers, outreach workers, residential staff, intake workers, or a Licensed Substance Abuse Associate (LSAA).

Gainful Employment information is available from Job Connection Services.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading and Writing Skills 2

Courses

Term 1

- HMSV 1150 - Motivational Interviewing **3 credit hour(s)**
- HMSV 1210 - Foundations of Substance Abuse Services **3 credit hour(s)**

Term 2

- HMSV 1220 - Physiological and Pharmacological Foundations of Substance Abuse Counseling **3 credit hour(s)**
- HMSV 2120 - Clinical Evaluation of Substance Abuse and Treatment **3 credit hour(s)**
- HMSV 2340 - Case Management and Professional Skills in Substance Abuse Treatment **3 credit hour(s)**

Term 3

- HMSV 2240 - Counseling in the Substance Abuse Field **3 credit hour(s)**
- HMSV 2990 - Human Services Practicum **2 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 20

INTEGRATED STUDIES

Integrated Studies, Associate of Applied Science

School of Business, Hospitality & Technology (BHT)

The Associate of Applied Science in Integrated Studies provides a degree designed for students who want to package a variety of job-related skills in order to achieve advancement and/or marketability in the workplace. This degree is not intended for transfer. Students with multiple credit hours may benefit from this degree path. This program cannot be a student's second or subsequent degree.

Special Requirements

The program includes classroom, studio, laboratory instruction and distance learning.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

This Associate of Applied Science Degree is not intended to transfer to a four-year institution. See Advisement for information on transfer degrees. Program information is available from the Business, Hospitality & Technology Office.

For the graduation policy refer to the Graduating from CNM section, cnm.edu, or the student tab on MyCNM. Integrated studies must be a student's first degree, and it cannot be earned concurrently with another CNM associate degree

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

  or
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Unrestricted Elective **9 credit hour(s) ***

Term 3

- Unrestricted Elective **12 credit hour(s) ***

Term 4

- Unrestricted Elective **12 credit hour(s) ***

Term 5

- Unrestricted Elective **12 credit hour(s) ***

Minimum Credit Hours Required to Complete Degree: 60

Note

*** Unspecified Electives: Any Course Numbered 1000 or Above**

LATIN AMERICAN STUDIES

Latin American Studies, Associate of Arts

School of Liberal Arts (LA)

Latin American Studies is an interdisciplinary degree providing a foundation for understanding the Latin American region through cultural anthropology, history, geography, language, and literature, among other disciplines. Students will gain language skills and area competences that can be valuable in business, public service or further professional training. The program features opportunities such as Study Abroad, collaboration with University of New Mexico's Latin American Studies programs and activities, and Service Learning.

This degree program is designed for transfer to Latin American Studies programs at the University of New Mexico or New Mexico State University.

Approximate Costs of this Educational

Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
  or
- DGST 1110 - Introduction to Digital Studies **3 credit hour(s)**
  or
- FUTR 1110 - Introduction to Futures Studies **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- LTAM 1110 - Introduction to Latin American Studies **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Program Approved Elective **(SPAN or PORT) 4 credit hour(s)**

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- HIST 1170 - Survey of Early Latin America **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Program Approved Elective **(SPAN or PORT) 4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 3

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- HIST 1180 - Survey of Modern Latin America **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- ANTH 2222 - Ancient Mesoamerica **3 credit hour(s)**
  or
- LTAM 1111 - Latin American Film **3 credit hour(s)**
  or
- SOCI 2340 - Global Issues **3 credit hour(s)**
- Arts & Sciences Electives* **10 credit hour(s)**
  or
- Program Approved Electives **10 credit hour(s)**
- Creative and Fine Arts Requirement** **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

* These courses are recommended for transfer to the Latin American Studies Program at the University of New Mexico: ECON 2125 [Inactive], POLS 2120, SPAN 2280, and/or SUST 1134. It is the student's responsibility to contact the four year transfer school to confirm specific admission and degree requirements.

* * Recommended: ARTH 2120 or ARTH 2140 for for transfer to UNM's Latin American Studies program.

Program Approved Electives

- ANTH 2222 - Ancient Mesoamerica **3 credit hour(s)**
- BUSA 2120 - Introduction to Global Business **3 credit hour(s)**
- LBAR 2610 - Liberal Arts Study Abroad **3 credit hour(s)**
- LTAM 1111 - Latin American Film **3 credit hour(s)**
- LTAM 2088 - Latin American Studies Specialty **1-12 credit hour(s)**
- LTAM 2111 - Tourism and Culture **3 credit hour(s)**
- LTAM 2996 - Topics in Latin American Studies **1-6 credit hour(s)**
- PORT 1110 - Beginning Portuguese I **4 credit hour(s)**
- PORT 1120 - Beginning Portuguese II **4 credit hour(s)**
- SOCI 2340 - Global Issues **3 credit hour(s)**
- SPAN 1110 - Spanish I **4 credit hour(s)**
- SPAN 1120 - Spanish II **4 credit hour(s)**
- SPAN 1125 - Conversational Spanish I **3 credit hour(s)**
- SPAN 1210 - Spanish for Heritage Learners I **4 credit hour(s)**
- SPAN 1220 - Spanish for Heritage Learners II **4 credit hour(s)**
- SPAN 2110 - Spanish III **3 credit hour(s)**
- SPAN 2120 - Spanish IV **3 credit hour(s)**
- SPAN 2125 - Conversational Spanish II **3 credit hour(s)**
- SPAN 2277 - The Art and Skill of Translation **3 credit hour(s)**
- SPAN 2280 - Introduction to Hispanic Literature **3**

credit hour(s)
- SPAN 2375 - Accelerated Beginning Spanish **6 credit hour(s)**
- SPAN 2376 - Accelerated Intermediate Spanish **6 credit hour(s)**
- SPAN 2996 - Special Topics **3 credit hour(s)**

LIBERAL ARTS

General Studies, Certificate of Completion

School of Liberal Arts (LA)

This certificate covers the general education curriculum of 31 credit hours, which is accepted by all New Mexico state colleges and universities as the general education core for degree completion on the pathway to a two or four year degree. The certificate is embedded in the Liberal Arts degree, and can be used toward any associate of arts or associate of science degree at CNM.

See Recommended Sequence of Courses

Special Requirements

Students may wish to engage in competency based learning through our General Studies and Liberal Arts classes. The General Studies Certificate of Completion can be completed online. Please contact an advisor for information about available classes.

Educational Option Information

- This educational option is a: Certificate of Completion.
- This educational option can be completed: Part-time or full-time.
- This educational option can be started: Any term.
- Primary course location: Main, Montoya, Rio Rancho, South Valley and Westside Campuses; many AA degree courses are available online.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Educational Opportunities

Students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- Arts and Sciences Elective **3 hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 2

- Arts and Sciences Elective **3 hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**

  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Laboratory Science Requirement **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 31

Liberal Arts, Associate of Arts

School of Liberal Arts (LA)

Coursework in the Liberal Arts degree prepares students to draw connections across content areas, think critically and adapt to a variety of problems, and communicate solutions effectively to diverse audiences. As a stand-alone degree, students will gain and reinforce these skills, which are fundamental to the workplaces of today and of the future. For students transferring to four-year schools, the degree is designed to substantially fulfill the freshman and sophomore course requirements for completing a bachelor's degree program in liberal arts, and the first two years of study toward a bachelor's degree in the areas of communication, humanities or social sciences. The degree includes a general education curriculum of 31-35 credit hours, which is accepted by many colleges and universities as the general education core for degree completion.

See Recommended Sequence of Courses

The Liberal Arts degree also includes a Sustainability

Certificate, for students wishing to transfer to the University of New Mexico's Sustainability Program, and a as well as a Certificate in Social Justice. The AA in Liberal Arts is designed to accommodate diverse educational interests and supports program requirements of other CNM academic schools.

Educational Option Information

- **This educational option is an**
- Associate of Arts Degree.
- This educational option can be completed: Part-time or full-time.
- This educational option can be started: Any term.
- Primary course location: Main, Montoya, Rio Rancho, South Valley and Westside Campuses; many AA degree courses are available online.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)** *
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 3

- Arts & Sciences Elective **3 credit hour(s)**

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**

- Creative and Fine Arts Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 4

- Arts & Sciences Electives **9 credit hour(s)**
  or
- Program Approved Elective **9 credit hour(s)**

- LBAR 2999 - Community Leadership: Liberal Arts Capstone **3 credit hour(s)**
  or
- Internship **3 credit hour(s)**
  or
- Arts & Sciences Elective **3 credit hour(s)**
  or
- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

This information is meant to serve as a general guide for students intending to transfer to a four-year school. Specific requirements for transfer will vary from school to school. It is the student's responsibility to contact the four-year transfer school to confirm specific admission and degree requirements.

*BCIS 1110 or FUTR 1110 recommended.

Program Approved Electives

- Business/Financial Literacy Core

A minimum of 3 credits recommended.

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BFIN 1110 - Personal Financial Planning for College Students **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- COMM 2180 - Business and Professional Communication **3 credit hour(s)**
- ENTR 1110 - Entrepreneurship **3 credit hour(s)**
- FUTR 1110 - Introduction to Futures Studies **3 credit hour(s)**
- Digital Literacy Electives

Some courses in the Digital Literacy Electives may require

students successfully complete BCIS 1110 or the BCIS 1110 (IT 1010) Challenge Exam prior to enrolling.

- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**
- AMST 1160 - Environment, Science & Technology **3 credit hour(s)**
- BCIS 1340 - Data Concepts **3 credit hour(s)**
- CIST 1605 - Internet of Things **3 credit hour(s)**
- CSCI 1108 - CS for All: Introduction to Computer Modeling **4 credit hour(s)**
- DGST 1110 - Introduction to Digital Studies **3 credit hour(s)**
- DGST 1120 - Introduction to Digital Humanities **3 credit hour(s)**
- ENGL 1160 - Introduction to Digital Storytelling **3 credit hour(s)**
- FDMA 1260 - Introduction to Digital Media **3 credit hour(s)**
- PHIL 2135 - Ethics of Technology **3 credit hour(s)**
- Diversity Electives
- AFST 1110 - Introduction to Africana Studies **3 credit hour(s)**
- AMST 1105 - Introduction to American Studies **3 credit hour(s)**
- AMST 1130 - Introduction to Politics in Popular Culture **3 credit hour(s)**
- AMST 1140 - Introduction to Critical Race and Indigenous Studies **3 credit hour(s)**
- AMST 1150 - Introduction to Southwest Studies **3 credit hour(s)**
- ANTH 1140 - Introduction to Cultural Anthropology **3 credit hour(s)**
- ANTH 2150 - Indigenous Peoples of the American Southwest **3 credit hour(s)**
- ARTH 2201 - History of Women Artists **3 credit hour(s)**
- CCST 1110 - Introduction to Comparative Global and Ethnic Societies **3 credit hour(s)**
- CCST 1125 - Chicana/o Latina/o Musical Cultures and Expressions **3 credit hour(s)**
- CCST 2110 - Introduction to Chicana and Chicano Studies **3 credit hour(s)**
- CCST 2332 - Introduction to Chicana Studies **3 credit hour(s)**
- COMM 2160 - Gender Communication **3 credit hour(s)**
- COMM 2170 - Intercultural Communication **3 credit hour(s)**
- ENGL 2650 - World Literature I **3 credit hour(s)**
- ENGL 2660 - World Literature II **3 credit hour(s)**
- FUTR 1110 - Introduction to Futures Studies **3 credit hour(s)**
- GEOG 1130 - Human Geography **3 credit hour(s)**
- GNDR 2110 - Introduction to Women, Gender, and Sexuality Studies **3 credit hour(s)**
- HIST 1170 - Survey of Early Latin America **3 credit hour(s)**
- HIST 1180 - Survey of Modern Latin America **3 credit hour(s)**
- HIST 2110 - Survey of New Mexico History **3 credit hour(s)**
- HUMN 1105 - Being Human: An Introduction to the Humanities **3 credit hour(s)**
- HUMN 1110 - Introduction to World Humanities I **3 credit hour(s)**
- HUMN 2110 - Introduction to World Humanities II **3 credit hour(s)**
- LTAM 1110 - Introduction to Latin American Studies **3 credit hour(s)**
- LTAM 1111 - Latin American Film **3 credit hour(s)**
- MUSC 1140 - Music Appreciation: World Music **3 credit hour(s)**
- NATV 1150 - Introduction to Native American Studies **3 credit hour(s)**
- NATV 2110 - Sociopolitical Concepts in Native America **3 credit hour(s)**
- NATV 2120 - The Native American Experience **3 credit hour(s)**
- PHIL 1135 - Introduction to Asian Philosophies **3 credit hour(s)**
- POLS 2120 - International Relations **3 credit hour(s)**
- RELG 1110 - Introduction to World Religions **3 credit hour(s)**
- SOCI 2120 - Introduction to Criminal Justice Systems **3 credit hour(s)**
- SOCI 2220 - Sociology of Gender **3 credit hour(s)**
- SOCI 2250 - Sociology of Race and Ethnicity **3 credit hour(s)**
- SOCI 2310 - Contemporary Social Problems **3 credit hour(s)**
- SOCI 2340 - Global Issues **3 credit hour(s)**
- SOCI 2235 - LGBTQ Issues & Identities **3 credit hour(s)**
- Liberal Arts Internships
- ARTS 2998 - Arts Internship **3 credit hour(s)**
- COMM 2998 - Internship in Communication **1-3 credit hour(s)**
- ENGL 2998 - Internship in English **1-3 credit hour(s)**
- HIST 2998 - Internship in History **1-3 credit hour(s)**
- LTAM 2998 - Internship in Latin American Studies **1-3 credit hour(s)**
- PSYC 2998 - Internship in Psychology **1-3 credit hour(s)**
- SOCI 2998 - Internship in Sociology **1-3 credit hour(s)**
- SPAN 2998 - Internship in Spanish **1-3 credit hour(s)**
- THEA 2998 - Internship in Theatre **1-3 credit hour(s)**

Social Justice, Certificate of Achievement

School of Liberal Arts (LA)

The Social Justice Certificate is an embedded program with the Liberal Arts, Associate of Arts Degree. This degree is intended for students who wish to explore social justice, social engagement, and enhance their understanding of social inequality and change.

Educational Option Information

- **This educational option is a**
- Social Justice Certificate.
- This educational option can be completed: Part-

time or full-time.
- This educational option can be started: Any term.
- Primary course location: Main, Montoya, Rio Rancho, South Valley and Westside Campuses; many AA degree courses are available online.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Educational Opportunities

Students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements.

Coursework for the Social Justice, Certificate of Completion can be applied towards a Liberal Arts, Associates of Arts degree.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Reading and Writing Skills 2

Courses

Certificate Requirements

- AMST 1140 - Introduction to Critical Race and Indigenous Studies **3 credit hour(s)**

  and

- Program Approved Electives - Any 4 courses **12 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 15

- Program Approved Electives - Any 4 courses (12 credit hours)
- AFST 1110 - Introduction to Africana Studies **3 credit hour(s)**
- AMST 1130 - Introduction to Politics in Popular Culture **3 credit hour(s)**
- AMST 1160 - Environment, Science & Technology **3 credit hour(s)**
- CCST 2110 - Introduction to Chicana and Chicano Studies **3 credit hour(s)**
- COMM 2160 - Gender Communication **3 credit hour(s)**
- COMM 2289 - Listening Communication Studies **3 credit hour(s)**
- GNDR 2110 - Introduction to Women, Gender, and Sexuality Studies **3 credit hour(s)**
- HIST 2110 - Survey of New Mexico History **3 credit hour(s)**
- LTAM 1110 - Introduction to Latin American Studies **3 credit hour(s)**
- LTAM 1111 - Latin American Film **3 credit hour(s)**
- NATV 1150 - Introduction to Native American Studies **3 credit hour(s)**
- POLS 2150 - Public Policy and Administration **3 credit hour(s)**
- SOCI 2120 - Introduction to Criminal Justice Systems **3 credit hour(s)**
- SOCI 2310 - Contemporary Social Problems **3 credit hour(s)**
- SOCI 2340 - Global Issues **3 credit hour(s)**

MACHINE TOOL TECHNOLOGY

Basic Machine Tool Skills, Certificate of Completion

School of Skilled Trades & Arts (STA)

Students will study hands-on machine tool technology, which includes blueprint reading mathematics, metallurgy and other general course work. Classes include classroom and lab time. Students will safely operate a diverse selection of Manual and Automated machine tools. Students will also use computers and three different Computer Aided Design software programs, CAD/CAM to draw machine parts from two- dimensional drawings to three-dimensional automated tool paths. Students will successfully manufacture parts using Computer-Numerical Controlled (CNC) machine tools. Upon completion of this program, graduates will be eligible for entry level machinist positions in a wide variety of industrial applications.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Gainful Employment information is available from Job Connection Services. One hundred percent of the 2007-08 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. The associate of applied science degree prepares graduates for career

advancement and earning potential.

For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in my CNM.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- MATT 1001 - Metals Math I **2 credit hour(s)**
- MATT 1005 - Metals Blueprint Reading I **2 credit hour(s)**
- MATT 1099 - Machine Tool Lab I **1 credit hour(s)**
- MATT 1110 - Basic Lathe Principles **2 credit hour(s)**
- MATT 1120 - Basic Milling Machine Principles **2 credit hour(s)**
- MATT 1130 - Basic Supporting Machine Tool Principles **2 credit hour(s)**
- MATT 1140 - Basic Measurement and Inspection **1 credit hour(s)**

Term 2

- MATT 1040 - Machine Tool Geometric Dimensioning and Tolerancing **2 credit hour(s)**
- MATT 1045 - Advanced Manufacturing Methods and Industry Exploration **1 credit hour(s)**
- MATT 1210 - Intermediate Lathe Principles **2 credit hour(s)**
- MATT 1220 - Intermediate Milling Machine Principles **2 credit hour(s)**
- MATT 1230 - Intermediate Supporting Machine Tool Principles **2 credit hour(s)**
- MATT 1240 - Basic CAD/CAM **2 credit hour(s)**
- MATT 1199 - Machine Tool Lab II **1 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 24

Machine Tool Technology, Associate of Applied Science

School of Skilled Trades & Arts (STA)

Students will study hands-on Machine Tool Technology, which includes blueprint reading, mathematics, metallurgy and other general course work. Classes include classroom and lab time. This program combines the advanced and the proven processes of the manufacturing skill set needed to gain and succeed the industry of Machine Tools. Upon completion of this program, graduates will be eligible for entry level employment in a variety of industrial careers.

Educational Option Information

- Special skills needed for this educational option:
- Students will be required to perform algebra and trigonometry calculations to successfully complete projects.
- This educational option can be completed: In 5 terms.
- This program can be started: Fall and Spring Terms
- Primary course location: Main Campus
- Program physical requirements: Normal body strength. Ability to work in a social environment. Ability to stand for long periods of time. Ability to work in a noisy environment.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Students will study hands-on Machining Technology, which includes blueprint reading, mathematics, metallurgy and other general course work. Classes include classroom and lab time. Upon completion of this program, graduates will be eligible for entry-level employment in a variety of industrial careers.

This program is designed to prepare students for immediate employment in jobs with descriptions such as: manufacture piece parts, small assemblies, large assemblies, lead small to large groups of personnel to succeed in the manufacturing process. Common job titles in the field include: Machinist, Machine operator, Tool and Die, Journeyman, Proto-type machinist, Aerospace Machinist, and Owner.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- MATT 1001 - Metals Math I **2 credit hour(s)**
- MATT 1005 - Metals Blueprint Reading I **2 credit hour(s)**
- MATT 1099 - Machine Tool Lab I **1 credit hour(s)**
- MATT 1110 - Basic Lathe Principles **2 credit hour(s)**
- MATT 1120 - Basic Milling Machine Principles **2 credit hour(s)**
- MATT 1130 - Basic Supporting Machine Tool Principles **2 credit hour(s)**
- MATT 1140 - Basic Measurement and Inspection **1 credit hour(s)**

Term 2

- MATT 1040 - Machine Tool Geometric Dimensioning and Tolerancing **2 credit hour(s)**
- MATT 1045 - Advanced Manufacturing Methods and Industry Exploration **1 credit hour(s)**
- MATT 1199 - Machine Tool Lab II **1 credit hour(s)**
- MATT 1210 - Intermediate Lathe Principles **2 credit hour(s)**
- MATT 1220 - Intermediate Milling Machine Principles **2 credit hour(s)**
- MATT 1230 - Intermediate Supporting Machine Tool Principles **2 credit hour(s)**
- MATT 1240 - Basic CAD/CAM **2 credit hour(s)**

Term 3

- MATT 2005 - Intermediate CNC CAD/CAM **3 credit hour(s)**
- MATT 2030 - Advanced Supporting Machine Tool Principles **2 credit hour(s)**
- MATT 2035 - Advanced Machining **3 credit hour(s)**
- Program Approved Electives **3 credit hour(s)**

Term 4

- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- MATT 1299 - Machine Tool Lab III **1 credit hour(s)**
- MATT 2050 - Advanced Measurement and Inspection **2 credit hour(s)**
- MATT 2140 - Advanced Computer CNC, CAD/CAM **2 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Program Approved Electives **2 credit hour(s)**

Term 5

- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Humanities Elective **3 credit hour(s)**

  or
- Fine Arts Elective **3 credit hour(s)**
- MATT 1060 - Machine Tool Technology Skills **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- AT 1005 - Survey of Applied Technologies **3 credit hour(s)**
- AT 1096 - 1996 - Special Topics **1 - 9 credit hour(s)**
- MATT 2096-2996 - Special Topics **1-7 credit hour(s)**
- MATT 2198 - Machine Tool Internship **3 credit hour(s)**
- MATT 2999 - Machine Tool Technology Capstone Course **1 credit hour(s)**
- OSH 2010 - Occupational Safety for Construction - 30 Hour **3 credit hour(s)**
- OSH 2030 - Occupational Safety General Industry 30 Hour **3 credit hour(s)**
- WELD 1010 - Safety and Orientation **2 credit hour(s)**
- WELD 1110 - Introduction to Welding Fundamentals **3 credit hour(s)**

MATHEMATICS

Mathematical Sciences, Associate of Science

School of Math, Science & Engineering (MSE)

Students majoring in the Mathematical Sciences degree program study quantitative and logical reasoning in addition to mathematically based science courses. Interested students can learn about career opportunities and pathways in Mathematics and related fields from the Mathematical Association of America.

The program is designed to meet the requirements for an Associate of Science in Mathematical Sciences from CNM and prepares a student to obtain a Bachelor's degree in Mathematics or one of the mathematical sciences at the University of New Mexico, as well as other baccalaureate degree granting institutions. Students should always consult an advisor at their intended transfer institution and refer to the catalog of that institution for admission, program, course, and graduation requirements. College catalogs are generally available online. Students should also consult an advisor at CNM.

Educational Option Information

- This educational option can be completed: Part -Time or Full -Time
- This educational option can be started: Any term
- Primary course location: Main campus and Montoya campus

Special Requirements

Students are expected to purchase textbooks, lab manuals and lab safety equipment.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

This degree prepares students for transfer into a four-year baccalaureate degree program.

An associate degree is an important milestone for students pursuing either a baccalaureate degree or graduate degree in Mathematics. Core requirements for the baccalaureate are met through completion of the CNM Associate of Science degree.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Program Requirements

- Math Skills 6
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
  or
- CSCI 1108 - CS for All: Introduction to Computer Modeling **4 credit hour(s)**
  or
- Unrestricted Elective*** 3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- MATH 1510 - Calculus I **4 credit hour(s)**

Term 2

- MATH 1520 - Calculus II **4 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Program Approved Communications Elective **3 credit hour(s)**
- Program Approved Computer Programming Elective **4 credit hour(s)**

Term 3

- MATH 2530 - Calculus III **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**
- Unrestricted Elective **3 credit hour(s)**

Term 4

- Creative and Fine Arts Requirement **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Unrestricted Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Many students satisfy Program Approved Elective requirements by completing coursework specific to a Bachelor's degree in Mathematics at a university and transferring it back to CNM as MATH 2088. It is strongly recommended that students meet with an advisor at their intended transfer university as well an advisor at CNM before selecting Program Approved Electives. Students may find the other courses specified in this list useful in preparing for upper division coursework required for a Bachelor's degree in Mathematics. However, some 4-year institutions, including UNM, may not apply these courses towards a Bachelor's degree in Mathematics.

Program Approved Electives

- CSCI 2310 - Discrete Mathematics for Computer Science **4 credit hour(s)**
- BIOL 2410 - Principles of Biology: Genetics **3 credit hour(s)**
- BIOL 2410L - Principles of Biology: Genetics Lab **1 credit hour(s)**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- CHEM 1225L - General Chemistry II Laboratory for STEM Majors **1 credit hour(s)**
- ENGR 2710 - Thermodynamics **3 credit hour(s)**
- ENGR 2810 - Engineering Statics **3 credit hour(s)**
- ENGR 2815 - Engineering Dynamics **3 credit hour(s)**
- ENGR 2910 - Circuit Analysis I **3 credit hour(s)**
- ENGR 2915 - Circuit Analysis II **3 credit hour(s)**
- MATH 1350 - Introduction to Statistics **3 credit hour(s)**
  or
- MATH 1350P - Introduction to Statistics Plus **4 credit hour(s)**
- MATH 2088 - Math Specialty **1-12 credit**

hour(s)
- MATH 2410 - Applied Ordinary Differential Equations **3 credit hour(s)**
- MATH 2420 - Applied Linear Algebra **3 credit hour(s)**
- PHYS 1320 - Calculus-Based Physics II **4 credit hour(s)**
- PHYS 1320L - Calculus-Based Physics II Laboratory **1 credit hour(s)**
- PHYS 2310 - Calculus-based Physics III **4 credit hour(s)**
- Program Approved Computer Programming Electives
- CSCI 1230 - C Programming **4 credit hour(s)**
- CSCI 1260 - Computer Programming Fundamentals Java I **4 credit hour(s)**
- CSCI 1153 - Programming in Matlab **4 credit hour(s)**

Note: CSCI 1153 is highly recommended because MATLAB is the most commonly used programming language within the mathematical sciences. In addition, students who take MATH 2410 or MATH 2420 will use MATLAB to solve problems in these courses.

- Program Approved Communications Elective
- COMM 1130 - Public Speaking **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**

Note

*Students who plan to take CSCI 1260 in Term 2 to satisfy the Program Approved Computer Programming Elective should take either BCIS 1110 or CSCI 1108 since these courses serve as prerequisites for CSCI 1260.

MECHATRONICS (INDUSTRIAL AUTOMATION TECHNOLOGY)

Industrial Automation Technician, Certificate of Completion

School of Skilled Trades & Arts (STA)

The Industrial Automation (Mechatronics) Technician program prepares students to work in highly automated industrial manufacturing environments. The program includes operation, maintenance and troubleshooting instruction in mechanical components, industrial electricity and electronics, programmable logic controllers (PLCs), hydraulics and pneumatics.

Educational Option Information

- This educational option is an: Certificate of Completion
- This educational option can be completed: Full-Time
- This educational option is designed for: Students interested in working in an industrial setting in support of manufacturing processes; and STEM-focused students interested in lab work at national labs like Sandia, LANL and AFRL. The current proposal does not focus on students interested in transfer to a 4-year degree.
- This educational option can be started: Fall
- Primary course location: ATC

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The curriculum is based on Smart Automation Certification Alliance (SACA) standards and curriculum and local industry needs. Students will be able to earn industry-recognized certifications and micro-credentials as they complete the program. Students who pass the written test and complete the associated lab work can receive SACA gold certification.

Career Opportunities

This program is in response to community needs and will position CNM as a leader in training for Industry 4.0, industrial automation, electro-mechanical technology and other in-demand and evolving industrial and manufacturing trends. Amazon, Honeywell, Intel, and Sandia National Labs have a need for these technicians.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- MECH 1001 - Introduction to Electrical Systems **3 credit hour(s)**
- MECH 1005 - Introduction to Mechatronics **3 credit hour(s)**
- MECH 1011 - Introduction to Mechanical Drives **3 credit hour(s)**
- MECH 1021 - Introduction to Pneumatics & Hydraulics **3 credit hour(s)**
- MECH 1031 - Introduction to Programmable Logic Controllers (PLCs) **3 credit hour(s)**

- MECH 1041 - Introduction to Electric Motor Control **2 credit hour(s)**

Term 2

- MECH 1101 - Industrial Electricity **3 credit hour(s)**
- MECH 1111 - Advanced Mechanical Drives **3 credit hour(s)**
- MECH 1120 - Advanced Pneumatics and Hydraulics **3 credit hour(s)**
- MECH 1131 - Advanced Programmable Logic Controllers (PLCs) **3 credit hour(s)**
- MECH 1241 - Advanced Electrical Motor Control **2 credit hour(s)**
- Program Approved Electives **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 34

Program Approved Electives

- MATT 1060 - Machine Tool Technology Skills **3 credit hour(s)**
- MECH 1051 - Lean Manufacturing Principles **3 credit hour(s)**
- MECH 1205 - Advanced Industrial Control Systems **3 credit hour(s)**
- MECH 1241 - Advanced Electrical Motor Control **2 credit hour(s)**
- MECH 1251 - Industrial Robotics Integration **3 credit hour(s)**
- MECH 1401 - Additive Manufacturing (3D Printing) **3 credit hour(s)**
- MECH 1430 - Intro to Engineering CAD **3 credit hour(s)**
- MECH 2096-2996 - Special Topics **1-7 credit hour(s)**
- MECH 2998 - Internship **3 credit hour(s)**
- WELD 1110 - Introduction to Welding Fundamentals **3 credit hour(s)**

Industrial Technician, Certificate of Completion

School of Skilled Trades & Arts (STA)

Industrial Technician program prepares students to work in industrial and manufacturing environments. The program includes operation and maintenance instruction in mechanical components, industrial electricity and electronics, and programmable logic controllers (PLCs), hydraulics and pneumatics. This certificate is stackable within the Industrial Automation Technician Certificate of Completion.

Educational Option Information

- This educational option is an: Certificate of Completion
- This educational option can be completed: Full-Time
- This educational option is designed for: Students interested in working in an industrial setting in support of manufacturing processes; and STEM-focused students interested in lab work at national labs like Sandia, LANL and AFRL. The current proposal does not focus on students interested in transfer to a 4-year degree.
- This educational option can be started: Fall
- Primary course location: ATC

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The curriculum is based on Smart Automation Certification Alliance (SACA) standards and curriculum and local industry needs. Students will be able to earn industry-recognized certifications and micro-credentials as they complete the program. Students who pass the written test and complete the associated lab work can receive SACA gold certification.

Career Opportunities

This program is in response to community needs and will position CNM as a leader in training for Industry 4.0, industrial automation, electro-mechanical technology and other in-demand and evolving industrial and manufacturing trends. Amazon, Honeywell, Intel, and Sandia National Labs have a need for these technicians.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- MECH 1001 - Introduction to Electrical Systems **3 credit hour(s)**
- MECH 1005 - Introduction to Mechatronics **3 credit hour(s)**
- MECH 1011 - Introduction to Mechanical Drives **3 credit hour(s)**
- MECH 1021 - Introduction to Pneumatics & Hydraulics **3 credit hour(s)**
- MECH 1031 - Introduction to Programmable Logic Controllers (PLCs) **3 credit hour(s)**
- MECH 1041 - Introduction to Electric Motor Control **2 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 17

MEDICAL ASSISTANT

Medical Assistant, Certificate of Completion

School of Nursing & Patient Support (NPS)

Medical assistants are cross-trained to perform routine administrative and clinical duties in clinics, doctor offices, and other health care agencies. Medical assistants are multi-skilled in areas of medical office organization, patient care management, and health navigation. Specific duties vary by medical setting depending on the location, specialty, and size of the office/clinic. The goal of this cohorted program is to prepare medical assistants who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.

The CNM Medical Assistant Certificate of Completion is accreditated by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assistant Education Review Board (MAERB).

The Commission on Accreditation of Allied Health Education Programs, www.caahep.org is located 9355 113th Street N, #7709, Seminole, FL 33775; Phone (727) 210-2350

Graduates of the CNM Medical Assistant Program are eligible to sit for a national certification of their choice. National Certification demonstrates achieved competencies and may lead to higher compensation and career ladder opportunities.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is a: Certificate of Completion.
- This educational option can be completed: In three terms.
- This educational option is designed for: Students who want to pursue a career as a medical assistant. Medical assistants perform administrative and certain clinical duties under the direction of a physician. This program will prepare graduates to take a national certifying exam.
- Primary course location: Online (54%); CNM Rio Rancho / UNM Health Sciences Rio Rancho (36%); Practicum Site/Clinic (10%)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Special Requirements

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Nursing and Patient Support (NPS) for more information.

Criminal Background

Most of the health programs in NPS require students undergo the New Mexico Department of Health caregivers criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in NPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Transportation

Students are responsible for their own transportation to off-campus training sites. (Clinical courses at healthcare facilities, hospitals, externships, etc.)

Educational Opportunities

Students planning to continue their education beyond the certificate level may pursue other academic programs in the healthcare field.

Some of the courses in this program are transferable and may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Students that have not attended for the past two years, please contact the School of Nursing and Patient Support for assistance.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- HIT 1020 - Medical Terminology and Anatomy **3 credit hour(s)**
- HLTH 1010 - Medical Ethics and Law **1 credit hour(s)**
- MA 1010 - Medical Assistant Professional Overview **1 credit hour(s)**

Term 2

- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**
- MA 1020 - Medical Assistant Clinical Skills 1 **3 credit hour(s)**
- MA 1030 - Medical Assistant Coding and Billing Procedures **3 credit hour(s)**
- MA 1092 - Medical Assistant Clinical Skills I Lab **1 credit hour(s)**
- MA 1520 - Medical Assistant Laboratory Skills **3 credit hour(s)**
- MA 1592 - Medical Assistant Laboratory Skills Lab **1 credit hour(s)**

Term 3

- MA 1540 - Medical Assistant Administrative Skills **2 credit hour(s)**
- MA 2010 - Medical Assistant Clinical Skills II **2 credit hour(s)**
- MA 2092 - Medical Assistant Clinical Skills II Lab **1 credit hour(s)**
- MA 2990 - Medical Assistant Practicum **4 credit hour(s)**
- MA 2999 - Medical Assistant Capstone **1 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 30

MEDICAL LABORATORY SCIENCES

Medical Laboratory Technician, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

The MLT program is an associate degree with general education prerequisites. Medical Laboratory Technicians perform highly complex testing in the areas of clinical chemistry, hematology, immunohematology, immunology, microbiology, and urinalysis. They must exhibit high levels of judgment and responsibility. The MLT program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences: 5600 N. River Rd. Suite 720, Rosemont, IL 60018-5119; naacls.org.

Medical Laboratory Science programs prepare students to play a crucial role in the detection, diagnosis, and treatment of disease.

Medical laboratory personnel work in clinics, hospitals, reference laboratories, and physician office labs. They safely collect, process, and analyze blood and body fluid specimens. They use microscopes, centrifuges, computerized instruments, and other sophisticated laboratory equipment. The complexity of tests performed, the level of judgment needed, and the amount of responsibility workers assume depends largely on the amount of education they have. Students study theory in the classroom, learn skills in campus labs, and complete clinical experiences in area health care facilities and labs. Upon completion of the programs, students are eligible to take national certification exams.

Special Requirements

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health Caregivers Criminal History Screening Program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment.

Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

This program is financial aid eligible.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Gainful Employment information is available from Job Connection Services. There are many job placement prospects locally, regionally and nationally for Medical Laboratory Science graduates. Tuition assistance for those who want to pursue more education in Medical Laboratory Science is available through many employers. An agreement with the University of New Mexico allows for the transfer of CNM credits to the Medical Laboratory Science Bachelor of Science Degree program. Graduate and higher degrees in Medical Laboratory Science are available. For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in *my***CNM**.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- High School Diploma or Equivalent
- Math Skills 3
- Reading and Writing Skills 2

Courses

This program's first term courses are typically offered in the fall term only. This may delay a student's program start date. Please check with an academic advisor for more information.

Term 1

- BIOL 1140 - Biology for Health Sciences **3 credit hour(s)**
- BIOL 1140L - Biology for Health Sciences Lab **1 credit hour(s)**
- CHEM 1120 - Introduction to Chemistry **3 credit hour(s)**
  and
- CHEM 1120L - Introduction to Chemistry Laboratory **1 credit hour(s)**
  or
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
  and
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
  and
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
  and
- CHEM 1225L - General Chemistry II Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- MLT 1001 - Preparation for Medical Lab Sciences **3 credit hour(s)**

Term 2

- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
- MATH 1350 - Introduction to Statistics **3 credit hour(s)**
  or
- MATH 1350P - Introduction to Statistics Plus **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 3

- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
- BIOL 2310 - Microbiology **3 credit hour(s)**
- BIOL 2310L - Microbiology Lab **1 credit hour(s)**
- MLT 1292 - Basic Phlebotomy Skills **1 credit hour(s)**
  or

- PHLB 1010 - Phlebotomy Theory **3 credit hour(s)**
  and
- PHLB 1092 - Phlebotomy Lab **2 credit hour(s)**

Term 4 (Typically Offered Fall Only)

- MLT 1012 - Clinical Urinalysis **1 credit hour(s)**
- MLT 1092 - Clinical Urinalysis Laboratory **1 credit hour(s)**
- MLT 1510 - Clinical Hematology **3 credit hour(s)**
- MLT 1592 - Clinical Coagulation Laboratory **1 credit hour(s)**
- MLT 1692 - Clinical Hematology Laboratory **2 credit hour(s)**
- MLT 2011 - Clinical Chemistry **3 credit hour(s)**
- MLT 2092 - Clinical Chemistry Laboratory **1 credit hour(s)**

Term 5 (Typically Offered Spring Only)

- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**

- MLT 1192 - Clinical Immunology Laboratory **1 credit hour(s)**
- MLT 1511 - Clinical Immunohematology **2 credit hour(s)**
- MLT 1792 - Clinical Immunohematology Laboratory **2 credit hour(s)**
- MLT 2010 - MLT Microbiology **3 credit hour(s)**
- MLT 2592 - Clinical Microbiology Laboratory **3 credit hour(s)**

Term 6 (Typically Offered Summer Only)

- MLT 2712 - Advanced MLT Topics and Exam Preparation **1 credit hour(s)**
- MLT 2790 - MLT Clinical Experience **5 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

Phlebotomy Technician, Certificate of Achievement

School of Health, Wellness & Public Safety (HWPS)

Phlebotomists collect and process blood specimens using approved venipuncture and capillary puncture techniques. Requires a high level of professionalism when working with patients.

Phlebotomists work in clinics, hospitals and physician office labs. They safely collect and process blood and body fluid specimens. High levels of professionalism and ethics are necessary when interacting with patients. Students study theory in the classroom, learn skills in campus labs, and complete clinical experiences in area health care facilities and labs. Upon completion of the programs, students are eligible to take national certification exams. The CNM PHLB and MLT programs are articulated, certain MLT courses will be waived for PHLB graduates. A formal articulation agreement between CNM and UNM facilitates the transfer of credit received from the Associate of Applied Science MLT Degree to the Medical Laboratory Sciences Program at the University of New Mexico. CNM also offers a Pre-Health Sciences AA Degree.

Special Requirements

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health Caregivers Criminal History Screening Program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites (i.e. clinical courses at hospitals, internships, etc.).

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- **High School Diploma or Equivalent**
- Math Skills 2 Alg
- Reading and Writing Skills 2
- HLTH 1001 **or** HLTH 1003

Courses

- MLT 1001 - Preparation for Medical Lab Sciences **3 credit hour(s)**
- PHLB 1010 - Phlebotomy Theory **3 credit hour(s)**
- PHLB 1090 - Clinical Phlebotomy **2 credit hour(s)**
- PHLB 1092 - Phlebotomy Lab **2 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 10

MODERN LANGUAGES

American Sign Language, Certificate of Completion

School of Liberal Arts (LA)

This certificate is designed to demonstrate proficiency in American Sign Language for professional use in the workplace, neighborhood and community activities, and in working with the public.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Program Requirements

- Reading and Writing Skills 2

Courses

- SIGN 1110 - American Sign Language I **4 credit hour(s)**
- SIGN 1120 - American Sign Language II **4 credit hour(s)**
- SIGN 2110 - American Sign Language III **3 credit hour(s)**
- SIGN 2120 - American Sign Language IV **3 credit hour(s)**
- SIGN 2130 - Fingerspelling **3 credit hour(s)**
- SIGN 2214 - Introduction to Deaf Culture & the Deaf Community **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 20

Modern Languages (AA), American Sign Language Concentration

School of Liberal Arts (LA)

Modern Languages courses develop listening, reading, and writing skills in the learning of languages other than English. American Sign Language, Spanish, Portuguese, French and Arabic are some of the most widely spoken languages in the world.

This program is designed to meet the requirements of an Associate of Arts in Modern Languages from CNM. It is the student's responsibility to seek out specific admission and degree requirements of any transfer school, as these vary.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Option Information

- This educational option is an: Associate of Arts
- This educational option can be completed: Full-time or Part-Time
- This educational option can be started: Any Term
- Primary course location: Any CNM campus and/or online

Educational Opportunities

This degree prepares students to continue with a degree in foreign languages and/or ASL at a 4-year institution.

Career Opportunities

A degree in Modern Languages with a concentration in ASL can be used on résumé and employment

applications for our graduates. Students wishing to work in the fields of education, hospitality, health care, etc., will likely benefit from this degree.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
  or
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- SIGN 1110 - American Sign Language I **4 credit hour(s)**
- SIGN 2214 - Introduction to Deaf Culture & the Deaf Community **3 credit hour(s)**

Term 2

- Creative and Fine Arts Requirement **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hours**
- SIGN 1120 - American Sign Language II **4 credit hour(s)**

Term 3

- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**
- Modern Language Elective **4 credit hour(s)** *
- SIGN 2110 - American Sign Language III **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- Arts & Sciences Elective **3 credit hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- SIGN 2120 - American Sign Language IV **3 credit hour(s)**
- SIGN 2130 - Fingerspelling **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

* Any Arabic (ARBC), French (FREN), Spanish (SPAN) or Portuguese (PORT)

Modern Languages (AA), Spanish Concentration

School of Liberal Arts (LA)

Modern Languages courses develop listening, reading, and writing skills in the learning of languages other than English. Spanish, Portuguese, French and Arabic are some of the most widely spoken languages in the world. This program is useful for both the new and heritage speaker.

The program is designed to meet the requirements of an Associate of Arts in Modern Languages from CNM and prepare a student to obtain a Bachelor of Arts at the University of New Mexico or New Mexico State University. It is the student's responsibility to contact the four year transfer school to confirm specific admission and degree requirements.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Part of this degree will include a certificate for Spanish; this can be used on résumé and employment applications for our graduates.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- Arts & Sciences Elective **1-3 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
  or
- Humanities Requirement **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Program Approved Elective **4 credit hour(s)**

Term 2

- Creative and Fine Arts Requirement **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Program Approved Elective **4-6 credit hour(s)**

Term 3

- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**
- Modern Language Elective **4 credit hour(s)** *
- Program Approved Elective **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- COMM 1130 - Public Speaking **3 credit hour(s)**

  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**

- Modern Language Elective **4 credit hour(s)** *
- Program Approved Elective **6 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

*** Any Arabic (ARBC), French (FREN), or Portuguese (PORT)**

Program Approved Electives

- SPAN 1110 - Spanish I **4 credit hour(s)**
- SPAN 1120 - Spanish II **4 credit hour(s)**
- SPAN 1125 - Conversational Spanish I **3 credit hour(s)**
- SPAN 1210 - Spanish for Heritage Learners I **4 credit hour(s)**
- SPAN 1220 - Spanish for Heritage Learners II **4 credit hour(s)**
- SPAN 2088 - Spanish Specialty **1-12 credit hour(s)**
- SPAN 2110 - Spanish III **3 credit hour(s)**
- SPAN 2120 - Spanish IV **3 credit hour(s)**
- SPAN 2125 - Conversational Spanish II **3 credit hour(s)**
- SPAN 2277 - The Art and Skill of Translation **3 credit hour(s)**
- SPAN 2280 - Introduction to Hispanic Literature **3 credit hour(s)**
- SPAN 2375 - Accelerated Beginning Spanish **6 credit hour(s)**
- SPAN 2376 - Accelerated Intermediate Spanish **6 credit hour(s)**
- SPAN 2996 - Special Topics **3 credit hour(s)**
- SPAN 2998 - Internship in Spanish **1-3 credit hour(s)**

Spanish Interpreter, Certificate of Completion

School of Liberal Arts (LA)

This program is designed to train highly proficient bilingual (Spanish and English) students to become competent interpreters in legal, healthcare and/or community settings. This program offers advanced training to prepare students for interpreter certifications and examinations in either the medical or legal field, or to pursue careers in business and community interpretation. Students will be broadly trained and will prepare for the field(s) of their choosing through their practicums and focused study in the last sequence of classes. Entrance into the program requires departmental approval, and includes either a Spanish placement exam score demonstrating advanced proficiency, an advanced academic history in Spanish, or an oral and written bilingual demonstration.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Program Requirements

- Reading & Writing Skills 2

- Math Skills 2

  or
- **Department Approval**

- **AVANT Heritage Placement Exam score of 5 or equivalent ***

  or
- **Departmental approval**

*For students scoring a 3 or 4 on the Avant Heritage Placement Exam, students may enter program with pre-req or co-req of Heritage Spanish 1210 or 1220 or equivalent.

Courses

Term 1

- SPLI 1101 - Fundamentals of Interpreting **4 credit hour(s)**
- SPLI 1102 - Language Structure and Technologies in Interpretation and Translation **4 credit hour(s)**

Term 2

- SPLI 1103 - Introduction to Medical Interpretation **4 credit hour(s)**

  or
- SPLI 1104 - Introduction to Legal Interpretation **4 credit hour(s)**

Term 3

- SPLI 1106 - Beginning Simultaneous Interpretation **4 credit hour(s)**
- SPLI 1107 - Beginning Consecutive Interpretation **4 credit hour(s)**

Term 4

- SPLI 2206 - Advanced Simultaneous Interpretation **4 credit hour(s)**
- SPLI 2207 - Advanced Consecutive Interpretation **4 credit hour(s)**

Term 5

- SPLI 1105 - Ethics and Advocacy in the Profession **3 credit hour(s)**
- SPLI 2990 - Community Practicum **4 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 35

Spanish Language, Certificate of Completion

School of Liberal Arts (LA)

This certificate is designed to demonstrate proficiency in Spanish for professional use in the workplace, neighborhood and community activities, and in working with the public.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Program Requirements

- Reading and Writing Skills 2

Courses

Beginning/Heritage Track

- Program Approved Elective **3 credit hour(s)**
- SPAN 1110 - Spanish I **4 credit hour(s)**

  or
- SPAN 1210 - Spanish for Heritage Learners I **4 credit hour(s)**
- SPAN 1120 - Spanish II **4 credit hour(s)**

  or
- SPAN 1220 - Spanish for Heritage Learners II **4 credit hour(s)**
- SPAN 2110 - Spanish III **3 credit hour(s)**
- SPAN 2120 - Spanish IV **3 credit hour(s)**

Or Accelerated Track

- Program Approved Elective **6 credit hour(s)**
- SPAN 2375 - Accelerated Beginning Spanish **6 credit hour(s)**
- SPAN 2376 - Accelerated Intermediate Spanish **6 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 17

Program Approved Electives

- SPAN 1125 - Conversational Spanish I **3 credit hour(s)**
- SPAN 1410 - Spanish for Health Care Professionals **3 credit hour(s)**
- SPAN 2125 - Conversational Spanish II **3 credit hour(s)**
- SPAN 2204 - Spanish Language in Film **1 credit hour(s)**
- SPAN 2277 - The Art and Skill of Translation **3 credit hour(s)**
- SPAN 2280 - Introduction to Hispanic Literature **3 credit hour(s)**
- SPAN 2996 - Special Topics **3 credit hour(s)**

NATIVE AMERICAN STUDIES

Native American Studies, Associate of Arts

School of Liberal Arts (LA)

Native American Studies at CNM is an interdisciplinary program in which students explore the Native experience of Indigenous peoples with significant attention given our complex history and intercultural heritage of New Mexico and the United States.

Educational Option Information

- This educational option is an: Associates of Arts
- This educational option can be completed: Part-time
- This educational option is designed for: Associate of Arts students and 4-year degree transfer students.
- This educational option can be started: Anytime
- Primary course location: Main campus

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The Associate of Arts in Native American Studies provides students the opportunity to transfer into the Native American Studies program at UNM as a junior, with 60 applicable credits.

Career Opportunities

Law school, community outreach, graduate school (Native American Studies but also History, Geography, Anthropology, and English), journalism, art careers, positions in government agencies, museums, independent writing, and filmmaking.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- Digital Literacy Elective **3 credit hour(s)**
  or
- DGST 1110 - Introduction to Digital Studies **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- NATV 1150 - Introduction to Native American Studies **3 credit hour(s)**

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
  or
- NATV 2315 - Language Recovery, Revitalization, and Community Renewal **3 credit hour(s)**
- Humanities Elective **3 credit hour(s)**
  or
- AMST 1140 - Introduction to Critical Race and Indigenous Studies **3 credit hour(s)**
- Laboratory Science Requirement (lab required) **4 credit hour(s)**
- NATV 2110 - Sociopolitical Concepts in Native America **3 credit hour(s)**

Term 3

- Arts & Science Elective **3 credit hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- FUTR 1110 - Introduction to Futures Studies **3 credit hour(s)**
- NATV 2140 - Research Issues in Native America **3 credit hour(s)**

Term 4

- Arts & Sciences Elective **6 credit hour(s)**
- Arts & Sciences Elective **3 credit hours**
  or
- LBAR 2999 - Community Leadership: Liberal Arts Capstone **3 credit hour(s)**
- NATV 2120 - The Native American Experience **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**
  or
- CCST 2110 - Introduction to Chicana and Chicano Studies **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

- Digital Literacy Elective
- AMST 1160 - Environment, Science & Technology **3 credit hour(s)**
- BCIS 1330 - Introduction to Analytics and Data Visualization **3 credit hour(s)**
- CIST 1605 - Internet of Things **3 credit hour(s)**
- CSCI 1108 - CS for All: Introduction to Computer Modeling **4 credit hour(s)**
- ENGL 1160 - Introduction to Digital Storytelling **3 credit hour(s)**
- FDMA 1260 - Introduction to Digital Media **3 credit hour(s)**
- PHIL 2135 - Ethics of Technology **3 credit hour(s)**

NURSING

Nurse Refresher

School of Nursing & Patient Support (NPS)

- Provide nurses with an opportunity to update their knowledge and skills of pharmacology, dosage calculation and medical surgical nursing
- Provide nurses with an opportunity to update their practice in a medical surgical or skilled nursing facility

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal

Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Special Requirements

Program must be completed within one year (12 months) from date started.

Course Expiration Rule

Nursing (NMNC and PN) coursework expires two years after the last successful clinical course. Nurse Refresher (NR) coursework is required to be completed within one year from successful completion of the theory course.

Courses

- NR 2110 - Nursing Refresher Course **7 credit hour(s)**
- NR 2190 - Nurse Refresher Clinical Application **2 credit hour(s)**

Nursing, Associate of Applied Science

School of Nursing & Patient Support (NPS)

All CNM nursing courses emphasize a holistic approach that encourages students to embrace the concepts of clear communication, critical thinking and compassion when caring for patients. The Nursing program curriculum includes classroom, laboratory, and supervised clinical instruction that combines an essential set of arts and sciences classes with the nursing courses.

CNM offers the common New Mexico Nursing Education Consortium (NMNEC) curriculum.

Graduates of the Associate of Applied Science in Nursing (AASN) program meet the requirements set by the New Mexico State Board of Nursing to take the NCLEX-RN licensing examination. Specific terms of licensure can be obtained through the New Mexico Board of Nursing.

This program is a participating member in the New Mexico Nursing Education Consortium (NMNEC).

Please consult the nursing program webpage for the most current national accreditation information.

See Recommended Sequence of Courses

Special Requirements

- HESI A2 Exam minimum composite score of 75%; minimum subtest scores of 75% in Math, Reading, Grammar, Biology, Chemistry and Vocabulary.
- Program must be completed within two years (24 months) from date started.

Program Entry Registration Screening

This is a "Coordinated Program Entry" program; students must complete a pre-registration screening process administered through the Coordinated Program Entry Office before being eligible to register for program courses.

Criminal Background

Most of the health programs in NPS require students undergo the New Mexico Department of Health caregivers criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in NPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Nursing and Patient Support office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, educational resources, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a

course.

Educational Opportunities

Graduates meet the requirements set by the New Mexico State Board of Nursing to take the NCLEX-RN licensing examination. This program is accredited through the Accreditation Commission for Education in Nursing (ACEN) and a participating member in the New Mexico Nursing Education Consortium (NMNEC).

Nursing students are encouraged to continue their education toward a bachelor of science in nursing degree in order to pursue leadership positions in nursing and in the community and obtain specialty credentials.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

AASN Graduates find employment in hospitals, long-term care facilities, home health care and physicians' offices. CNM nursing students are encouraged to continue their education toward a bachelor of science in nursing degree in order to pursue leadership positions in nursing and in the community and obtain specialty credentials.

All NMNC coursework expires 2 years after the last clinical course that was successfully completed.

Course Expiration Rule

Nursing (NMNC and PN) coursework expires two years after the last successful clinical course. Nurse Refresher (NR) coursework is required to be completed within one year from successful completion of the theory course.

Program Requirements

- Coordinated Entry Program
- HESI A2 Exam
- Math Skills 2 Alg **or** Math Skills 3 **(Recommended) ***
- Reading and Writing Skills 2
- Biology Skills

Courses

Term 1

- BIOL 2310 - Microbiology **3 credit hour(s)**
- BIOL 2310L - Microbiology Lab **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Mathematics Requirement **3 credit hour(s) * ***
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**

Term 2

- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
- BIOL 2510 - Pathophysiology I **3 credit hour(s)**
- PSYC 2120 - Developmental Psychology **3 credit hour(s)**

Term 3

- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
- BIOL 2520 - Pathophysiology II **3 credit hour(s)**
- NMNC 1110 - Introduction to Nursing Concepts **3 credit hour(s)**
- NMNC 1135 - Principles of Nursing Practice **4 credit hour(s)**

Term 4

- NMNC 1210 - Health and Illness Concepts I **3 credit hour(s)**
- NMNC 1220 - Health Care Participant **3 credit hour(s)**
- NMNC 1230 - Nursing Pharmacology **3 credit hour(s)**
- NMNC 1235 - Assessment and Health Promotion **4 credit hour(s)**

Term 5

- NMNC 2310 - Health & Illness Concepts II **3 credit hour(s)**
- NMNC 2320 - Professional Nursing Concepts I **3 credit hour(s)**
- NMNC 2335 - Care of Patients with Chronic Conditions **4 credit hour(s)**

Term 6

- NMNC 2410 - Health & Illness Concepts III **4 credit hour(s)**
- NMNC 2435 - Clinical Intensive I **4 credit hour(s)**
- NMNC 2445 - ADN Capstone **2 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 68

*** Recommended for students pursuing the NMNEC BSN.**

*** *MATH 1350 Recommended**

Practical Nursing, Certificate of Completion

School of Nursing & Patient Support (NPS)

The Practical Nursing (PN) program teaches skills for direct patient care. This program curriculum provides knowledge and skills needed to provide safe and quality nursing care to meet the needs of our community.

Courses will incorporate the domains of healthcare, nursing practice, and the holistic individual. This will be emphasized through evidence-based practices, individualized nursing care, and participation in the interdisciplinary team.

Graduates will be eligible to apply to take the National Council Licensure Examination (NCLEX-PN) which is recognized for practice as a Licensed Practical Nurse.

Educational Option Information

- This educational option is an: Certificate of

Completion
- This educational option can be completed: Part-Time
- This educational option is designed for: Students who want to pursue a career as a licensed practical nurse (LPN). This program will prepare graduates to take the NCLEX-PN.
- This educational option can be started: Any Term
- Primary course location: Main Campus

Special Requirements

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Nursing and Patient Support office for more information.

Criminal Background

Most of the health programs in NPS require students undergo the New Mexico Department of Health caregivers criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Additional Requirements

Many of the health programs in NPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *pending* Financial Aid approval.
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Course Expiration Rule

Nursing (NMNC and PN) coursework expires two years after the last successful clinical course. Nurse Refresher (NR) coursework is required to be completed within one year from successful completion of the theory course.

Program Requirements

- Math Skills 2 Alg **or** Math Skills 2 Non-Alg
- Reading and Writing Skills 2

Courses

Term 1

- BIOL 1130 - Introductory Anatomy and Physiology **3 credit hour(s)**
  or
- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
  and
- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
- PN 1110 - Introduction to PN Concepts **3 credit hour(s)**
- PN 1120 - Fundamentals of PN Practice **3 credit hour(s)**
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**
- PN 1135 - Clinical Fundamentals of PN Practice **1 credit hour(s)**

Term 2

- PN 1210 - PN Health and Illness Concepts I **4 credit hour(s)**
- PN 1220 - PN Professional Communication **1 credit hour(s)**
- PN 1230 - PN Pharmacology **3 credit hour(s)**
- PN 1235 - PN Care of the Patient with Chronic Conditions **4 credit hour(s)**

Term 3

- PN 1310 - PN Health and Illness Concepts II **4 credit hour(s)**
- PN 1320 - Professionalism in Practical Nursing **4 credit hour(s)**
- PN 1335 - PN Care of the Acute Patient **4 credit hour(s)**

Minimum Credit Hours to Complete Certificate: 38

NURSING ASSISTANT

Nursing Assistant, Certificate of Achievement

School of Nursing & Patient Support (NPS)

Students are provided instruction in the roles and responsibilities of the Nursing Assistant. Body structure and function, infection prevention, nutrition, principles of growth and development, safety in healthcare, home health care, and care of the older person are some of the topics emphasized. Instruction and practice of basic patient care skills required for Nursing Assistants is provided. Skills practiced include patient assistance with activities of daily living, personal care, transfer and positioning, vital sign measurement, intake and output measurement, restorative care, and communication. Students will practice supervised basic patient care in a clinical setting prior to completion of the program. At the completion of this certificate, students are eligible to take the New Mexico State certification exam to become a Certified Nursing Assistant (CNA).

Special Requirements

Criminal Background

Most of the health programs in NPS require students undergo the New Mexico Department of Health caregivers criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in NPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Nursing and Patient Support (NPS) for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, educational resources, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Career Opportunities

Jobs are available in hospitals, outpatient clinics, nursing homes, and private homes.

Gainful Employment information is available from Career and Job Placement.

Course Expiration Rule

Nursing Assistant (NA) coursework must be completed within two consecutive terms, or all courses in the program must be repeated.

Program Requirements

- Reading & Writing Skills 1

Courses

- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**

- NA 1020 - Principles of Nursing Assistant **3 credit hour(s)**
- NA 1093 - Principles of Nursing Assistant Lab **2 credit hour(s)**
- NA 1190 - Nursing Assistant Clinical **1 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 7

NUTRITION

Dietary Manager, Certificate of Achievement - Pathway 1

School of Math, Science & Engineering (MSE)

Dietary Managers work with registered dietitians to

provide quality food production, service, and nutritional care and are an integral part of health care and food service management teams.

The Dietary Manager Certificate of Achievement program prepares students to manage the administration of food service systems in both public and private institutional settings. The program focuses on the principles and practices of human nutrition, food safety, the design and organization of food service systems, purchasing, and personnel management. Coursework includes online classroom time with students completing 180 hours of supervised practice in accredited facilities. For learners who already have two-years of work experience in the field, see Certified Dietary Manager, Certificate of Achievement, Pathway 3B.Certificate of Achievement

Certificate of Achievement

This certificate program prepares students for the Certifying Board of Dietary Managers' national exam. It includes three classroom courses, which can be completed entirely online, as well as 180 hours of clinical field experience completed in Albuquerque-area healthcare facilities.

Upon completion of the program, students will be eligible to sit for the Certifying Board of Dietary Managers' national exam and earn the CDM (Certified Dietary Manager) and CFPP (Certified Food Protection Professional) credentials. The CDM and CFPP credentials are nationally recognized as experts in managing dietary operations.

Educational Option Information

- This educational option is designed for: Immediate employment
- This educational option can be started: Fall or Spring semesters
- This educational option can be completed: Part-Time or Full-Time
- This educational option can be completed in 1-2 semesters
- Primary course location: Online, except for the clinical field experience hours, if required

Special Requirements

Complete prior to registering for NUTR 1090 and NUTR 1190 or to gain approval to waive clinical requirements and complete certificate through Pathway 3B.

- Contact the Dietary Manager Program Director at dietmgrprog@cnm.edu regarding whether you meet work hour requirement to obtain department approval to participate in Pathway 3B.
- Once you are registered for courses, you will receive additional information on beginning the process for the following requirements that must be completed
- Criminal background check
- Urine drug screening
- Current immunizations and tuberculosis screening

Criminal Background

Dietary Manager students must undergo the New Mexico Department of Health caregivers' criminal history screening program prior to their clinical experiences. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to beginning the clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Students who do not successfully appeal a disqualifying conviction will not be allowed to complete the clinical experiences and therefore will be ineligible to complete the certificate.

Other Compliance Requirements

This program requires a routine urine drug screen and documentation of current Covid-19 immunizations, prior to beginning the clinical experience, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Many healthcare facilities require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the Program Director for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for background checks, drug screens, etc.

Tuberculosis testing is not covered by the program fees but may be covered by the student's health insurance plan. Approximate cost: $130, varies by test type, location, and insurance coverage

Transportation

Students are responsible for their own transportation to off-campus training sites (i.e. clinical courses at hospitals, internships, etc.).

Approximate Cost no FA insert

Additional Costs

- Drug Screening and Criminal Background Check Fees: Approximately $130
- Individual courses associated with this program may require students to purchase additional materials.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Potential Employers

- Nursing facilities, rehab facilities, hospitals, senior living communities, correctional facilities, schools, military, corporations

Sample Job Titles

- Certified Dietary Manager (CDM), Foodservice Manager and many others

Sample Job Duties

- Manage menus, food purchasing, food preparation, document nutrition information, ensure food safety

Other Courses That May Help Employability/ Promotability

- Culinary arts courses and a bachelor's degree will improve chances of employment and also result in a higher salary.

Current pay rates

- Average Full-Time salary (2018): $53,116

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- NUTR 1015 - Nutrition Fundamentals and Medical Nutrition Therapy **3 credit hour(s)**
- NUTR 1060 - Foodservice Management I for Dietary Managers **3 credit hour(s)**
- NUTR 1070 - Foodservice Management II for Dietary Managers **3 credit hour(s)**
- NUTR 1090 - Dietary Manager Clinical I **2 credit hour(s)**

Term 2

- NUTR 1190 - Dietary Manager Clinical II **2 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 13

Dietary Manager, Certificate of Achievement - Pathway 3b

School of Math, Science & Engineering (MSE)

This certificate program prepares students for the Certifying Board of Dietary Managers' national exam. It includes three classroom courses and is intended for students who also have 2 years of full-time non-commercial food service management experience. Upon completion of the program, students will be eligible to sit for the Certifying Board of Dietary Managers' national exam and earn the CDM (Certified Dietary Manager) and CFPP (Certified Food Protection Professional) credentials. The CDM and CFPP credentials are nationally recognized as experts in managing dietary operations.

For learners who need work experience, see Certified Dietary Manager, Certificate of Achievement, Pathway 1.

Educational Option Information

- This educational option is option for: Certificate of Achievement
- This educational option can be started: Fall or Spring semesters
- This educational option can be completed: Part-Time or Full-Time
- Primary course location: Online

Special Requirements

Complete prior to registering or to gain approval for Pathway 3b certificate program.

- Contact the Dietary Manager Program Director at dietmgrprog@cnm.edu regarding whether you meet work hours to get department approval to participate in Pathway 3B. Work hours requirement to waive the clinical hours is approximately two years of full-time employment in a non-commercial food service management facility.

Physical Requirements

Students must be in good physical and psychological health. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the Program Director for more information.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Career Opportunities

Potential Employers

- Nursing facilities, rehab facilities, hospitals, senior living communities, correctional facilities, schools, military, corporations

Sample Job Titles

- Certified Dietary Manager (CDM), Foodservice Manager and many others

Sample Job Duties

- Manage menus, food purchasing, food preparation, document nutrition information, ensure food safety

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

- Program Requirement

Students must provide documentation of two or more years of non-commercial food service management experience to the Program Director prior to completion of the certificate.

Courses

Term 1

- NUTR 1015 - Nutrition Fundamentals and Medical Nutrition Therapy **3 credit hour(s)**
- NUTR 1060 - Foodservice Management I for Dietary Managers **3 credit hour(s)**
- NUTR 1070 - Foodservice Management II for Dietary Managers **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 9

Nutrition, Associate of Science

School of Math, Science & Engineering (MSE)

Students majoring in Nutrition examine the role of food and nutrition in overall health and disease prevention with an emphasis on the metabolic and physiological responses of the body to diet. Interested students can learn about career opportunities and pathways in Nutrition and related fields from the Academy of Nutrition and Dietetics.

This program is designed to meet the requirements for an Associate of Science in Nutrition from CNM and prepare a student to obtain a Bachelor of Science in Nutrition and Dietetics at the University of New Mexico. However, students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students interested in transfer to UNM should consult the Department of Individual, Family, and Community Education - Nutrition/Dietetics Program. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements. College catalogs are generally available online. Students should also consult an advisor at CNM.

Educational Option Information

- This educational option is an: Associate of Science Degree Program.
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program.
- This educational option can be started: Any Term
- Scheduling Information: Follow course catalog recommendations to avoid scheduling problems.
- Primary course location: Main Campus

Special Requirements

Students are expected to purchase textbooks, lab manuals and lab safety equipment.

Information for people with felony convictions

- A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BIOL 1140 - Biology for Health Sciences **3 credit hour(s)**
- BIOL 1140L - Biology for Health Sciences Lab **1 credit hour(s)**

  or
- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**
- BIOL 2110L - Principles of Biology: Cellular and Molecular Biology Lab **1 credit hour(s) ***
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- MATH 1220 - College Algebra **3 credit hour(s)**

or

- MATH 1220P - College Algebra Plus **4 credit hour(s)**

- Unrestricted Elective **3 credit hour(s)**
- Program Approved Communication Elective** **3 credit hour(s)**

Term 2

- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**

- MATH 1350 - Introduction to Statistics **3 credit hour(s)**

  or
- MATH 1350P - Introduction to Statistics Plus **4 credit hour(s)**

- Creative and Fine Arts Requirement **3 credit hour(s)**
- Unrestricted Elective **4 credit hour(s)**

Term 3

- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
- BIOL 2210L - Human Anatomy and Physiology I Lab **1 credit hour(s)**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- CHEM 1225L - General Chemistry II Laboratory for STEM Majors **1 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- NUTR 2110 - Human Nutrition **3 credit hour(s)**
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**

Term 4

- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
- BIOL 2225L - Human Anatomy and Physiology II Lab **1 credit hour(s)**

- CHEM 2120 - Integrated Organic Chemistry and Biochemistry **4 credit hour(s) ****

  or
- CHEM 2130 - Organic Chemistry I **3 credit hour(s)**

- Program Approved Elective **3-4 credit hour(s)**

  or
- Program Approved Communication Elective** **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Communications Elective **

- COMM 1130 - Public Speaking **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**

Program Approved Elective **

- BIOL 2310 - Microbiology **3 credit hour(s)**
- BIOL 2310L - Microbiology Lab **1 credit hour(s)**
- NUTR 1020 - Sports Nutrition **3 credit hour(s)**
- NUTR 1996 - Topics in Nutrition **1-6 credit hour(s)**
- NUTR 2996 - Topics in Nutrition **1-3 credit hour(s)**
- Modern Language
- Program Approved Communication Elective

Notes

* See transfer school requirements before choosing biology course series

**See transfer school requirements/recommendation to decide on which course to complete

OFFICE ADMINISTRATION

Administrative Assistant, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Office Administration program provides opportunities for individuals to develop marketable skills in the areas of office procedures, interpersonal relations, office technology, 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. Two concentrations are available in the Office Administration program: Medical Concentration and Office Administration Concentration. Students may contact the associate dean for more information about advanced placement.

Educational Option Information

- This program can be completed: Part-time or full-time
- This program can be started: Any term
- Primary course location: Main Campus, and some courses are offered at Montoya and online.

Special Requirements

- Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.

- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The courses in this program may be applied toward an Office Administration associate of applied science degree. For information about extending your education beyond the certificate level, contact an advisor.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

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 in the office administration profession is expected to continue.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- OTEC 1101 - Keyboarding **3 credit hour(s)**
- OTEC 1301 - Introduction to Practical and Ethical AI Usage **3 credit hour(s)**

Term 2

- BCIS 1211 - MS Outlook **1 credit hour(s)**
- BCIS 1230 - Introduction to MS PowerPoint **2 credit hour(s)**
- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**
- BCIS 1220 - Introduction to MS Word **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**
- BUSA 2240 - Customer Service in Business **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 30

Medical Office Assistant, Certificate of Completion

School of Business, Hospitality & Technology (BHT)

The Office Administration program provides opportunities for individuals to develop marketable skills in the areas of medical terminology and transcription, office procedures, interpersonal relations, office administration, 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. Two concentrations are available in the Office Administration program: Medical Concentration and Office Administration Concentration. Students may contact the associate dean for more information about advanced placement.

See Recommended Sequence of Courses

Educational Option Information

- This program can be completed: Part-time or full-time
- This program can be started: Any term
- Primary course location: Main Campus; some courses are offered at Montoya Campus and online..

Special Requirements

- Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

CNM's Office Administration Certificate programs integrate seamlessly with its Office Administration associate degree programs. This associate degree is designed to transfer to a UNM program that prepares students to earn a bachelor of science degree. For information about extending your education beyond the certificate level, contact an advisor.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at

other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

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 in the office administration profession is expected to continue.

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- OTEC 1101 - Keyboarding **3 credit hour(s)**
- OTEC 1175 - Computers in the Medical Office **2 credit hour(s)**
- OTEC 1301 - Introduction to Practical and Ethical AI Usage **3 credit hour(s)**

Term 2

- BCIS 1211 - MS Outlook **1 credit hour(s)**
- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**
- BCIS 1220 - Introduction to MS Word **3 credit hour(s)**
- BUSA 2240 - Customer Service in Business **3 credit hour(s)**
- HIT 1020 - Medical Terminology and Anatomy **3 credit hour(s)**
- HIT 1030 - Health Data Content and Structure **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 33

Office Administration & Business Technology (AAS), Medical Office Concentration

School of Business, Hospitality & Technology (BHT)

The Office Administration program provides opportunities for individuals to develop marketable skills in the areas of office procedures, interpersonal relations, office technology, 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. Two concentrations are available in the Office Administration program: Medical Concentration and Office Administration Concentration. Students may contact the associate dean for more information about advanced placement.

See Recommended Sequence of Courses

Educational Option Information

- This program can be completed: Part-time or full-time
- This program can be started: Any term
- Primary course location: Main Campus; some courses are offered at Montoya Campus and online.

Special requirements

- Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

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 to continue in the office administration profession.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- OTEC 1101 - Keyboarding **3 credit hour(s)**
- OTEC 1301 - Introduction to Practical and Ethical AI Usage **3 credit hour(s)**

Term 2

- BCIS 1211 - MS Outlook **1 credit hour(s)**
- BCIS 1220 - Introduction to MS Word **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BUSA 2240 - Customer Service in Business **3 credit hour(s)**
- HIT 1020 - Medical Terminology and Anatomy **3 credit hour(s)**
- OTEC 1175 - Computers in the Medical Office **2 credit hour(s)**

Term 3

- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**
- BUSA 1198 - Project Management Fundamentals **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- HIT 1030 - Health Data Content and Structure **3 credit hour(s)**

Term 4

- BCIS 1210 - Introduction to MS Access **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**

  or
- Mathematics Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Social and Behavioral Sciences Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- **Any BFIN, BCIS, BUSA, ENTR, MGMT, or MKTG course not included in this degree.**
- BHT 1005 - Survey of Business, Hospitality & Technology **3 credit hour(s)**
- IT 1004 - Computer and Keyboarding Basics **3 credit hour(s)**
- OTEC 1096-1996 - Special Topics **1-3 credit hour(s)**
- OTEC 2096-2996 - Special Topics **1-3 credit hour(s)**
- OTEC 2097 - Independent Study **1-6 credit hour(s)**
- OTEC 2998 - Internship **3 credit hour(s)**
- Modern Language **3-4 credit hour(s)**

Office Administration & Business Technology (AAS), Office Administration Concentration

School of Business, Hospitality & Technology (BHT)

The Office Administration program provides opportunities for individuals to develop marketable skills in the areas of office procedures, interpersonal relations, office technology, 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.

Educational Option Information

- This program can be completed: Part-time or full-time
- This program can be started: Any term
- Primary course location: Main Campus; some courses are offered at Montoya Campus and online.

Special Requirements

- Students must have access to a computer and the Internet to complete coursework.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

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 to continue in the office administration profession.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**
- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- OTEC 1101 - Keyboarding **3 credit hour(s)**
- OTEC 1301 - Introduction to Practical and Ethical AI Usage **3 credit hour(s)**

Term 2

- BCIS 1211 - MS Outlook **1 credit hour(s)**
- BCIS 1230 - Introduction to MS PowerPoint **2 credit hour(s)**
- BCIS 1220 - Introduction to MS Word **3 credit hour(s)**
- BUSA 1110 - Introduction to Business **3 credit hour(s)**
- BUSA 1180 - Business Math **3 credit hour(s)**
- BUSA 2240 - Customer Service in Business **3 credit hour(s)**

Term 3

- ACCT 2110 - Principles of Accounting I **3 credit hour(s)**

  or
- ACCT 1150 - QuickBooks **3 credit hour(s)**

- BCIS 1215 - Introduction to MS Excel I **3 credit hour(s)**
- BUSA 1198 - Project Management Fundamentals **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 4

- BCIS 1210 - Introduction to MS Access **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**

- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**

  or
- Mathematics Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- **Any BUSA, ENTR, MGMT or MKTG course not included in the degree.** *(if not previously taken)*
- ACCT 1150 - QuickBooks **3 credit hour(s)**
- BFIN 1110 - Personal Financial Planning for College Students **3 credit hour(s)**
- BHT 1005 - Survey of Business, Hospitality & Technology **3 credit hour(s)**
- IT 1004 - Computer and Keyboarding Basics **3 credit hour(s)**
- Foreign Language **3-4 credit hour(s)**

- OTEC 1096-1996 - Special Topics **1-3 credit hour(s) ***

  or
- OTEC 2096-2996 - Special Topics **1-3 credit hour(s) ***

- OTEC 1175 - Computers in the Medical Office **2 credit hour(s)**
- OTEC 2097 - Independent Study **1-6 credit hour(s)**
- OTEC 2998 - Internship **3 credit hour(s)**

*** Maximum 3 Special Topics credits accepted toward degree**

PARALEGAL STUDIES

Paralegal Studies, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

The Paralegal program prepares students for careers in the legal field. Paralegals are skilled professionals who perform practical 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, and case management.

See Recommended Sequence of Courses

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.

- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Gainful Employment information is available from Job Connection Services. Employment opportunities include placement in law firms, corporate legal departments, legal aid offices, public agencies and insurance companies. Students with a criminal background may have limited employment opportunities. Students should contact appropriate agencies and employers for hiring and employment practices. For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in *my***CNM**.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BUSA 1115 - Business English I **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- PL 1110 - Introduction to Paralegal Studies **3 credit hour(s)**
- PL 1130 - Torts **3 credit hour(s)**

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- PHIL 1120 - Logic, Reasoning, & Critical Thinking **3 credit hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**
- PL 1120 - American Law and Ethics **3 credit hour(s)**
- PL 1140 - Legal Research and Writing I **3 credit hour(s)**

Term 3

- Creative and Fine Arts Requirement **3 credit hour(s)**
- PL 2130 - Criminal Litigation **3 credit hour(s)**
- PL 2140 - Legal Research and Writing II **3 credit hour(s)**
- PL 2150 - Evidence **3 credit hour(s)**
- PL 2160 - Law Office Management **3 credit hour(s)**

Term 4

- PL 2098 - Internship **3 credit hour(s)**
- PL 2120 - Civil Litigation **3 credit hour(s)**
- PL 2220 - Wills Probate and Estate Planning **3 credit hour(s)**
- PL 2240 - Paralegal Computer Applications **3 credit hour(s)**
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

PATIENT CARE TECHNICIAN

Patient Care Technician, Certificate of Achievement

School of Nursing & Patient Support (NPS)

This program provides students the knowledge needed to function as a Patient Care Tech in the acute care setting. Courses provide instruction on medical terminology, supervised practice of sterile technique, urinary catheterization, EKG lead placement, venipuncture, point of care testing, and other procedures related to the care of a patient in an acute care setting.

See Recommended Sequence of Courses

Special Requirements

Criminal Background

Most of the health programs in NPS require students undergo the New Mexico Department of Health caregivers criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in NPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move

a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Nursing and Patient Support (NPS) for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, educational resources, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**

- PCT 1020 - Patient Care Technician **4 credit hour(s)**
- PCT 1090 - Patient Care Tech Clinical Experience **2 credit hour(s)**
- PCT 1092 - Patient Care Technician Lab **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 10

PHARMACY SCIENCES

Pharmacy Technician Advanced Level, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

As healthcare services continue to grow to meet demand, pharmacies are increasingly becoming an integral part of the healthcare system. Because pharmacists are fulfilling a more significant number of clinical duties that were traditionally carried out by physicians, Pharmacy Technicians responsibilities are increasing and including additional skill sets and knowledge that will enable them to assist the pharmacist in the daily operations of the pharmacy. The advanced technician roles support the goals of ASHP's Practice Advancement Initiative (PAI) and demonstrate critical and innovative roles pharmacy technicians have in patient care.

The Pharmacy Technician Advanced Level Associate of Applied Science is designed to prepare students for a career in the emerging roles of advanced pharmacy technicians in a variety of contemporary settings such as hospital, community, mail-order pharmacies and other pharmacy related industries.

Students will receive classroom, laboratory and practical experience covering additional knowledge, skills, behaviors, and abilities needed for advanced practice. Included within the didactic and simulated portions of the program are content-specific blocks of instruction dealing with Medication Therapy Management, Point of Care testing processes, Medication Reconciliation processes, Pharmacy Informatics, Medication and Patient Safety, and other advanced pharmacy technician roles.

The Central New Mexico Community College Pharmacy Technician Program is jointly accredited by the American Society of Health System Pharmacists (ASHP), 4500 East-West Highway, Suite 900, Bethesda, MD 20814 Phone 866-279-0681 and Accreditation Council for Pharmacy Education (ACPE), 135 S. LaSalle Street, Suite 4100, Chicago, IL 60603, Phone 312-664-357 and is a PTCB-recognized sterile compounding education/training program.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is an: Associate of Applied Science
- This educational option can be completed:
  5 terms: Students that have obtained training and received a certificate from an ASHP/ACPE

accredited program may be eligible to reduce their time to graduate to less than five terms.
- This educational option can be started: Fall and Spring
- Primary course location: Westside campus

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Special Requirements

New Mexico Board of Pharmacy Registration requirements

- 18 years old before enrolling in PT 2090 - Pharmacy Technician Clinical and PT 2690 - Advanced Pharmacy Technician Clinical
- Valid Social Security Number (SSN) for registration as a Pharmacy Technician For additional information on New Mexico Board of Pharmacy requirements for Pharmacy Technicians, please click on the following link: http://164.64.110.134/parts/title16/16.019.0022.html

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health caregivers criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Illicit drug use, criminal background checks, and immunization status may prevent future employment as a pharmacy technician. Clinical Extern sites, employers, and State Boards of Pharmacy have regulations about drug use, criminal backgrounds, and immunization status.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Educational Opportunities

Embedded Entry Level Certificate of Completion

Career Opportunities

- According to U.S Bureau of Labor Statistics on an average a Pharmacy technician, makes **$37,970 annually** and the average wage per hour was estimated to be $18.25. While the best paid earned $49,990 the lowest earned $32,230 annually.

New Mexico workforce solutions projects a 24% increase (2014-2024) in the healthcare support industry, which includes pharmacy technician occupations. (Bureau of Labor Statistics (BLS), U.S. Department of Labor. 2019. Occupational Outlook Handbook, Pharmacy Technicians. Online, https://www.bls.gov/ooh/healthcare/pharmacy-technicians.htm#tab-1)

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- **Enrolled in High School, High School Diploma or GED- ASHP Standard**
- **Math Skills 2 Alg**
- **Reading and Writing Skills 2**

Courses

Term 1

- Laboratory Science Requirement **3-4 credit hour(s)*****

- PT 1003 - Pharmacy Calculations **3 credit hour(s)**
- PT 1011 - Pharmacy Technician Introduction **3 credit hour(s)**
- PT 1192 - Pharmacy Technician Processes Lab **2 credit hour(s)**
- PT 1316 - Pharmacy Technician Pharmacology I **3 credit hour(s)**

Term 2

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**
- HLTH 1010 - Medical Ethics and Law **1 credit hour(s)**
- PT 1710 - Intermediate Pharmacy Technician **3 credit hour(s)**
- PT 1716 - Pharmacy Technician Pharmacology II **3 credit hour(s)**
- PT 2092 - Sterile USP Compounding Lab – Hazardous and Non-Hazardous Preparations **2 credit hour(s)**

Term 3

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
  or
- COMM 2140 - Small Group Communication **3 credit hour(s)**
  or
- COMM 2180 - Business and Professional Communication **3 credit hour(s)**
- PT 1792 - Non-sterile USP Compounding Lab – Hazardous & Non-Hazardous Preparations **2 credit hour(s)**
- PT 2010 - Pharmacy Technician Professionalism **3 credit hour(s)**
- PT 2016 - Pharmacy Technician Pharmacology III **3 credit hour(s)**
- PT 2090 - Pharmacy Technician Clinical **3 credit hour(s)**

Term 4

- PT 2510 - Advanced Pharmacy Technician **3 credit hour(s)**
- PT 2515 - Advanced Pharmacy Technician Medication and Patient Safety **3 credit hour(s)**
- PT 2520 - Advanced Pharmacy Technician Informatics **2 credit hour(s)**
- PT 2592 - Advanced Pharmacy Technician Laboratory **2 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 5

- Mathematics Requirement **3 credit hour(s)****
- PT 2690 - Advanced Pharmacy Technician Clinical **3 credit hour(s)**
- PT 2999 - Advanced Pharmacy Technician Capstone **1 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

- Notes

*Recommended for transfer ECON 2120 or PSYC 1110

**Recommended for transfer MATH 1350 or MATH 1130

***Recommend BIOL 1130 – Introductory Anatomy and Physiology

Pharmacy Technician Entry Level, Certificate of Completion

School of Health, Wellness & Public Safety (HWPS)

The Pharmacy Technician Entry Level certificate of completion prepares graduates, working under the supervision of a licensed and registered pharmacist, for a career as a pharmacy technician in a variety of contemporary settings such as hospital, community, mail-order pharmacies and other pharmacy related industries.

Students will receive classroom, laboratory and practical experience covering all aspects of the profession. Included within the laboratory portions of the program is a 90-hour content-specific block of instruction dealing with the preparation of sterile hazardous and non-hazardous intravenous products. This content-specific block, and documented experiential site sterile compounding training hours, may then be used in satisfying the New Mexico statute 61-11-11.1 training requirements for pharmacy technicians who compound sterile preparations. The laboratory portions also include an additional 90-hour content-specific block of instruction dealing with the preparation of non-sterile hazardous and non-hazardous compounded preparations.

Upon completion of the program, graduates will be eligible to sit for the National Pharmacy Technician Certification Examination administered by the Pharmacy Technician Certification Board (PTCB®). After one year of job experience as a PTCB-Certified Pharmacy Technician (CPhT) in a sterile compounding environment, graduates are eligible to sit for the Certified Compounded Sterile Preparation Technician™ (CSPT™) exam offered through PTCB®.

The Central New Mexico Community College Pharmacy Technician Program is jointly accredited by the American Society of Health System Pharmacists (ASHP), 4500 East-West Highway, Suite 900, Bethesda, MD 20814 Phone 866-279-0681 and Accreditation Council for Pharmacy Education (ACPE), 135 S. LaSalle Street, Suite 4100, Chicago, IL 60603, Phone 312-664-357 and is a PTCB-recognized sterile compounding education/training program.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is an: Certificate of Completion
- This educational option can be completed: Three terms
- This educational option can be started: Fall and Spring
- Primary course location: Westside campus

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Special Requirements

New Mexico Board of Pharmacy Registration requirements

- 18 years old before enrolling in PT2090 Pharmacy Technician Clinical and PT2690 Advanced Pharmacy Technician Clinical
- Valid Social Security Number (SSN) for registration as a Pharmacy Technician For additional information on New Mexico Board of Pharmacy requirements for Pharmacy Technicians, please click on the following link: https://www.srca.nm.gov/parts/title16/16.019.0022.html

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health caregivers criminal history screening program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Illicit drug use, criminal background checks, and immunization status may prevent future employment as a pharmacy technician. Clinical Extern sites, employers, and State Boards of Pharmacy have regulations about drug use, criminal backgrounds, and immunization status.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Educational Opportunities

Students planning to continue their education beyond the certificate level are encouraged to complete the Pharmacy Technician Advanced Level Associate of Applied Science degree.

Career Opportunities

Nationally, the Bureau of Labor Statistics (BLS) reports that pharmacy technician opportunities are projected to increase 12% from 2016-2026 with median pay in 2017 equal to $31,750. New Mexico workforce solutions projects a 24% increase (2014-2024) in the healthcare support industry, which includes pharmacy technician occupations. (Bureau of Labor Statistics (BLS), U.S. Department of Labor. 2019. Occupational Outlook Handbook, Pharmacy Technicians. Online, https://www.bls.gov/ooh/healthcare/pharmacy-technicians.htm#tab-1)

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- **Enrolled in High School, High School Diploma or GED- ASHP Standard**
- **Math Skills 2 Alg**
- **Reading and Writing Skills 2**

Courses

Term 1

- Laboratory Science Requirement **3-4 credit hour(s)*****
- PT 1011 - Pharmacy Technician Introduction **3 credit hour(s)**
- PT 1192 - Pharmacy Technician Processes Lab **2 credit hour(s)**
- PT 1003 - Pharmacy Calculations **3 credit hour(s)**
- PT 1316 - Pharmacy Technician Pharmacology I **3 credit hour(s)**

Term 2

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- HLTH 1010 - Medical Ethics and Law **1 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
  or
- HLTH 1003 - CPR, First Aid & Safety **1 credit hour(s)**

- PT 1710 - Intermediate Pharmacy Technician **3 credit hour(s)**
- PT 1716 - Pharmacy Technician Pharmacology II **3 credit hour(s)**
- PT 2092 - Sterile USP Compounding Lab – Hazardous and Non-Hazardous Preparations **2 credit hour(s)**

Term 3

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
  or
- COMM 2140 - Small Group Communication **3 credit hour(s)**
  or
- COMM 2180 - Business and Professional Communication **3 credit hour(s)**

- PT 1792 - Non-sterile USP Compounding Lab – Hazardous & Non-Hazardous Preparations **2 credit hour(s)**
- PT 2010 - Pharmacy Technician Professionalism **3 credit hour(s)**
- PT 2016 - Pharmacy Technician Pharmacology III **3 credit hour(s)**
- PT 2090 - Pharmacy Technician Clinical **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 41

***Recommend BIOL 1130 - Introductory Anatomy and Physiology

PHILOSOPHY

Philosophy, Associate of Arts

School of Liberal Arts (LA)

This new program is in response to the needs of students transferring from CNM to UNM in the humanities. CNM and UNM are partners on a grant for the Andrew W. Mellon Foundation, the purpose of which is to create transfer opportunities for students in the humanities. One strategy for this is to create pathways from CNM in humanities areas that have bachelor's degrees at UNM. Afterwards, students may go on to complete a master's and doctoral degree in Philosophy.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
  or
- Future of Thought Elective **3 credit hour(s)**

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- Mathematics Requirement **3 credit hour(s)**
- PHIL 1115 - Introduction to Philosophy **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- Creative and Fine Arts Requirement **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement **4 credit hour(s)**
- PHIL 1120 - Logic, Reasoning, & Critical Thinking **3 credit hour(s)**

Term 3

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**

- History of Thought Elective **3 credit hour(s)**
- Modern Language Requirement **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- Program Approved Elective **3 credit hour(s)**

- Arts and Sciences Electives **10 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

- Program Electives
- PHIL 1130 - Contemporary Moral Issues **3 credit hour(s)**
- PHIL 1135 - Introduction to Asian Philosophies **3 credit hour(s)**
- PHIL 2120 - Biomedical Ethics **3 credit hour(s)**
- PHIL 2130 - Environmental Ethics **3 credit hour(s)**
- PHIL 2135 - Ethics of Technology **3 credit hour(s)**
- PHIL 2210 - Early Modern Philosophy **3 credit hour(s)**
- PHIL 2220 - Greek Philosophy **3 credit hour(s)**
- PHIL 2240 - Introduction to Existentialism **3 credit hour(s)**
- PHIL 2310 - Business Ethics **3 credit hour(s)**
- PHIL 2996 - Special Topics **3 credit hour(s)**
- History of Thought Electives
- ENGL 2650 - World Literature I **3 credit hour(s)**
- ENGL 2660 - World Literature II **3 credit hour(s)**
- HIST 1150 - Western Civilization I **3 credit hour(s)**
- HIST 1160 - Western Civilization II **3 credit hour(s)**
- HUMN 1105 - Being Human: An Introduction to the Humanities **3 credit hour(s)**
- HUMN 1110 - Introduction to World Humanities I **3 credit hour(s)**
- RELG 1110 - Introduction to World Religions **3 credit hour(s)**
- RELG 2110 - Eastern Religions **3 credit hour(s)**
- RELG 2120 - Western Religions **3 credit hour(s)**
- Future of Thought Electives
- AMST 1160 - Environment, Science & Technology **3 credit hour(s)**
- CSCI 1108 - CS for All: Introduction to Computer Modeling **4 credit hour(s)**
- DGST 1110 - Introduction to Digital Studies **3 credit hour(s)**
- FUTR 1110 - Introduction to Futures Studies **3 credit hour(s)**
- PHIL 2135 - Ethics of Technology **3 credit hour(s)**

PHYSICAL THERAPIST ASSISTANT

Physical Therapist Assistant, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

Physical Therapist Assistant (PTA) is a five-term program during which the student will attain the knowledge, skills and professional behaviors necessary for employment as a Physical Therapist Assistant. Physical therapist assistants work as part of a team to provide physical therapy services under the direction and supervision of a licensed physical therapist. PTAs help people of all ages who have medical problems or other health-related conditions that limit their ability to move and perform functional activities in their daily lives.

See Recommended Sequence of Courses

Care provided by PTAs may include teaching patients exercises for mobility, strength, and coordination; training for activities such as walking with crutches, canes, or walkers; massage; and the use of physical agents and electrotherapy.

The hours and days worked vary by practice setting. A PTA must use critical thinking and problem solving skills on a daily basis. A PTA must also possess excellent communication and interpersonal skills to interact appropriately with patients, families, co-workers, and other healthcare providers.

Students are prepared to sit for the national board exams administered by the Federation of State Boards of Physical Therapy (FSBPT).

The Physical Therapist Assistant Program at Central New Mexico Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave., Suite 100 | Alexandria, VA | 22305-3085; telephone: 800-999-2782; email: accreditation@apta.org; website: http://www.capteonline.org.

Please check with an advisor for more information.

Program Entry Registration Screening

This is a "Coordinated Program Entry" program; students must complete a pre-registration screening process administered through the Coordinated Program Entry Office before being eligible to register for program courses.

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health Caregivers Criminal History Screening Program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition

- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

There is currently a nationwide demand for physical therapy assistants. Graduates will be employed as physical therapy assistants in hospitals, outpatient clinics, long term care facilities, home health, and rehabilitation facilities.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Coordinated Entry Program
- **High School Diploma or Equivalent**
- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- Mathematics Requirement **3 credit hour(s)**
- PTA 1010 - The Profession of Physical Therapy **1 credit hour(s)**
- PTA 1020 - Pre-PTA Anatomy Fundamentals **4 credit hour(s)**
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**
- BIOL 1140 - Biology for Health Sciences **3 credit hour(s)**
- BIOL 1140L - Biology for Health Sciences Lab **1 credit hour(s)**

Term 2 - Coordinated Entry

- PTA 1110 - Orientation to Physical Therapist Assistant **3 credit hour(s)**
- PTA 1120 - Clinical Kinesiology **3 credit hour(s)**
- PTA 1130 - PTA Pathophysiology **3 credit hour(s)**
- PTA 1135 - Pathophysiology Lab **1 credit hour(s)**
- PTA 1140 - PTA Procedures I **5 credit hour(s)**

Term 3

- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
- PTA 1520 - Therapeutic Exercise **5 credit hour(s)**
- PTA 1530 - Orthopedics for PTA **2 credit hour(s)**
- PTA 1531 - Orthopedics for the PTA Lab **2 credit hour(s)**
- PTA 1533 - Physical Agents Lab **2 credit hour(s)**
- PTA 1540 - Clinical Neurology and Management **4 credit hour(s)**

Term 4

- Humanities Requirement **3 credit hour(s)**
- PTA 2010 - PTA Procedures II **3 credit hour(s)**
- PTA 2090 - Clinical Practicum I **4 credit hour(s)**

Term 5

- PTA 2210 - Professional Issues **1 credit hour(s)**
- PTA 2290 - Clinical Practicum II **4 credit hour(s)**
- PTA 2390 - Clinical Practicum III **4 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 68

PHYSICS

Physics, Associate of Science

School of Math, Science & Engineering (MSE)

Students majoring in Physics examine the properties of matter and energy and the relationships between them. Interested students can learn about career opportunities and pathways in Physics and related fields from the American Institute of Physics.

This program is designed to meet the requirements for an Associate of Science in Physics from CNM and prepare a student to obtain a Bachelor of Science in Physics at the University of New Mexico. The AS in Physics will also satisfy many of the requirements for a Bachelor of Science degree in Astronomy at UNM. However, students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students interested in transfer to UNM should consult the UNM Physics and Astronomy Department. Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements. College catalogs are generally available online. Students should also consult an advisor at CNM.

Educational Option Information

- This educational option is an Associate of Science Degree
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Immediate employment or transfer into a

baccalaureate program.
- This educational option can be started: Any Term
- Scheduling Information
- Follow course catalog recommendations to avoid scheduling problems.
- Primary course location: Main Campus

Special Requirements

Students are expected to purchase textbooks, lab manuals and lab safety equipment.

Information for people with felony convictions

- A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this degree are transferable and some may be applied to four-year degree programs. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 6
- Reading and Writing Skills 2

Courses

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- MATH 1510 - Calculus I **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)******

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- MATH 1520 - Calculus II **4 credit hour(s)**
- PHYS 1310 - Calculus-Based Physics I **4 credit hour(s)**
- PHYS 1310L - Calculus-Based Physics I Laboratory **1 credit hour(s)**
- Program Approved Science Lecture & Lab **4 credit hour(s)****

Term 3

- MATH 2530 - Calculus III **4 credit hour(s)**
- PHYS 1320 - Calculus-Based Physics II **4 credit hour(s)**
- PHYS 1320L - Calculus-Based Physics II Laboratory **1 credit hour(s)**
- Program Approved Communications Elective **3 credit hour(s)*****

- Unrestricted Elective **1 - 4 credit hour(s) (any course)**

  or
- Program Approved Elective **3 credit hour(s)**

Term 4

- PHYS 2310 - Calculus-based Physics III **4 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Program Approved Elective **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

This information is meant to serve as a general guide for students intending to major in Physics. Specific requirements for transfer will vary from school to school. It is the student's responsibility to contact the four-year transfer school to confirm specific admission and degree requirements.

- Program Approved Communications Elective
- COMM 1130 - Public Speaking **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- Program Approved Science**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- CHEM 1225L - General Chemistry II Laboratory for STEM Majors **1 credit hour(s)**
- GEOL 1110 - Physical Geology **3 credit hour(s)**
- GEOL 1110L - Physical Geology Laboratory **1 credit hour(s)**
- Program Approved Elective
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- CSCI 1108 - CS for All: Introduction to Computer Modeling **4 credit hour(s)**
- CSCI 1230 - C Programming **4 credit hour(s)**
- CSCI 1260 - Computer Programming Fundamentals Java I **4 credit hour(s)**
- CSCI 1153 - Programming in Matlab **4 credit hour(s)**
- MATH 2420 - Applied Linear Algebra **3 credit hour(s)** *

Note

*Check with your intended transfer university. Not accepted for degree requirements at all universities.

**Check with your intended transfer university. Recommended non-physics STEM courses change depending on transfer school and physics concentration being pursued

***Recommend ENGL 2210 for program approved communication requirement

****Students who plan to take CSCI 1260 should take either BCIS 1110 or CSCI 1108. The prerequisite for CSCI 1260 is either BCIS 1110 or CSCI 1108.

PLUMBING AND GAS FITTING

Plumbing and Gas Fitting, Certificate of Completion

School of Skilled Trades & Arts (STA)

The Plumbing Certificate program provides students with opportunities to develop marketable skills in areas of installation, repair and maintenance of common plumbing systems. Mathematical computations; interpretation of code, manufacturer's requirements, descriptions of technological advancements, public health and general public safety responsibilities are emphasized. Core principles and concepts of plumbing systems are cornerstones for each course. Classroom theory leads to team and individual hands-on projects, which are recorded, completed and evaluated. Plumbing safety, blueprint reading, gas fittings, pipe layout, drain waste and vent piping systems are subjects covered during the first term. Backflow prevention, commercial plumbing, building maintenance and repair, hydronics and plumbing systems and plumbing code applications are subjects concentrated on during the second term. Completion of the Plumbing Certificate program provides students with the education and experience for a New Mexico Journeyman's license.

Special Requirements

- Text books, hand tools and personal protective equipment must be purchased.
- Students should be able to lift and carry at least 50 lbs.
- Students are required to plan their work and be able to understand detailed instructions.
- The ability to visualize completed systems before beginning to work on them is an important skill.
- Course fees include the cost of tools required for lab activities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career and Educational Opportunities

Career opportunities are available in the public and private sector. A master plumber working for a systems installation business may advance to become a contractor, an inspector, educator or official in the plumbing trade.

Gainful Employment information is available from Career and Job Placement.

For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in my CNM.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- PLMB 1105 - Basic Plumbing, Safety and Pipe Fitting **3 credit hour(s)**
- PLMB 1111 - Plan Reading/Drawing **2 credit hour(s)**
- PLMB 1115 - Introduction to Gas Fitting and Combustion Venting **2 credit hour(s)**
- PLMB 1125 - Drain/Waste/Vent and Gray Water **3 credit hour(s)**
- PLMB 1130 - Water Piping Systems **2 credit hour(s)**
- PLMB 1305 - Trades Math **2 credit hour(s)**

Term 2

- PLMB 1215 - Service Plumbing, Repair, and Maintenance **2 credit hour(s)**
- PLMB 2211 - Plumbing Code **3 credit hour(s)**
- PLMB 1225 - Building Maintenance and Repair **2 credit hour(s)**
- PLMB 2210 - Mechanical Code **3 credit hour(s)**

Term 3

- PLMB 1205 - Water Supply Systems and Backflow Prevention **2 credit hour(s)**
- PLMB 1210 - Commercial Plumbing **2 credit hour(s)**
- PLMB 1230 - Boilers and Hydronic Systems **2 credit hour(s)**
- PLMB 1321 - Solar Thermal Systems **3 credit hour(s)**
- PLMB 1331 - Energy and Water Conservation Systems **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 36

POLITICAL SCIENCE

Political Science, Associate of Arts

School of Liberal Arts (LA)

Political science is a social science discipline that deals with the theory and practice of politics and the description and analysis of political systems and political behavior. Fields of political science include political theory, civics and comparative politics, national political systems, cross-national political analysis, political development, international relations, foreign policy analysis, public administration, and public policy.

This program is designed to meet the requirements for an Associate of Arts in Political Science from CNM and prepare a student to obtain a Bachelor of Arts in Political Science from a 4-year college or university.

Educational Option Information

- This educational option is an Associate of Arts Degree.
- This educational option can be completed: Part-time or full-time.
- This educational option is designed for: Meeting the requirements for an Associate of Arts in Political Science from CNM and to prepare a student to obtain a Bachelor of Arts in Political Science from a 4-year college or university.
- This educational option can be started: Any term.
- Primary course location: Main, Montoya, Rio Rancho, South Valley and Westside Campuses. Some courses are offered online.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The Associates Degree is an important milestone for student pursuing either a baccalaureate degree or a graduate degree in the field. Core requirements for the baccalaureate are met through completion of the CNM Associate of Arts degree.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Information about career opportunities and pathways in political science and related fields are available from the American Political Science Association.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**

  or

- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- POLS 1110 - Introduction to Political Science **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)** (from ANTH, ECON, PSYC, SOCI)

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
- Program Approved Elective **6 credit hour(s)**

Term 3

- Arts & Sciences Elective **3 credit hour(s)**

- COMM 1130 - Public Speaking **3 credit hour(s)**

  or

- COMM 2120 - Interpersonal Communication **3 credit hour(s)**

- Creative and Fine Arts Requirement **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**

Term 4

- Arts & Sciences Elective **7 credit hour(s)**
- Program Approved Elective **6 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

This information is meant to serve as a general guide for students intending to major in Political Science. Specific requirements for transfer will vary from school to school. It is the student's responsibility to contact the four-year transfer school to confirm specific admission and degree requirements.

Program Approved Electives

For students intending to transfer to the University of New Mexico's Political Science program, please refer to the UNM Political Science Major and Minor Requirements as you select which courses to take at CNM.

Choose from the following list of CNM courses:

- POLS 1120 - American National Government **3 credit hour(s)**

- POLS 2110 - Comparative Politics **3 credit hour(s)**
- POLS 2120 - International Relations **3 credit hour(s)**
- POLS 2130 - Political Ideas/Introduction to Political Theory **3 credit hour(s)**
- POLS 2150 - Public Policy and Administration **3 credit hour(s)**
- POLS 2140 - Introduction to Political Analysis **3 credit hour(s)**
- POLS 2998 - Internship in Politics **1-3 credit hour(s)**

PRE-HEALTH SCIENCES

Pre-Health Science (AA), General Health Sciences Concentration

School of Math, Science & Engineering (MSE)

The Pre-Health Sciences major is an Associate of Arts Degree program that prepares students to apply for health-related programs at CNM, as well as to transfer to the University of New Mexico (UNM) or other four-year degree programs in numerous health-related fields. It fulfills the general education core courses for 4-year degrees required by the state of New Mexico and the UNM core curriculum.

Educational Option Information

- This educational option is an: Associate of Arts Degree
- This program can be completed: Part-time or full time
- This educational option is designed for: The Pre-Health Sciences AA degree prepares students for numerous health-related programs at CNM as well as for transfer into health-related programs offered at 4-year institutions.
- This educational option can be started: Any term
- Primary course location: Main Campus

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.
- Other: Students are expected to purchase textbooks, lab manuals and lab safety equipment.

Educational Opportunities

This program is designed to prepare students to transfer into health-related programs offered at 4-year institutions.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 4 **or** Math Skills 3
- Reading and Writing Skills 2

Courses

Term 1

- BIOL 1140 - Biology for Health Sciences **3 credit hour(s)**
- BIOL 1140L - Biology for Health Sciences Lab **1 credit hour(s)**
- CHEM 1120 - Introduction to Chemistry **3 credit hour(s)**

  and
- CHEM 1120L - Introduction to Chemistry Laboratory **1 credit hour(s)**

  or
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**

  and
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Unrestricted Elective **3 credit hour(s)**

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**

Term 3

- Multi-Discipline/Flexible Requirement **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Unrestricted Elective **7 credit hour(s)**

Term 4

- Creative and Fine Arts Requirement **3 credit hour(s)**
- Program Approved Communications Elective **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Unrestricted Elective **9 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

Students must successfully complete 8-10 credit hour(s) from the following:

- BIOL 1130 - Introductory Anatomy and Physiology **3 credit hour(s)**
- BIOL 1130L - Introduction to Anatomy and Physiology Lab **1 credit hour(s)**
- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
- BIOL 2210L - Human Anatomy and Physiology I Lab **1 credit hour(s)**
- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
- BIOL 2225L - Human Anatomy and Physiology II Lab **1 credit hour(s)**
- BIOL 2310 - Microbiology **3 credit hour(s)**
- BIOL 2310L - Microbiology Lab **1 credit hour(s)**
- BIOL 2510 - Pathophysiology I **3 credit hour(s)**
- CHEM 2120 - Integrated Organic Chemistry and Biochemistry **4 credit hour(s)**
- NUTR 2110 - Human Nutrition **3 credit hour(s)**
- Program Approved Communications Elective
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**

Pre-Health Science (AA), Pre-Nursing Concentration

School of Math, Science & Engineering (MSE)

The Pre-Health Sciences major is an Associate of Arts Degree program that prepares students to apply for health-related programs at CNM, as well as to transfer to UNM or other four-year degree programs in numerous health-related fields. It fulfills the general education core courses for 4-year degrees required by the state of New Mexico and the University of New Mexico core curriculum.

This program is designed to prepare students to transfer to a 4-year degree program in Nursing.

Educational Option Information

- This program can be completed: Part-time or full-time.
- This program can be started: Any term.
- Primary course location: Main Campus
- Additional requirements for this educational option:
- Students are expected to purchase textbooks, lab manuals and lab safety equipment.
- A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.
- Individual courses associated with this program may require students to purchase additional materials.

Educational Opportunities

The Pre-Health Sciences degree is an associate of arts degree that prepares students to transfer to UNM or other four-year degree programs in numerous health-related fields. It fulfills the general education core courses for 4-year degrees required by the state of New Mexico. This particular concentration prepares students for transfer into a 4-year Nursing degree program.

Students from CNM seeking a baccalaureate degree should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements. College catalogs are generally available online. Students should also consult an advisor at CNM.

Career Opportunities

Employment of registered nurses is projected to grow 19 percent from 2012 to 2022, faster than the average for all occupations. Growth will occur for a number of reasons, including an increased emphasis on preventative care; growing rates of chronic conditions, such as diabetes and obesity; and demand for healthcare services from the baby boomer population, as they live longer and more active lives.

Program Requirements

- Math Skills 3
- Reading and Writing Skills 2

Courses

Term 1

- BIOL 1140 - Biology for Health Sciences **3 credit hour(s)**
- BIOL 1140L - Biology for Health Sciences Lab **1 credit hour(s)**
- CHEM 1120 - Introduction to Chemistry **3 credit hour(s)**
- CHEM 1120L - Introduction to Chemistry Laboratory **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**

Term 2

- BIOL 2310 - Microbiology **3 credit hour(s)**
- BIOL 2310L - Microbiology Lab **1 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- MATH 1350 - Introduction to Statistics **3 credit**

hour(s)
or

- MATH 1350P - Introduction to Statistics Plus **4 credit hour(s)**

- PSYC 2120 - Developmental Psychology **3 credit hour(s)**

Term 3

- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s) ***
- NUTR 2110 - Human Nutrition **3 credit hour(s)**
- Unrestricted Elective **3 credit hour(s)**
- Unrestricted Elective **3 credit hour(s)**
- Unrestricted Elective **3 credit hour(s)**

Term 4

- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s) ****
- BIOL 2510 - Pathophysiology I **3 credit hour(s)**

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**

- Creative and Fine Arts Requirement **3 credit hour(s)**
- Unrestricted Elective **3 credit hour(s) * * ***

Minimum Credit Hours Required to Complete Degree: 60

Notes

***The Anatomy and Physiology I Lab course, BIOL 2210L, is recommended but not required.**

****The Anatomy and Physiology II Lab course, BIOL 2225L, is recommended but not required.**

***** Students are recommended to take either a Modern Language or Pathophysiology II, BIOL 2520.**

Pre-Health Science (AS), Pre-Medical Concentration

School of Math, Science & Engineering (MSE)

The Pre-Health Sciences major is a program that prepares students to apply for health-related programs at CNM, as well as to transfer to UNM or other four-year degree programs in numerous health-related fields. It fulfills the general education core courses for 4-year degrees required by the state of New Mexico and the University of New Mexico core curriculum.

This program is designed to prepare students for medical school. The courses included in the program are those required as prerequisites for the UNM School of Medicine (SOM) and most schools of medicine nationwide.

The proposed term-by-term list only includes CNM's General Education requirements and the minimum science and math prerequisites for the UNM SOM while also including their list of Strongly Recommended and Recommended courses that are also offered at CNM.

Educational Option Information

- This educational option can be completed: Part-time or full-time
- This program can be started: Any term
- Primary course location: Main Campus
- Additional requirements that apply to this educational option:
- A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

An associate degree is an important milestone for students pursuing either a baccalaureate degree or graduate degree. Core requirements for the baccalaureate are met through completion of the CNM Associate of Science degree.

This program is designed to prepare students for medical school. The courses included in the program are those required as prerequisites for the UNM School of Medicine (SOM) and most schools of medicine nationwide.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**
- BIOL 2110L - Principles of Biology: Cellular and Molecular Biology Lab **1 credit hour(s)**
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- MATH 1220 - College Algebra **3 credit hour(s)**
  or
- MATH 1220P - College Algebra Plus **4 credit hour(s)**

- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**

Term 2

- BIOL 2410 - Principles of Biology: Genetics **3 credit hour(s)**
- BIOL 2410L - Principles of Biology: Genetics Lab **1 credit hour(s)**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- CHEM 1225L - General Chemistry II Laboratory for STEM Majors **1 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- MATH 1430 - Applications of Calculus I **3 credit hour(s)**

Term 3

- CHEM 2130 - Organic Chemistry I **3 credit hour(s)**
- CHEM 2130L - Organic Chemistry I Laboratory **1 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**
- Unrestricted Elective **3 credit hour(s)***

Term 4

- CHEM 2135 - Organic Chemistry II **3 credit hour(s)**
- CHEM 2135L - Organic Chemistry II Laboratory **1 credit hour(s)**
- PHYS 1240 - Algebra-Based Physics II **4 credit hour(s)**
- Program Approved Communications Elective **3 credit hour(s)**
- Unrestricted Elective **3 credit hour(s)***

Minimum Credit Hours Required to Complete Degree: 62

- Courses not required by CNM or the UNM School of Medicine but Strongly Recommended by the UNM School of Medicine
- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
- BIOL 2210L - Human Anatomy and Physiology I Lab **1 credit hour(s)**
- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
- BIOL 2225L - Human Anatomy and Physiology II Lab **1 credit hour(s)**
- BIOL 2310 - Microbiology **3 credit hour(s)**
- BIOL 2310L - Microbiology Lab **1 credit hour(s)**
- Program Approved Communications Elective
- COMM 1130 - Public Speaking **3 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**

Note

*It is recommended that students consider courses included in the list of courses strongly recommended by the UNM School of Medicine.

Pre-Health Science, Pre-Medical Certificate of Completion

School of Math, Science & Engineering (MSE)

The Pre-Health Sciences major is an Associate of Arts Degree program that prepares students to apply for health-related programs at CNM, as well as to transfer to UNM or other four-year degree programs in numerous health-related fields. It fulfills the general education core courses for 4-year degrees required by the state of New Mexico and the University of New Mexico core curriculum.

This certificate of completion is specifically designed to meet the needs of students who already possess a Bachelor's degree (or are near completion), have decided to apply to medical schools, and need to complete the science and math prerequisite courses.

Educational Option Information

- This educational option can be completed: Part-time or full-time
- This program can be started: Any term
- Primary course location: Main Campus
- Additional requirements that apply to this educational option:
- A felony conviction will not prevent entry into the program or employment; however, it may limit available employment opportunities.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

This certificate of completion is specifically designed to meet the needs of students who already possess a Bachelor's degree (or are near completion), have decided to apply to medical schools, and need to complete the science and math prerequisite courses.

Students from CNM should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements. College catalogs are generally available online. Students should also consult an advisor in CNM Advisement.

Many of the courses in this program are transferable and

some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Program Requirements

- Math Skills 5
- Reading and Writing Skills 2

Courses

Term 1

- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**
- BIOL 2110L - Principles of Biology: Cellular and Molecular Biology Lab **1 credit hour(s)**
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- MATH 1430 - Applications of Calculus I **3 credit hour(s)**

Term 2

- BIOL 2410 - Principles of Biology: Genetics **3 credit hour(s)**
- BIOL 2410L - Principles of Biology: Genetics Lab **1 credit hour(s)**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- CHEM 1225L - General Chemistry II Laboratory for STEM Majors **1 credit hour(s)**
- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**

Term 3

- CHEM 2130 - Organic Chemistry I **3 credit hour(s)**
- CHEM 2130L - Organic Chemistry I Laboratory **1 credit hour(s)**
- PHYS 1240 - Algebra-Based Physics II **4 credit hour(s)**

Term 4

- CHEM 2135 - Organic Chemistry II **3 credit hour(s)**
- CHEM 2135L - Organic Chemistry II Laboratory **1 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 35

Courses not required by CNM or the UNM School of Medicine but strongly recommended by the UNM School of Medicine

- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
- BIOL 2210L - Human Anatomy and Physiology I Lab **1 credit hour(s)**
- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
- BIOL 2225L - Human Anatomy and Physiology II Lab **1 credit hour(s)**
- BIOL 2310 - Microbiology **3 credit hour(s)**
- BIOL 2310L - Microbiology Lab **1 credit hour(s)**

PRE-LAW

Pre-Law, Associate of Arts

School of Liberal Arts (LA)

The purpose of the program is to prepare students interested in pursuing law to transfer into a pre-law concentration degree program at a four-year university. Students may transfer directly into philosophy or political science programs on their path to the law degree or careers in related fields.

See Recommended Sequence of Courses

Educational Option Information

- This educational option is an: Associate of Arts Degree
- This educational option can be completed: Part-Time or Full-Time
- This educational option is designed for: Students to complete relevant courses applicable to university programs with pathways to law school.
- This educational option can be started: Any Term
- Scheduling Information: Follow course catalog recommendations to avoid scheduling problems.
- Primary course location: Many classes can be completed at branch campuses or online, but some are available only at Main campus.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions.

Career Opportunities

This degree is designed for transfer. Employment in legal fields may require additional degrees and certifications.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information

Literacy and Systems **3 credit hour(s)**
or

- Arts & Sciences Elective **3 credit hour(s)**

- ENGL 1110 - Composition I **3 credit hour(s)**
or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- Humanities Requirement **3 credit hour(s) ***
- Mathematics Requirement **3 credit hour(s) * ***
- Social and Behavioral Science Requirement **3 credit hour(s) * * ***

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- PHIL 1120 - Logic, Reasoning, & Critical Thinking **3 credit hour(s)**
- Social and Behavioral Requirement **3 credit hour(s) * * * ***

Term 3

- COMM 1130 - Public Speaking **3 credit hour(s)**
or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**

- Creative and Fine Arts Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**
- Program Approved Electives **6 credit hour(s)**

Term 4

- Arts & Sciences Elective **4 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
- Program Approved Electives **6 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

*** HIST 1120 recommended for students intending to transfer to UNM.**

*** * MATH 1350 recommended for students intending to transfer to UNM.**

*** * * SOCI 1110 recommended for students intending to transfer to UNM.**

*** * * * POLS 1120 recommended for students intending to transfer to UNM.**

Program Approved Electives

- **Any POLS course**
- ENGL 2120 - Intermediate Composition **3 credit hour(s)**
- PHIL 2210 - Early Modern Philosophy **3 credit hour(s)**
- PHIL 2220 - Greek Philosophy **3 credit hour(s)**
- SOCI 2120 - Introduction to Criminal Justice Systems **3 credit hour(s)**
or
- SOCI 2130 - Introduction to Criminology **3 credit hour(s)**

PSYCHOLOGY

Psychology, Associate of Arts

School of Liberal Arts (LA)

Psychology is the science of behavior and mental processes. Students of psychology learn about a variety of topics including nervous system function, human development, learning, memory, the role of the mind in physical health, and individual behavior in social contexts.

This program is designed to meet the requirements for an Associate of Arts in Psychology from CNM and prepare a student to obtain a Bachelor of Arts in Psychology from a 4-year college or university.

Educational Option Information

- This program can be completed: Part-time or full-time.
- This program can be started: Any term.
- Primary course location: Main, Montoya, Rio Rancho, South Valley or Westside Campuses.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.
- Individual courses associated with this program may require students to purchase additional materials.

Educational Opportunities

This program is designed to meet the requirements for an Associate of Arts in Psychology from CNM and prepare a student to obtain a Bachelor of Arts in Psychology at University of New Mexico. However, students from CNM seeking a baccalaureate degree may also transfer to other institutions.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

- Students should always refer to the catalog of their intended transfer institution for admission, program, course, and graduation requirements. College catalogs are generally available online.

Students should also consult an advisor in CNM Advisement.

Students interested in transfer to UNM should consult the UNM psychology department.

NOTE: Psychology minors at UNM complete PSYC 1110 Introduction to Psychology and any 5 other psychology courses for a total of 18 credit hours, and 2 of those courses (6 credit hours) must be taken at UNM. Therefore, up to 4 total psychology courses (12 credit hours), selected from any psychology courses offered at CNM, can be applied toward graduation requirements for a psychology minor at UNM.

Career Opportunities

Interested students can learn about career opportunities and pathways in psychology and related fields from the American Psychological Association.

Program Requirements

- Math 1111-1114 Series **or** Math Skills 3 **or** Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)** *recommended

  or
- Arts & Sciences Elective **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 3

- Arts & Sciences Elective **3 credit hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**

  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**
- PSYC 2510 - Statistical Principles for Psychology **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- Arts & Sciences Elective **4 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- Program Approved Electives **6 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

This information is meant to serve as a general guide for students intending to major in Psychology. Specific requirements for transfer will vary from school to school. It is the student's responsibility to contact the four-year transfer school to confirm specific admission and degree requirements.

*recommended if needed

Program Approved Electives

Choose from the following list of courses:

- PSYC 2110 - Social Psychology **3 credit hour(s)**
- PSYC 2120 - Developmental Psychology **3 credit hour(s)**
- PSYC 2210 - Abnormal Psychology **3 credit hour(s)**
- PSYC 2220 - Cognitive Psychology **3 credit hour(s)**
- PSYC 2250 - Brain and Behavior **3 credit hour(s)**
- PSYC 2270 - Psychology of Learning and Memory **3 credit hour(s)**
- PSYC 2320 - Health Psychology **3 credit hour(s)**

RADIOLOGIC TECHNOLOGY

Radiologic Technology, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

Radiologic technology is a healthcare profession for practitioners who 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). The program meets the ARRT (American Registration of Radiologic Technologist) accreditation requirements through the NCACS-HLC institutional accreditation of Central New Mexico Community College.

See Recommended Sequence of Courses

Special Requirements

Program Entry Registration Screening

This is a "Coordinated Program Entry" program; students must complete a pre-registration screening process administered through the Coordinated Program Entry Office before being eligible to register for program courses.

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health Caregivers Criminal History Screening Program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites (i.e. clinical courses at hospitals, internships, etc.).

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career 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. A career in radiologic technology offers vast opportunities for advancement in specialized imaging techniques.

Gainful Employment information is available from Career and Job Placement.

For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in myCNM.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Coordinated Entry Program
- Reading and Writing Skills 2
- Math Skills 2 Alg

Courses

Term 1

- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s) ****
- BPCS 1092 - Basic Patient Care Skills **1 credit hour(s)**

  or
- NA 1020 - Principles of Nursing Assistant **3 credit hour(s)**

  and
- NA 1093 - Principles of Nursing Assistant Lab **2 credit hour(s)**

  and
- NA 1190 - Nursing Assistant Clinical **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or

- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
- Mathematics Requirement **3 credit hour(s) ***

Term 2 (Coordinated Entry)

- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s) * ***
- RADT 1070 - Radiographic Positioning I **5 credit hour(s)**
- RADT 1075 - Patient Care for Radiography **2 credit hour(s)**
- RADT 2410 - Radiographic Physics and Instrumentation **3 credit hour(s)**

Term 3

- RADT 1570 - Radiographic Positioning II **5 credit hour(s)**
- RADT 1690 - Clinical Experience I **5 credit hour(s)**
- RADT 2010 - Radiographic Imaging I **3 credit hour(s)**

Term 4

- PHIL 2120 - Biomedical Ethics **3 credit hour(s)**
- RADT 2090 - Clinical Experience II **5 credit hour(s)**
- RADT 2404 - Radiographic Imaging II **3 credit hour(s)**

Term 5

- RADT 1520 - Radiation Biology and Protection **2 credit hour(s)**
- RADT 2408 - Radiographic Pathology and Cross-sectional Anatomy **3 credit hour(s)**
- RADT 2490 - Clinical Experience III **5 credit hour(s)**

Term 6

- RADT 2890 - Clinical Experience IV **6 credit hour(s)**
- RADT 2999 - Radiologic Technology Capstone **2 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 66

***** MATH 1220 or MATH 1350 recommended for transfer into the UNM Bachelor of Science in Radiologic Science degree.

*** *** It is strongly recommended that students take the Anatomy & Physiology lab courses concurrently with the lectures. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.

RESPIRATORY CARE

Respiratory Therapy, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

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 cardiopulmonary 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 cardiopulmonary 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 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. The CNM Respiratory Therapy Program is accredited by the Commission on Accreditation for Respiratory Care.

Program Goal: To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs).Special Requirements

Program Entry Registration Screening

This is a "Coordinated Program Entry" program; students must complete a pre-registration screening process administered through the Coordinated Program Entry Office before being eligible to register for program courses.

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health Caregivers Criminal History Screening Program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological

health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites. (i.e. clinical courses at hospitals, internships, etc.)

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

For the graduation policy refer to the Graduating From CNM section, cnm.edu or the Students tab in my CNM.

Career Opportunities

Graduates of the CNM Respiratory Therapy Program are employed by acute care hospitals, transitional care hospitals, home health care agencies, skilled nursing homes and cardiopulmonary rehabilitation centers within New Mexico and throughout the nation. The CNM program has a high 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.

The CNM Respiratory Therapy Program is required to publish CoARC Programmatic Outcomes Data. The intent of the reporting is that comparable information be readily available to the public.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- High School Diploma or Equivalent
- At least 18 years of age to apply for Coordinated Program Entry
- Coordinated Entry Program
- Math Skills 2 Alg
- Reading and Writing Skills 2
- Biology Skills

Courses

Term 1

- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
- BIOL 2310 - Microbiology **3 credit hour(s)**
- BIOL 2310L - Microbiology Lab **1 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)***

Term 2

- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
- RT 1020 - Physics of Respiratory Therapy **3 credit hour(s)**
- RT 1060 - Respiratory Therapy I **3 credit hour(s)**
- RT 1080 - Cardiopulmonary Pathophysiology I **1 credit hour(s)**
- RT 1090 - Clinical Experiences I **3 credit hour(s)**
- RT 1093 - Respiratory Therapy Lab I **1 credit hour(s)**
- RT 1094 - Basic Clinical Preparation Lab **1 credit hour(s)**

Term 3

- RT 1030 - Pharmacology of Respiratory Therapy **3 credit hour(s)**
- RT 1560 - Respiratory Therapy II **3 credit hour(s)**
- RT 1580 - Cardiopulmonary Pathophysiology II **1 credit hour(s)**
- RT 1590 - Clinical Experiences II **3 credit hour(s)**
- RT 1592 - Scenario Procedures Lab I **1 credit hour(s)**
- RT 1593 - Respiratory Therapy Lab II **1 credit hour(s)**

Term 4

- RT 2060 - Advanced Respiratory Therapy I **3 credit hour(s)**
- RT 2080 - Cardiopulmonary Pathophysiology III **2 credit hour(s)**

- RT 2090 - Advanced Clinical Experiences I **3 credit hour(s)**
- RT 2092 - Scenario Procedures Lab II **1 credit hour(s)**
- RT 2093 - Advanced Respiratory Therapy Lab I **1 credit hour(s)**
- RT 2094 - Advanced Clinical Prep Lab I **1 credit hour(s)**

Term 5

- Humanities Requirement **3 credit hour(s)****
- RT 2460 - Advanced Respiratory Therapy II **3 credit hour(s)**
- RT 2480 - Cardiopulmonary Pathophysiology IV **2 credit hour(s)**
- RT 2490 - Advanced Clinical Experiences II **3 credit hour(s)**
- RT 2492 - Scenario Procedures Lab III **1 credit hour(s)**
- RT 2493 - Advanced Respiratory Therapy Lab II **1 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 65

* **MATH 1350 - Introduction to Statistics recommended**

*** * PHIL 2120 - Biomedical Ethics recommended**

SOCIOLOGY

Sociology, Associate of Arts

School of Liberal Arts (LA)

Sociology is a social science that examines the social lives of individuals, groups, and societies. The discipline covers a range of topics, from the analysis of short contacts between anonymous individuals on the street to the study of global social processes. Information about career options for sociology majors is offered by the American Sociological Association.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

This program listed below is designed to meet the requirements for an Associate of Arts in Sociology from CNM and prepare a student to obtain a Bachelor of Arts in Sociology at University of New Mexico (UNM). Currently, UNM offers two concentrations for the sociology degree: (1) pre-law and (2) human services and social policy. These concentrations have slightly different requirements; courses accepted for each concentration are listed. A concentration is not required to earn a Bachelor of Arts in Sociology at UNM.

Students interested in transferring to UNM should consult the UNM Sociology Department. Students from CNM seeking a baccalaureate degree may also transfer to other institutions. Students should always refer to the catalog of their intended transfer institution for specific admission and curricular requirements. Students should also consult an advisor with CNM Advisement.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**

  or
- Program Approved Elective **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s) ***
- SOCI 1110 - Introduction to Sociology **3 credit hour(s)**

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Term 3

- Arts & Sciences Elective **6 credit hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**

  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Creative and Fine Arts Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Optional) **3 credit hour(s)**

Term 4

- Arts & Sciences Elective **4 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Social and Behavioral Sciences Requirement **3 credit hour(s)**

- SOCI 2410 - Introduction to Research Methods **3 credit hour(s)**
  or
- SOCI 2999 - Sociology and Criminology Capstone **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

This information is meant to serve as a general guide for students intending to major in Sociology. Specific requirements for transfer will vary from school to school. It is the student's responsibility to contact the four year transfer school to confirm specific admission and degree requirements.

*** MATH 1350 or MATH 1350P recommended for transfer**

Program Approved Electives

- SOCI 2120 - Introduction to Criminal Justice Systems **3 credit hour(s)**
- SOCI 2130 - Introduction to Criminology **3 credit hour(s)**
- SOCI 2140 - Juvenile Delinquency **3 credit hour(s)**
- SOCI 2210 - Sociology of Deviance **3 credit hour(s)**
- SOCI 2220 - Sociology of Gender **3 credit hour(s)**
- SOCI 2240 - Sociology of Intimate Relationships and Family **3 credit hour(s)**
- SOCI 2250 - Sociology of Race and Ethnicity **3 credit hour(s)**
- SOCI 2310 - Contemporary Social Problems **3 credit hour(s)**
- SOCI 2330 - Society and Personality **3 credit hour(s)**
- SOCI 2340 - Global Issues **3 credit hour(s)**
- SOCI 2410 - Introduction to Research Methods **3 credit hour(s)**
- SOCI 2235 - LGBTQ Issues & Identities **3 credit hour(s)**

SOFTWARE DEVELOPMENT

Software Development (AAS), Applications Developer Concentration

School of Business, Hospitality & Technology (BHT)

The Applications Developer Concentration provides students with a solid foundation in computer programming. Students develop critical thinking skills by learning to design code to model real life situations using at least three modern computer languages: C++, C#, Python and Java. Advanced classes such as Android Development, OpenGL, and ASP.Net provide cutting edge learning opportunities.

In addition, courses in SQL and database technology make the programming languages more versatile by facilitating interaction with databases. Students learn object-oriented design, Graphic User Interface construction and web applications and web services.

See Recommended Sequence of Courses

Educational Option Information

- This program can be completed: Part-time or full-time. (The program can be completed in four terms full-time.)
- This program can be started: Any term.
- Primary course location: Main Campus

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Other costs:

- USB flash drive is required ~ $40
- The three programming languages taught in this program have certification exams for intermediate programmers: C# Microsoft Specialist Certification 483, C++ Certified Associate Programmer - CPA, and Oracle Certified Associate Java SE 7 Programmer.

Educational Opportunities

Applications Developer graduates are encouraged to continue their education at a four-year college or university.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

In the workforce, computer programmers are commonly employed to maintain existing software, develop user interfaces, develop new software applications, program dashboards, model systems, trouble shoot technical problems, resolve database and configuration issues.

Employment opportunities for Applications Developer graduates include large scientific corporations, government agencies, government contractors, small specialized software development companies, utilities, etc.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**

  or
- CIST 1220 - Programming Fundamentals **3 credit hour(s)**
- CSCI 1220 - Computer Programming Fundamentals: Python **3 credit hour(s)**
- CSCI 1240 - C++ Programming I **3 credit hour(s)**
- COMM 1130 - Public Speaking **3 credit hour(s)**

Term 2

- CIST 2275 - C++ Programming II **3 credit hour(s)**
- CIST 1680 - Linux Essentials **3 credit hour(s)**
- CIST 2210 - Introduction to SQL (Structured Query Language) **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**

  or
- Social and Behavioral Science Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 3

- CIST 1261 - JavaScript Web Programming **3 credit hour(s)**
- CIST 2220 - .Net I/C# **3 credit hour(s)**
- CIST 2235 - Java Programming I **3 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**

  or
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)** (Except NTSC courses)

Term 4

- Application Developer Courses **9 credit hour(s)**
- CIST 2899 - Software Development Capstone **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

Application Developer Courses

- CIST 2237 - Android App Dev with Java and Kotlin **3 credit hour(s)**
- CIST 2215 - iPhone Programming with Swift **3 credit hour(s)**
- CIST 2225 - Game Development **3 credit hour(s)**
- CIST 2277 - C++ Programming III **3 credit hour(s)**
- CIST 2284 - .NET II/C# **3 credit hour(s)**

Program Approved Electives

- CIST 1996 - Special Topics **1-3 credit hour(s) ***

  or
- CIST 2996 - Special Topics **1-3 credit hour(s) ***

* Maximum 3 Special Topic credit hours allowed toward degree

- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- CIST 1410 - IT Essentials: Hardware **3 credit hour(s)**
- CIST 1413 - Network Administration Concepts **3 credit hour(s)**
- CIST 1605 - Internet of Things **3 credit hour(s)**
- CIST 1610 - IT Essentials: Software **3 credit hour(s)**
- CIST 1261 - JavaScript Web Programming **3 credit hour(s)**
- CIST 1263 - PHP Web Programming **3 credit hour(s)**
- CIST 2616 - Intro to Competitive Robotics **3 credit hour(s)**
- CIST 2097 - Independent Study **1-6 credit hour(s)**
- CIST 2237 - Android App Dev with Java and Kotlin **3 credit hour(s)**
- CIST 2215 - iPhone Programming with Swift **3 credit hour(s)**
- CIST 2225 - Game Development **3 credit hour(s)**
- CIST 2251 - Python Programming II **3 credit hour(s)**
- CIST 2277 - C++ Programming III **3 credit hour(s)**
- CIST 2284 - .NET II/C# **3 credit hour(s)**
- CIST 2798 - Internship **1 credit hour(s)**
- CIST 2898 - Internship **2 credit hour(s)**
- CIST 2998 - Internship **3 credit hour(s)**
- FDMA 1515 - Introduction to Digital Image Editing-Photoshop **3 credit hour(s)** (if not previously taken)
- FDMA 1535 - Introduction to Illustrator **3 credit hour(s)**

Software Development (AAS), Web Programming Concentration

School of Business, Hospitality & Technology (BHT)

Web Programming students acquire skills for entry level website designers and developers to create and publish industry standard compliant web content with strong hands-on knowledge of browser-side and server-side technology.

Educational Option Information

- This educational option can be completed: Part-time or full-time. The program can be completed in four terms full-time.
- This educational option is designed for: Immediate employment and transfer into a baccalaureate program.
- This educational option can be started: Any term.
- Primary course location: Main campus, many courses offered online.
- Are there any other course or licensing requirements that apply to this educational option (term by term)?
- Some courses in the program have associated course fees that cover the cost of industry recognized certification exams.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Education Opportunities

Many of CNM's CIS courses are transferrable to four-year degree programs, and CNM currently has Transfer Agreements with many colleges and universities.

Career Opportunities

The employment prospects for the web industry are good. Almost every organization maintains a web presence. There is a constant need to update web content and develop new features.

The Web Programming AAS concentration prepares the student to: Develop web content; create and maintain websites; promote or market web sites. Job titles associated with this degree include: Web Architect; Web Content Manager; Web Content Editor; Web Designer; Web Programmer; Web Administrator; Web Promoter; Web Marketer.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BUSA 1130 - Business Professionalism **3 credit hour(s)**
- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**

  or
- CIST 1220 - Programming Fundamentals **3 credit hour(s)**
- CIST 1217 - Overview of Web Technologies **3 credit hour(s)**
- CIST 1213 - Web Publishing **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**

  or
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- CSCI 1240 - C++ Programming I **3 credit hour(s)**
- CIST 1261 - JavaScript Web Programming **3 credit hour(s)**
- CIST 1680 - Linux Essentials **3 credit hour(s)**
- CIST 2210 - Introduction to SQL (Structured Query Language) **3 credit hour(s)**
- Communications Requirement **3 credit hour(s)**

Term 3

- CIST 2220 - .Net I/C# **3 credit hour(s)**
- CIST 1263 - PHP Web Programming **3 credit hour(s)**
- ENGL 1210 - Technical Communications **3 credit hour(s)**

  or
- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- Program Approved Elective **3 credit hour(s)**
- Laboratory Science Requirement **4-5 credit hour(s)** (Except NTSC courses)

Term 4

- CIST 2263 - Web Programming Framework **3 credit hour(s)**
- CIST 2899 - Software Development Capstone **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- Program Approved Elective **6 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 61

Program Approved Electives

- AIML 1310 - Introduction to Artificial Intelligence **3 credit hour(s)**
- AIML 1320 - Fundamentals of Artificial Intelligence **3 credit hour(s)**

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
- BFIN 1110 - Personal Financial Planning for College Students **3 credit hour(s)**
- BHT 1005 - Survey of Business, Hospitality & Technology **3 credit hour(s)**

- CIST 1996 - Special Topics **1-3 credit hour(s) ***

or

- CIST 2996 - Special Topics **1-3 credit hour(s) ***

- CSCI 1220 - Computer Programming Fundamentals: Python **3 credit hour(s)**
- CIST 1605 - Internet of Things **3 credit hour(s)**
- CIST 2097 - Independent Study **1-6 credit hour(s)**
- CIST 2235 - Java Programming I **3 credit hour(s)**
- CIST 2237 - Android App Dev with Java and Kotlin **3 credit hour(s)**
- CIST 2251 - Python Programming II **3 credit hour(s)**
- CIST 2275 - C++ Programming II **3 credit hour(s)**
- CIST 2277 - C++ Programming III **3 credit hour(s)**
- CIST 2284 - .NET II/C# **3 credit hour(s)**
- CIST 2998 - Internship **3 credit hour(s)**

*** Maximum 3 Special Topic credits allowed**

Software Development (Certificate of Completion), Applications Developer

School of Business, Hospitality & Technology (BHT)

This Software Development certificate is a subset of the core AAS degree technical courses. These core courses provide students with a solid foundation in computer programming. Students develop critical thinking skills by learning to design code to model real life situations using three computer languages - C++, C# and Java. Advanced classes include Android Development and ASP. Net.

In addition, courses in SQL and database design make the programming languages more versatile by facilitating interaction with data bases. Students learn object-oriented design, Graphic User Interface construction and web applications and web services.

Since this Software Development certificate is a subset of the core AAS degree technical courses, it will enable CNM students who have completed the CIS AAS degree in a different concentration to complete the remaining technical courses in this area and earn this CIS certificate. Additionally, this cert is ideal for students coming to CNM with AA/AAS/BS degrees who wish to do the core technical course work for this area.

See Recommended Sequence of Courses

Educational Option Information

- This educational option can be completed: Part-time or full-time.
- This educational option is designed for: Students who have completed an associates or bachelor's degree and wish to complete coursework to enter into the IT profession. .
- This educational option can be started: Any term.
- Primary course location: Main campus, many courses offered online.
- Other course or licensing requirements that apply to this educational option:
- Some courses in the program have associated course fees that cover the cost of industry recognized certification exams.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *pending* Financial Aid approval.
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**

or

- CIST 1220 - Programming Fundamentals **3 credit hour(s)**

- CSCI 1220 - Computer Programming Fundamentals: Python **3 credit hour(s)**
- CSCI 1240 - C++ Programming I **3 credit hour(s)**

Term 2

- CIST 1680 - Linux Essentials **3 credit hour(s)**
- CIST 2275 - C++ Programming II **3 credit hour(s)**
- CIST 2210 - Introduction to SQL (Structured Query Language) **3 credit hour(s)**

Term 3

- CIST 2220 - .Net I/C# **3 credit hour(s)**
- CIST 1261 - JavaScript Web Programming **3 credit hour(s)**
- CIST 2235 - Java Programming I **3 credit hour(s)**

Term 4

- CIST 2237 - Android App Dev with Java and Kotlin **3 credit hour(s)**
- CIST 2284 - .NET II/C# **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 33

Software Development (Certificate of Completion), Web Programming

School of Business, Hospitality & Technology (BHT)

This Web Programming certificate is a subset of the core AAS degree technical courses. These technical courses allow students to acquire skills for entry level website designers and developers to create and publish industry standard compliant web content with strong hands-on knowledge of browser-side and server-side technology.

Since this Web Programming certificate is a subset of the core AAS degree technical courses, it will enable CNM students who have completed the AAS degree in a different concentration to complete the remaining technical courses in this area and earn a certificate. Additionally, this cert is ideal for students coming to CNM with AA/AAS/BS degrees who wish to do the core technical course work for this area.

See Recommended Sequence of Courses

Educational Option Information

- This educational option can be completed: Part-time or full-time.
- This educational option is designed for: Students who have completed an associates or bachelor's degree and wish to complete coursework to enter into the IT profession. .
- This educational option can be started: Any term.
- Primary course location: Main campus; many courses offered online.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *pending* Financial Aid approval.
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Gainful Employment information is available from Career and Job Placement.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
  or
- CIST 1220 - Programming Fundamentals **3 credit hour(s)**
- CIST 1213 - Web Publishing **3 credit hour(s)**
- CIST 1217 - Overview of Web Technologies **3 credit hour(s)**

Term 2

- CIST 1680 - Linux Essentials **3 credit hour(s)**
- CIST 1263 - PHP Web Programming **3 credit hour(s)**
- CIST 2263 - Web Programming Framework **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 18

SURGICAL SCIENCES

Sterile Processing Technician, Certificate of Achievement

School of Health, Wellness & Public Safety (HWPS)

Sterile Processing Technician is a one term program that presents the knowledge and skills necessary to work in a hospital's Central Supply or Sterile Processing Department. Students will develop skills necessary to properly disinfect, prepare, process, store and issue both sterile and nonsterile supplies and equipment for patient

care. Also, students will learn to operate sterilizing units and monitor effectiveness of the sterilization process. The learning environment consists of the campus classroom and laboratory.

Graduates will receive a certificate and may be eligible to apply to take the National Institute for Certification of Healthcare Sterile Processing and Distribution Personnel Examination (CBSPD). Employment opportunities include surgery centers, dialysis facilities, and central processing units in hospitals.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Career Opportunities

Employment opportunities include surgery centers, dialysis facilities, and central processing units and central supply departments in hospitals.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

- SPT 1010 - Basics of Sterile Processing **2 credit hour(s)**
- SPT 1092 - Sterile Processing Lab **2 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 4

Surgical Technology, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

Surgical Technology is an associate degree 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). Students will be administered the Surgical Technologist National Certifying Examination just prior to graduation. 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. The CNM Surgical Technology Program adheres to the most current CAAHEP approved Curriculum for Surgical Technology.

Program Goals and Minimum Expectations Statement: "To prepare entry-level Surgical Technologists who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession."

See Recommended Sequence of Courses

Special Requirements

Criminal Background

Most of the health programs in HWPS require students undergo the New Mexico Department of Health Caregivers Criminal History Screening Program. This involves state and federal felony criminal background checks with fingerprints. This must be completed prior to starting their program or prior to beginning their clinical experiences. Students with a disqualifying conviction can appeal some of those convictions through the New Mexico Department of Health. Depending on the program, students may or may not be allowed to remain in the program pending appeal. Students who do not successfully appeal a disqualifying conviction will not be allowed to start or remain in the program. A successful appeal does not guarantee eligibility for licensure after graduation in professions that require licensure.

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the HWPS Office for more information.

Occupational Risks

Occupational hazards can include musculoskeletal conditions, psychosocial stress, radiation exposure, and

the risk of communicable diseases, sharps injuries.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites (i.e. clinical courses at hospitals, internships, etc.).

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in my CNM.

Career 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.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- **High School Diploma or Equivalent**
- **Math Skills 2 Alg**
- **Reading and Writing Skills 2**
- **Biology Skills**

Courses

Term 1

- BIOL 2210 - Human Anatomy and Physiology I **3 credit hour(s)**
- BIOL 2210L - Human Anatomy and Physiology I Lab **1 credit hour(s)**
- BPCS 1092 - Basic Patient Care Skills **1 credit hour(s)**

  or
- NA 1020 - Principles of Nursing Assistant **3 credit hour(s) ***

  and
- NA 1093 - Principles of Nursing Assistant Lab **2 credit hour(s) ***

  and
- NA 1190 - Nursing Assistant Clinical **1 credit hour(s) ***
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- HIT 1020 - Medical Terminology and Anatomy **3 credit hour(s)**

Term 2

- BIOL 2225 - Human Anatomy and Physiology II **3 credit hour(s)**
- BIOL 2225L - Human Anatomy and Physiology II Lab **1 credit hour(s)**
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- ST 1001 - Introduction to Surgical Technology **2 credit hour(s)**

Term 3 (Typically Offered in Summer and Fall Only)

This program's first term courses are typically offered in the Summer and Fall term. This may delay a student's program start date. Please check with an advisor for more information.

- HLTH 1001 - Clinical Preparation **1 credit hour(s)**
- PHIL 2120 - Biomedical Ethics **3 credit hour(s)**
- ST 1010 - Beginning Surgical Technology I **3 credit hour(s)**
- ST 1092 - Surgical Technology Lab I **6 credit hour(s)**

Term 4 (Typically Offered Fall and Spring Only)

- ST 1510 - Beginning Surgical Technology II **3 credit hour(s)**
- ST 1590 - Surgical Technology Clinical I **8 credit hour(s)**
- ST 1592 - Surgical Technology Lab II **2 credit hour(s)**

Term 5 (Typically Offered Spring and Summer Only)

- ST 2010 - Surgical Technology III **3 credit hour(s)**
- ST 2090 - Surgical Technology Clinical II **8 credit hour(s)**
- ST 2092 - Surgical Technology Lab III **2 credit hour(s)**

Minimum Credit Hours Required to Complete

Degree: 62

*** HLTH 1001 is a pre- or corequisite course for NA 1020**

TEACHER EDUCATION

Teacher Education (AA), Elementary/ Special Education Concentration

School of Education (ED)

The Teacher Education Elementary and Special Education associate degree program focuses on the knowledge, dispositions and skills required for working with children in the public school system (PreK-12). Students will gain practical experience through field experience in a PreK-12 public school setting. Students interested in teaching in the early grades (PreK-3rd grade) should also consider the Birth-3rd Grade Teacher concentration in the Early Childhood Multicultural Education Degree.

The Teacher Education associate degree is also available in a cohorted fast track program. Contact Education Programs at teachered@cnm.edu for more information. The Teacher Education associate degree with a concentration in Elementary and Special Education is designed to transfer to four-year colleges of education in Elementary, Special Education or dual Elementary/Special Education licensure pathways.

Special Requirements

- Students must pass a criminal background check prior to beginning their field experience.
- All courses required for transfer must be taken for a traditional grade of A, B, C, etc.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The Education Department also offers courses for students who have already earned a bachelor's degree and want to transition to teaching through Alternative Teacher Licensure in the following areas:

- Elementary (K-8)
- Secondary (6-12)
- Special Education (K-12)
- Early Childhood (PreK-3)

Students should refer to the Alternative Teacher Licensure website for more information about the program.

Career Opportunities

The Associate of Arts degree enables graduates to serve as educational assistants or substitute teachers within New Mexico public schools. Graduates from the program may transfer to four-year institutions that grant bachelor's degrees in education.

Teaching remains a high demand field in New Mexico, especially in the areas of Bilingual Elementary, Secondary (Math or Science), and Special Education. Starting salary for teachers in New Mexico public schools is $55,000. Within 7 years, teachers can move to a salary of $78,000 or more.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg **or** Math Skills 4
- Reading and Writing Skills 2

Courses

Term 1

- Creative and Fine Arts Requirement **3 credit hour(s)**
- EDUC 2375 - Technology Integration in the Classroom **3 credit hour(s)**
- ENGL 1110 - Composition I **3 credit hour(s)**

  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- HIST 1110 - United States History I **3 credit hour(s)**

  or
- HIST 1150 - Western Civilization I **3 credit hour(s)**

  or
- HIST 1160 - Western Civilization II **3 credit hour(s)**

  or
- HIST 2110 - Survey of New Mexico History **3 credit hour(s)**
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**

  or
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 2

- CEPY 2110 - Learning in the Classroom **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**

- HIST 1150 - Western Civilization I **3 credit hour(s)**
  or
- HIST 1160 - Western Civilization II **3 credit hour(s)**
  or
- HIST 1110 - United States History I **3 credit hour(s)**
  or
- HIST 1120 - United States History II **3 credit hour(s)**
  or
- HIST 2110 - Survey of New Mexico History **3 credit hour(s)**
- MATH 1110 - Math for Teachers I **3 credit hour(s)**
- NTSC 1110 - Physical Science for Teachers **4 credit hour(s)**
  or
- NTSC 1120 - Life Science for Teachers **4 credit hour(s)**
  or
- NTSC 2110 - Environmental Science for Teachers **4 credit hour(s)**
  or
- Laboratory Science Requirement (Lab Required) **4 credit hours(s)**

Term 3

- EDUC 1120 - Introduction to Education **3 credit hour(s)**
- EDUC 1190 - Introduction to Education Practicum **1 credit hour(s)**
- EDUC 2315 - Educating Linguistically and Culturally Diverse Students **3 credit hour(s)**
- MATH 1220 - College Algebra **3 credit hour(s)**
  or
- MATH 1220P - College Algebra Plus **4 credit hour(s)**
  or
- MATH 2110 - Math for Teachers III **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)** (ANTH, ECON, GEOG, POLS, SOCI recommended)
- SPED 2110 - Introduction to Students with Exceptionalities **3 credit hour(s)**

Term 4

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2150 - Communication for Teachers **3 credit hour(s)**
- EDUC 2243 - Children's Literature **3 credit hour(s)**
- NTSC 1110 - Physical Science for Teachers **4 credit hour(s)**
  or
- NTSC 1120 - Life Science for Teachers **4 credit hour(s)**
  or
- NTSC 2110 - Environmental Science for Teachers **4 credit hour(s)**
  or
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)** (ANTH, ECON, GEOG, POLS, SOCI recommended)

Minimum Credit Hours Required to Complete Degree: 60

- Additional Notes

It is strongly recommended that students fulfill the Laboratory Science Requirements with the following courses: NTSC 1110 - Physical Science for Teachers, NTSC 1120 - Life Science for Teachers, and/or NTSC 2110 - Environmental Science for Teachers. These courses are aligned to required teacher assessments for elementary and special education licensure.

We encourage students to meet with an advisor to review the transfer requirements of the college where they intend to complete their degree to determine if there are additional general education course requirements that can be completed at CNM.

Teacher Education (AA), Secondary Concentration

School of Education (ED)

The Teacher Education Secondary Associate of Arts degree program focuses on the knowledge, dispositions and skills required for working with children in the public school system (K-12). Students will gain practical experience in a public school setting.

This program leads to an Associate of Arts degree in Teacher Education with a concentration in Secondary Education. Students will choose a subject area track in Math, Science, Language Arts, Social Studies or Spanish.

In New Mexico, teachers must complete one or more teaching fields (endorsements) to apply for a Secondary Teaching License (grades 7-12).

See Recommended Sequence of Courses

Special Requirements

- Students must pass a criminal background check

prior to beginning their field experience.
- All courses required for transfer must be taken for a traditional grade of A, B, C, etc.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

The Education Department also offers courses for students who have already earned a bachelor's degree and want to transition to teaching through Alternative Teacher Licensure in the following areas:

- Early Childhood (PreK-3)
- Elementary (K-8)
- Secondary (6-12)
- Special Education (K-12)

Students with a bachelor's degree or higher should refer to the Alternative Teacher Licensure, Elementary / Special Ed for the recommended course sequence for each Alternative Teacher Licensure area.

Students should refer to the Alternative Teacher Licensure website for more information about the program.

Career Opportunities

The associate of arts degree enables graduates to serve as educational assistants or substitute teachers within New Mexico public schools. Graduates from the program may transfer to four-year institutions that grant bachelor's degrees in education.

Teaching remains a high demand field in New Mexico, especially in the areas of Bilingual Elementary, Secondary (Math or Science), and Special Education. Starting salary for teachers in New Mexico public schools is $55,000. Within 7 years, teachers can move to a salary of $78,000 or more.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 4 **or** Math Skills 3
- Reading and Writing Skills 2

Courses

Teacher Licensure requirements may vary for specific disciplines. Consult an advisor or the program director in selecting electives and meeting requirements.

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**

Term 2

- EDUC 2315 - Educating Linguistically and Culturally Diverse Students **3 credit hour(s)**
- ENGL 1120 - Composition II **3 credit hour(s)**
- Humanities Requirement **3 credit hour(s)**
- Program Approved Elective (See Content Area Tracks) **6 credit hour(s)**

Term 3

- Creative and Fine Arts Requirement **3 credit hour(s)**
- EDUC 1120 - Introduction to Education **3 credit hour(s)**
- EDUC 1190 - Introduction to Education Practicum **1 credit hour(s)**
- CEPY 2110 - Learning in the Classroom **3 credit hour(s)**
- EDUC 2375 - Technology Integration in the Classroom **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Term 4

- COMM 1130 - Public Speaking **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Program Approved Elective (See Content Area Tracks) **6 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

- Secondary Education: Content Area Tracks

Secondary Education Content Area Tracks (12 credits)**

In New Mexico, teachers must complete one or more teaching fields (endorsements) to apply for a Secondary Teaching License (grades 7-12).

Students are advised to choose one teaching field from the tracks listed below as program approved electives to fulfill the teaching field requirements for the Teacher Education Secondary Concentration.

Language Arts Content Area (12 credit hours):

- COMM 1115 - Introduction to Communication **3 credit hour(s)**
- COMM 2140 - Small Group Communication **3 credit hour(s)**

- ENGL 2210 - Professional and Technical Communication **3 credit hour(s)**
- ENGL 2610 - American Literature I **3 credit hour(s)**
- ENGL 2620 - American Literature II **3 credit hour(s)**
- ENGL 2630 - British Literature I **3 credit hour(s)**
- ENGL 2640 - British Literature II **3 credit hour(s)**
- ENGL 2650 - World Literature I **3 credit hour(s)**
- ENGL 2660 - World Literature II **3 credit hour(s)**

Social Studies Content Area (12 credit hours):

- GEOG 1120 - World Regional Geography **3 credit hour(s)**
- HIST 2110 - Survey of New Mexico History **3 credit hour(s)**
- POLS 1120 - American National Government **3 credit hour(s)**
- POLS 2110 - Comparative Politics **3 credit hour(s)**
- SOCI 2250 - Sociology of Race and Ethnicity **3 credit hour(s)**

Spanish Content Area (12 credit hours):

- SPAN 1110 - Spanish I **4 credit hour(s)**

  or
- SPAN 1210 - Spanish for Heritage Learners I **4 credit hour(s)**
- SPAN 1120 - Spanish II **4 credit hour(s)**

  or
- SPAN 1220 - Spanish for Heritage Learners II **4 credit hour(s)**
- SPAN 2110 - Spanish III **3 credit hour(s)**
- SPAN 2120 - Spanish IV **3 credit hour(s)**
- SPAN 2125 - Conversational Spanish II **3 credit hour(s)**
- SPAN 2280 - Introduction to Hispanic Literature **3 credit hour(s)**

Math Content Area (12 credit hours):

- CSCI 1153 - Programming in Matlab **4 credit hour(s)**
- MATH 1220 - College Algebra **3 credit hour(s)**
- MATH 1250 - Trigonometry & Pre-Calculus **5 credit hour(s)**
- MATH 1510 - Calculus I **4 credit hour(s)**
- MATH 1520 - Calculus II **4 credit hour(s)**
- MATH 2530 - Calculus III **4 credit hour(s)**

Science Content Area (12 credit hours):

- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**
- BIOL 2110L - Principles of Biology: Cellular and Molecular Biology Lab **1 credit hour(s)**
- BIOL 2410 - Principles of Biology: Genetics **3 credit hour(s)**
- BIOL 2410L - Principles of Biology: Genetics Lab **1 credit hour(s)**
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- CHEM 1225 - General Chemistry II for STEM Majors **3 credit hour(s)**
- CHEM 1225L - General Chemistry II Laboratory for STEM Majors **1 credit hour(s)**
- GEOL 1110 - Physical Geology **3 credit hour(s)**
- GEOL 1110L - Physical Geology Laboratory **1 credit hour(s)**
- GEOL 2110 - Historical Geology **3 credit hour(s)**
- GEOL 2110L - Historical Geology Laboratory **1 credit hour(s)**
- PHYS 1230 - Algebra-Based Physics I **4 credit hour(s)**
- PHYS 1230L - Algebra-Based Physics I Laboratory **1 credit hour(s)**
- PHYS 1240 - Algebra-Based Physics II **4 credit hour(s)**
- PHYS 1240L - Algebra-Based Physics II Laboratory **1 credit hour(s)**

Additional Notes

We encourage students to meet with an advisor to review the transfer requirements of the college where they intend to complete their degree to determine if there are additional general education course requirements that can be completed at CNM.

THEATRE

Theatre, Associate of Arts

School of Skilled Trades & Arts (STA)

The Theatre program teaches acting for the stage and camera, technical theatre, costuming, screenwriting, voice and movement, production practicums, and ensemble improvisation. Earn an Associate of Arts and pursue work as an theatre artist, theatre educator, and more.

Educational Option Information

- This educational option is an: Associate of Arts Degree
- This educational option can be completed: Part-Time
- This educational option is designed for: participation and work in theatre production and performance.
- This educational option can be started: Anytime
- Primary course location: Main Campus, Montoya

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

Students who graduate with an AA in theatre at CNM can move on to four-year programs at any University in New Mexico or elsewhere.

Many of the courses in this program are transferable and some may be applied to four-year degree programs at other institutions. CNM currently has transfer agreements with many colleges and universities in New Mexico and elsewhere.

Career Opportunities

Acting, Lighting Design, Scenic Design, Costume Design, Fashion, Playwriting ,Screenwriting, Theatre Arts Management, Theatre History, Theatre Criticism, Theatrical Production, Musical Theatre, Voice Acting, Podcasting.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BCIS 1110 - Fundamentals of Information Literacy and Systems **3 credit hour(s)**
  or
- Program Approved Elective **3 credit hour(s)**

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- Humanities Requirement **3 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- THEA 1110 - Introduction to Theatre **3 credit hour(s)**

Term 2

- ENGL 1120 - Composition II **3 credit hour(s)**
- Laboratory Science Requirement (Lab Required) **4 credit hour(s)**
- Modern Language Elective **4 credit hour(s)**
- THEA 2310 - Stagecraft **3 credit hour(s)**
- THEA 1220 - Beginning Acting **3 credit hour(s)**

Term 3

- COMM 1130 - Public Speaking **3 credit hour(s)**
  or
- COMM 2120 - Interpersonal Communication **3 credit hour(s)**

- Social and Behavioral Science Requirement **3 credit hour(s)**

- THEA 2220 - Intermediate Acting **3 credit hour(s)**
  or
- THEA 1310 - Introduction to Costuming **3 credit hour(s)**
  or
- THEA 2320 - Lighting for Theater **3 credit hour(s)**

- THEA 1990 - Theatre Practicum **1 credit hour(s)**
- THEA 2420 - Voice and Movement **3 credit hour(s)**

Term 4

- Humanities Requirement **3 credit hour(s)**
- Laboratory Science Requirement (Lab optional) **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**

- THEA 2210 - Acting for the Camera **3 credit hour(s)**
  or
- THEA 2255 - Beginning Screenwriting **3 credit hour(s)**
  or
- THEA 1320 - Intermediate Costume **3 credit hour(s)**

- THEA 2230 - Ensemble Improvisation **3 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 60

Program Approved Electives

- DANC 1120 - African Dance I **3 credit hour(s)**
- DANC 1140 - Flamenco I **3 credit hour(s)**
- THEA 1310 - Introduction to Costuming **3 credit hour(s)**
- THEA 1320 - Intermediate Costume **3 credit hour(s)**
- THEA 1330 - Advanced Costuming and Sewing **3 credit hour(s)**
- THEA 2230 - Ensemble Improvisation **3 credit hour(s)**
- THEA 2255 - Beginning Screenwriting **3 credit hour(s)**
- THEA 2320 - Lighting for Theater **3 credit hour(s)**
- THEA 2996 - Topics in Theater **1-6 credit hour(s)**

UNMANNED AIRCRAFT SYSTEMS (UAS)

Unmanned Aircraft Systems (UAS) Fundamentals, Certificate of Achievement

School of Skilled Trades & Arts (STA)

This certificate provides students with the fundamental skills, knowledge and abilities to successfully implement a UAS project. Topics include safety, regulations, flight skills and practice, and use of UAS-based data to generate products such as topographic models or imagery. This certificate is appropriate for professionals currently working in construction management, surveying, mapping, marketing, and other fields utilizing UAS technology.

Educational Option Information

- This educational option is a Certificate of Achievement.
- This educational option can be completed: One Term.
- This educational option is designed for: Students including professionals, who wish to learn the basics of UAS regulations, safety, flight skills, and work flows.
- This educational option can be started: Fall and Spring terms.
- Primary course location: CNM Advanced Technology Center Campus.
- Special requirements for this educational option:
- The cost of a basic UAS is included as a $50 course fee on UAS 1010.
- Students completing UAS 1011 (UAS Standards, Regulations and Law and Exam Prep) can sit for the FAA Part 107 Exam. The exam itself is not included as part of this educational option.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

UNMANNED AIRCRAFT SYSTEMS (UAS), CERTIFICATE OF COMPLETION IS PENDING FINANCIAL AID ELIGIBILITY.

Educational Opportunities

Students completing this certificate can complete the UAS Certificate of Completion with one additional term.

Career Opportunities

UAS is a growth area with applications in a variety of fields. New Mexico employers currently utilizing this technology represent construction and design, mapping, public safety, government and film industries. According to the FAA, sales of UAS for commercial purposes are expected to grow from 600,000 in 2016 to 2.7 million by 2020 (https://www.faa.gov/news/updates/?newsId=85227). UAS also provides excellent entrepreneurial opportunities.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- GIS 1002 - Fundamentals of Geospatial Technology **3 credit hour(s)**
- UAS 1010 - Introduction to Unmanned Aircraft Systems **3 credit hour(s)**
- UAS 1011 - UAS Standards, Regulations and Law and Exam Prep **1 credit hour(s)**
- UAS 1020 - Crew Resource Management for UAS **1 credit hour(s)**
- UAS 1030 - UAS Flight Training I **2 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 10

Unmanned Aircraft Systems (UAS), Certificate of Completion

School of Skilled Trades & Arts (STA)

Unmanned aircraft systems (UAS) or drones, have become an important tool across a range of industries. This program introduces the fundamentals of UAS safety and regulation, and emphasizes the use of UAS for high-precision measurement and mapping and other applications including construction management, surveying, marketing and others. Students will log flight hours using both fixed wing and multi-rotor airframes.

Educational Option Information

- This educational option is a Certificate of Completion.
- This educational option can be completed: 2 Terms.
- This educational option is designed for: Students including professionals, who wish to learn the basics of UAS regulations, safety, flight skills, and work flows. More advanced applications to specific areas including mapping and surveying, and construction are also options for this certificate.
- This educational option can be started: Fall Term.
- Primary course location: CNM Advanced Technology Center Campus
- Special requirements for this educational option:
- The cost of a basic UAS is included as a $50 course fee on UAS 1010.
- Students completing UAS 1011 (UAS Standards, Regulations and Law and Exam Prep) can sit for the FAA Part 107 Exam. The exam itself is not included as part of this educational option.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Educational Opportunities

This certificate is not intended for transfer. It does include coursework included in CNM's GIT program.

Career Opportunities

UAS is a growth area with applications in a variety of fields. New Mexico employers currently utilizing this technology represent construction and design, mapping, public safety, government and film industries. According to the FAA, sales of UAS for commercial purposes are expected to grow from 600,000 in 2016 to 2.7 million by 2020 (https://www.faa.gov/news/updates/?newsId=85227). UAS also provides excellent entrepreneurial opportunities.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading and Writing Skills 2

Courses

Term 1

- GIS 1002 - Fundamentals of Geospatial Technology **3 credit hour(s)**
- UAS 1010 - Introduction to Unmanned Aircraft Systems **3 credit hour(s)**
- UAS 1011 - UAS Standards, Regulations and Law and Exam Prep **1 credit hour(s)**
- UAS 1020 - Crew Resource Management for UAS **1 credit hour(s)**
- UAS 1030 - UAS Flight Training I **2 credit hour(s)**

Term 2

- UAS 1031 - UAS Flight Training II **2 credit hour(s)**
- UAS 2010 - UAS for Design and Construction **3 credit hour(s)**
  or
- UAS 2020 - UAS Data Modeling & 3D Visualization **3 credit hour(s)**
- Program Approved Electives **9 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 24

Program Approved Electives

- CM 1205 - Introduction to Building Information Modeling **3 credit hour(s)**
- GIS 1118 - Geographic Information Systems I **3 credit hour(s)**
- SUR 2205 - Fundamentals of Land Surveying **3 credit hour(s)**
- UAS 2010 - UAS for Design and Construction **3 credit hour(s)**
- UAS 2020 - UAS Data Modeling & 3D Visualization **3 credit hour(s)**

VETERINARY SCIENCES

Veterinary Receptionist, Certificate of Achievement

School of Health, Wellness & Public Safety (HWPS)

The Veterinary Receptionist certificate prepares students with entry level, reception / front office related skills to serve as receptionists or in customer care for veterinary offices, pet stores, feed or agricultural stores, or at grooming or boarding facilities. Students will explore the basics of a variety of animal health professions, acquire skills for reception / front office service, understand veterinary professionalism, and gain skills to excel in veterinary customer service. Veterinary medical terminology and vocabulary supporting animal care fields are included in the certificate courses.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This program is *NOT* financial aid eligible.
- FA Ineligible Programs at CNM
- Although the program is not eligible for Federal Financial Aid, there are some possible outside funding options (i.e. VA, DVR, institutional funding, etc.). For more information go to http://www.cnm.edu/depts/financial-aid.
- May be eligible for funding from Workforce Innovation and Opportunity Act (WIOA).

Educational Opportunities

The courses for the Veterinary Receptionist certificate may be applied toward the Veterinary Technology Associate of Applied Science degree. Graduates may decide to continue their education to become a Registered Veterinary Technician by completing the Veterinary Technology Associate of Applied Science degree.

Career Opportunities

Employment opportunities are available in veterinary offices, pet stores, feed or agricultural stores, or at

grooming or boarding facilities, and other animal related businesses serving in receptionist / front office positions, with an emphasis on customer care and service.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**
- VT 1005 - Veterinary Reception Basic Skills **3 credit hour(s)**
- VT 1011 - Introduction to the Veterinary Profession **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 12

Veterinary Technology, Associate of Applied Science

School of Health, Wellness & Public Safety (HWPS)

Veterinary technology is a career in which skilled veterinary technicians participate in the exciting and challenging field of veterinary medicine working with a variety of animals such as dogs, cats, horses and birds, 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 technology. Upon completion of the program, the graduate is ready to be an integral part of the veterinary health care team providing care and support to animals.

Graduates are eligible to sit for the Veterinary Technician National Examination and the New Mexico Board of Veterinary Medicine Practice Act Examination. Upon passing both examinations successfully, the applicant is eligible for licensure by the New Mexico Board of Veterinary Medicine (NMBVM) as a Registered Veterinary Technician. The American Veterinary Medical Association (AVMA) Council on Education (COE) and Committee on Veterinary Technician Education and Activities (CVTEA) nationally accredits the Program.

See Recommended Sequence of Courses

Special Requirements

Other Compliance Requirements

Many of the health programs in HWPS require students to undergo a routine urine drug screen, provide documentation of current immunizations, have a current Healthcare Provider Basic Life Support (CPR) certificate and other training prior to beginning the program or beginning clinical education, all of which, along with the criminal background check, are verified through the Office of Verification and Compliance.

Physical Requirements

Students must be in good physical and psychological health. Students may be asked to provide documentation of a recent physical examination. Many health programs require the student to be able to safely lift and/or move a minimum of 50 pounds. Reasonable accommodations are made for students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with disabilities that may interfere with completing program competencies are advised to contact the School of Health, Wellness & Public Safety (HWPS) Office for more information.

Program Fees

Program fees cover costs incurred on behalf of the student for student-issued equipment, background checks, drug screens, etc.

Transportation

Students are responsible for their own transportation to off-campus training sites (i.e. clinical courses at hospitals, internships, etc.).

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.

Career Opportunities

Employment opportunities for Registered Veterinary Technicians in New Mexico are excellent. RVTs work in private clinical veterinary practices, animal control and animal humane centers, zoos and wildlife facilities, diagnostic laboratories, biomedical facilities, federal positions, and institutions of higher learning as well as in other areas involving animal care. In some jobs, the academic training allows for rapid advancement into management positions with commensurate higher pay.

Gainful Employment information is available from Career and Job Placement.

For the graduation policy refer to the Graduating from CNM section, cnm.edu or the Students tab in my CNM.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- **High School Diploma or Equivalent**
- **At least 18 years of age to begin Term 3**
- Math Skills 2 Alg
- Reading and Writing Skills 2

Courses

Term 1

- BIOL 1140 - Biology for Health Sciences **3 credit hour(s)**
  and
- BIOL 1140L - Biology for Health Sciences Lab **1 credit hour(s)**
  or
- BIOL 2110 - Principles of Biology: Cellular and Molecular Biology **3 credit hour(s)**
  and
- BIOL 2110L - Principles of Biology: Cellular and Molecular Biology Lab **1 credit hour(s)**
- CHEM 1120 - Introduction to Chemistry **3 credit hour(s)**
  and
- CHEM 1120L - Introduction to Chemistry Laboratory **1 credit hour(s)**
  or
- CHEM 1215 - General Chemistry I for STEM Majors **3 credit hour(s)**
  and
- CHEM 1215L - General Chemistry I Laboratory for STEM Majors **1 credit hour(s)**
- Mathematics Requirement **3 credit hour(s)**
- VT 1011 - Introduction to the Veterinary Profession **3 credit hour(s)**

Term 2 (VT Courses Offered Fall Only)

- ENGL 1110 - Composition I **3 credit hour(s)**
  or
- ENGL 1110P - Composition I Plus **4 credit hour(s)**
- Program Approved Elective **1 credit hour**
- VT 1008 - Applied Mathematics for Veterinary Technicians **1 credit hour(s)**
- VT 1012 - Introduction to Animal Care **2 credit hour(s)**
- VT 1070 - Animal Comparative Anatomy and Physiology **3 credit hour(s)**
- VT 1292 - Veterinary Office and Hospital Procedures Lab **1 credit hour(s)**

Term 3 (VT Courses Offered Spring Only)

- PSYC 1110 - Introduction to Psychology **3 credit hour(s)**
- VT 1210 - Animal Comparative Anatomy and Physiology II **3 credit hour(s)**
- VT 1251 - Radiology for Veterinary Technicians Lecture **1 credit hour(s)**
- VT 1272 - Surgical Technology for Veterinary Technicians **2 credit hour(s)**
- VT 1293 - Radiology for Veterinary Technicians Laboratory **1 credit hour(s)**
- VT 2015 - Non-Infectious and Infectious Diseases for Veterinary Technicians **3 credit hour(s)**

Term 4 (Offered Summer Only)

- VT 2010 - Clinical Pathology for Veterinary Technicians I **4 credit hour(s)**
- VT 2190 - Veterinary Technology Clinical I **4 credit hour(s)**
- VT 2674 - Applied Therapeutics and Care for Veterinary Technicians I **2 credit hour(s)**

Term 5 (Offered Fall Only)

- VT 2610 - Clinical Pathology for Veterinary Technicians II **4 credit hour(s)**
- VT 2651 - Anesthesiology for Veterinary Technicians Lecture **2 credit hour(s)**
- VT 2692 - Anesthesiology for Veterinary Technicians Lab **1 credit hour(s)**
- VT 2690 - Veterinary Technology Clinical II **3 credit hour(s)**

Term 6 (Offered Spring Only)

- VT 2790 - Applied Therapeutics II Avian, Laboratory, Exotic, and Large Animals **3 credit hour(s)**
- VT 2803 - Pharmacology for Veterinary Technicians **3 credit hour(s)**
- VT 2890 - Veterinary Technology Clinical III **3 credit hour(s)**
- VT 2892 - Dentistry for Veterinary Technicians **1 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 68

Program Approved Electives

- VT 1003 - Preparation for Professional Success **1 credit hour(s)**
- VT 1005 - Veterinary Reception Basic Skills **3 credit hour(s)**
- VT 1192 - Supplemental Lab **1 credit hour(s)**
- VT 2592 - Advanced Supplemental Lab for Veterinary Technology (CR/NC) **1 credit hour(s)**

WELDING

Welding Technology, Associate of Applied Science

School of Skilled Trades & Arts (STA)

Students will study hands-on Welding Technology, which includes blueprint reading, mathematics, metallurgy and other general course work. Classes include classroom and lab time. Upon completion of this program, graduates will be eligible for entry level employment in a variety of industrial careers.

Educational Option Information

- This program can be started: Any term.
- First, Second and Third term classes are offered every term.
- The first three terms have 300 contact hours of lab classes plus various lecture classes in blueprint reading, welding math and metallurgy.
- Primary course location: Welding classes are taught on Main and Rio Rancho Campuses.
- Physical requirements: Ability to stand for long periods of time, lift up to 50 lbs., work in a variety of surroundings and conditions.

Cost and Financial Aid

- This is a financial aid eligible program.
- Scholarships available from American Society of Welding (AWS), CNM Foundation and Albuquerque Community Foundation.

What is the approximate cost of this educational option?

Tuition: See table of Tuition and Fees

Books: ~$400 - $500

Fees: $750

Tools: The cost of tools is included in Fees.

Educational Opportunities

The CNM Welding Technology, Associate of Applied Science coursework may be transferable to a 4-year degree program. CNM currently has transfer agreements with a number of universities in New Mexico and elsewhere.

Career Opportunities

Employment prospects for graduates with associate degrees in welding are generally good. Available jobs include construction, energy and manufacturing. This degree prepares graduates for career advancement and increased earning potential.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading and Writing Skills 2

Courses

Term 1

- WELD 1120 - Print Reading for Welders **2 credit hour(s)**
- WELD 1010 - Safety and Orientation **2 credit hour(s)**
- WELD 1030 - Welding Math **3 credit hour(s)**
- WELD 1125 - Thermal Cutting **2 credit hour(s)**
- WELD 1130 - SMAW (Shielded Metal Arc Welding) I **2 credit hour(s)**
- WELD 1155 - GTAW (Gas Tungsten Arc Welding) I **2 credit hour(s)**
- WELD 1140 - Gas Metal Arc Welding I **2 credit hour(s)**

Term 2

- Creative and Fine Arts Requirement **3 credit hour(s)**

  or

- Laboratory Science Requirement (Lab Optional) **3 credit(s)**

- WELD 1171 - Layout and Fabrication **2 credit hour(s)**
- WELD 1160 - Advanced SMAW **2 credit hour(s)**
- WELD 1260 - Advanced GTAW and Fabrication **2 credit hour(s)**
- WELD 2140 - GMAW II **2 credit hour(s)**
- WELD 1220 - Pipe Welding I **2 credit hour(s)**
- WELD 1040 - Welding Technology CAD/CNC **3 credit hour(s)**

Term 3

- ENGL 1110 - Composition I **3 credit hour(s)**

  or

- ENGL 1110P - Composition I Plus **4 credit hour(s)**

- WELD 2130 - SMAW II **3 credit hour(s)**
- WELD 2155 - GTAW II **3 credit hour(s)**
- WELD 1370 - Qualifications for GMAW **3 credit hour(s)**
- WELD 2150 - Metal Fabrication II **3 credit hour(s)**

Term 4

- COMM 2120 - Interpersonal Communication **3 credit hour(s) (or higher)**
- Humanities Requirement **3 credit hour(s)**
- Program Approved Electives **3 credit hour(s)**
- Social and Behavioral Science Requirement **3 credit hour(s)**
- WELD 2220 - Pipe Welding II **2 credit hour(s)**
- WELD 1580 - Advanced Project and Fabrication Lab **2 credit hour(s)**

Minimum Credit Hours Required to Complete Degree: 62

Program Approved Electives

- AT 1005 - Survey of Applied Technologies **3 credit hour(s)**
- MATT 1060 - Machine Tool Technology Skills **3 credit hour(s)**
- OSH 2010 - Occupational Safety for Construction - 30 Hour **3 credit hour(s)**

- OSH 2030 - Occupational Safety General Industry 30 Hour **3 credit hour(s)**
- WELD 1110 - Introduction to Welding Fundamentals **3 credit hour(s)**
- WELD 2996 - Special Topics **1-7 credit hour(s)**

Welding, Certificate of Completion

School of Skilled Trades & Arts (STA)

Students will study hands-on Welding Technology, which includes blueprint reading, mathematics, and metallurgy. Classes include classroom and lab time. Upon completion of this program, graduates will be eligible for entry level employment in a variety of industrial careers.

See Recommended Sequence of Courses

Educational Option Information

- This is a 40-hour Welding, Certificate of Completion program.
- This program can be started: Any term.
- First, Second and Third term classes are offered every term.
- The first three terms have 300 contact hours of lab classes plus various lecture classes in blueprint reading, welding math and metallurgy.
- Primary course location: Welding classes are taught on Main and Rio Rancho Campuses.
- Program physical requirements: Ability to stand for long periods of time, lift up to 50 lbs., work in a variety of surroundings and conditions.

Approximate Costs of this Educational Option

- Cost of Attendance
- Tuition
- Books
- Program and Course Fees

Financial Aid Considerations

- This is a financial aid eligible program.
- Direct Subsidized Loans: 150 percent rule
- Some courses are not eligible for Financial Aid. Please check the list here when considering a course.
- Scholarships available from American Society of Welding (AWS) and Albuquerque Foundation.
- Books: ~$400 - $500
- Fees: $750
- Tools: Tools are included in Fees

Educational Opportunities

The Welder, Certificate of Completion coursework is transferrable into the CNM Welding Technology, Associate of Applied Science.

- Many of our courses are transferable to four-year institutions and CNM currently has transfer agreements with many colleges in New Mexico and elsewhere.

Employment Opportunities

Available jobs with the Welding concentration include construction, energy and manufacturing, with job titles including Fabricator, Fitter, Welders helper and Welder.

Gainful Employment information is available from Job Connection Services.

Ten Year Rule for CTE Courses

Career and technical education courses in this program will qualify for credit for a period of ten academic years. Due to changing technologies, trends, and professional demands, courses completed ten or more years in the past will satisfy program requirements only if they are approved by the instructional school in which they were offered. Cohorted programs may have additional restrictions.

Program Requirements

- Reading & Writing Skills 1

Courses

Term 1

- WELD 1120 - Print Reading for Welders **2 credit hour(s)**
- WELD 1010 - Safety and Orientation **2 credit hour(s)**
- WELD 1030 - Welding Math **3 credit hour(s)**
- WELD 1125 - Thermal Cutting **2 credit hour(s)**
- WELD 1130 - SMAW (Shielded Metal Arc Welding) I **2 credit hour(s)**
- WELD 1155 - GTAW (Gas Tungsten Arc Welding) I **2 credit hour(s)**
- WELD 1140 - Gas Metal Arc Welding I **2 credit hour(s)**

Term 2

- Program Approved Electives **3 credit hour(s)**
- WELD 1171 - Layout and Fabrication **2 credit hour(s)**
- WELD 1160 - Advanced SMAW **2 credit hour(s)**
- WELD 1260 - Advanced GTAW and Fabrication **2 credit hour(s)**
- WELD 2140 - GMAW II **2 credit hour(s)**
- WELD 1220 - Pipe Welding I **2 credit hour(s)**

Term 3

- WELD 2130 - SMAW II **3 credit hour(s)**
- WELD 2155 - GTAW II **3 credit hour(s)**
- WELD 1370 - Qualifications for GMAW **3 credit hour(s)**
- WELD 2150 - Metal Fabrication II **3 credit hour(s)**

Minimum Credit Hours Required to Complete Certificate: 40

Program Approved Electives

- AT 1005 - Survey of Applied Technologies **3 credit hour(s)**
- MATT 1060 - Machine Tool Technology Skills **3 credit hour(s)**
- OSH 2010 - Occupational Safety for Construction - 30 Hour **3 credit hour(s)**
- OSH 2030 - Occupational Safety General Industry 30 Hour **3 credit hour(s)**
- WELD 1110 - Introduction to Welding Fundamentals **3 credit hour(s)**

- WELD 2996 - Special Topics **1-7 credit hour(s)**

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Accounting

ACCT 1135 - Accounting Applications

3 credit hour(s)
Prerequisite: ACCT 2110
Pre- or corequisite: BCIS 1215 or department approval

Applies the complete accounting process and practical problems to expand skills in the performance of accounting functions.

N**ote(s):**

- Previously ACCT 1140. Read more.

Theory Hours: 45

ACCT 1150 - QuickBooks

3 credit hour(s)
Prerequisite: BCIS 1110
Recommended: ACCT 2110

An introductory course to QuickBooks accounting software, including setting up a new company and chart of accounts; recording transactions for service and merchandising businesses with customers, vendors and employees; bank reconciliations; payroll; end-of-period procedures; financial reporting; managing lists; and running reports and forms and customizing them.

* Students should have basic accounting skills for this course.

Theory Hours: 45

ACCT 1220 - Volunteer Tax Training

2 credit hour(s)
Recommended: BCIS 1110*

Introduces basic tax return preparation issues and the software to complete and electronically file basic tax returns for low-income and elderly taxpayers. Students will not be able to take the ACCT 1998 Volunteer Tax Preparation Internship if they do not meet the current Internal Revenue Service (IRS) guideline that requires all volunteers to be either U.S. citizens or authorized aliens. An "unauthorized alien" is defined by the IRS as a person not legally admitted into the United States for either permanent residence or employment.

* Student should have basic computer skills for this course.

N**ote(s):**

- Offered spring term.
- Previously ACCT 1301. Read more.

Theory Hours: 30

ACCT 1996 - Topics in Accounting

1-6 credit hour(s)

Special topics are offered occasionally and the selection is different every semester. Special Topic courses do not repeat material presented by regular semester courses. The purpose of special topics is to provide students with new, one-time, and developing information in accounting.

N**ote(s):**

- All courses ending in 96 are special topics. (See Schedule of Classes.)
- Previously ACCT 1096 - 1996. Read more.

ACCT 1998 - Volunteer Tax Preparation Internship

1 credit hour(s)
Pre- or corequisite: ACCT 1220

Students apply current tax code to prepare individual tax returns for low-income and elderly taxpayers. Volunteers must meet VITA volunteer eligibility requirements as defined by the IRS, which includes the passing of a certification examination.

The Internal Revenue Service (IRS) also requires all volunteers to be either U.S. citizens or authorized aliens. An "unauthorized alien" is defined by the IRS as a person not legally admitted into the United States for either permanent residence or employment.

N**ote(s):**

- Previously ACCT 1398. Read more.

Internship Hours: 15

ACCT 2088 - Accounting Specialty

1-3 credit hour(s)

This course allows students to apply accounting elective credit towards an accounting program requirement.

ACCT 2110 - Principles of Accounting I

3 credit hour(s)
Pre- or corequisite: BCIS 1110 + (BUSA 1180 or Mathematics Requirement)
Recommended: Reading and Writing Skills 2*

An introduction to financial accounting concepts emphasizing the analysis of business transactions in accordance with generally accepted accounting principles (GAAP), the effect of these transactions on the financial statements, financial analysis, and the interrelationships of the financial statements.

N**ote(s):**

- * Students need to have basic reading skills for this course.
- Previously ACCT 1115. Read more.

Theory Hours: 45

ACCT 2120 - Principles of Accounting II

3 credit hour(s)
Prerequisite: ACCT 2110

An introduction to the use of accounting information in the management decision making processes of planning, implementing, and controlling business activities. In addition, the course will discuss the accumulation and classification of costs as well as demonstrate the difference between costing systems.

N**ote(s):**

- Previously ACCT 1210. Read more.

Theory Hours: 45

ACCT 2125 - Introduction to Intermediate Accounting I

3 credit hour(s)
Prerequisite: ACCT 1135

Introduction to intermediate accounting concepts, principles and practices, stressing financial reporting theory, applied financial accounting problems and contemporary financial accounting issues. Focuses on the determination of income and financial position of the corporate form of organization.

Theory Hours: 45

ACCT 2130 - Introduction to Intermediate Accounting II

3 credit hour(s)
Pre- or corequisite: ACCT 2125

Completes the accounting theory framework started in Introduction to Intermediate Accounting I with the concepts and principles underlying liabilities, stockholder equity and the effects on the income statement and statement of retained earnings.

N**ote(s):**

- Previously ACCT 2103. Read more.

Theory Hours: 45

ACCT 2170 - Payroll Accounting

3 credit hour(s)
Prerequisite: ACCT 2110
Pre- or corequisite: ACCT 1135

Covers payroll accounting procedures and controls, tax and employment laws, and tax reports that form the core of payroll responsibilities.

N**ote(s):**

- Previously ACCT 1120. Read more.

Theory Hours: 45

ACCT 2220 - Computerized Accounting

3 credit hour(s)
Prerequisite: ACCT 1135

This course requires the prior knowledge from Principles of Accounting I (Financial). It employs integrated accounting software for payroll, inventory control, accounts payable, accounts receivable and general ledger functions. Course reviews the accounting cycle.

Theory Hours: 45

ACCT 2240 - Cost Management Accounting

3 credit hour(s)
Prerequisite: ACCT 2120 + BCIS 1215 or departmental approval

Expands the student's ability to use job order and process costing systems as well as the student's ability to apply and analyze accounting information for decision making in planning and controlling business activities. This includes the collecting of cost information, cost estimation and allocation, standard costs, budgeting and cost-volume-profit relationships.

N**ote(s):**

- Previously ACCT 2230. Read more.

Theory Hours: 45

ACCT 2250 - Introduction to Fund Accounting

3 credit hour(s)
Pre- or corequisite: ACCT 2125

A study of basic fund accounting and financial reporting principles and procedures necessary to implement budgetary controls for governmental units and other not-for-profit organizations.

N**ote(s):**

- Previously ACCT 2510. Read more.

Theory Hours: 45

ACCT 2265 - Advanced Accounting Techniques

3 credit hour(s)
Prerequisite: BCIS 1215
Pre- or corequisite: ACCT 2125

Advanced strategies in evaluating financial statements, forecasting trends, applying intelligent systems and critical thinking to solve real-world accounting concerns. Utilize spreadsheet software and emerging technologies to aid in the compiling, validating, interpreting, and presenting of data-driven financial information to improve decision-making capabilities.

Theory Hours: 45

ACCT 2270 - Budgeting

3 credit hour(s)
Prerequisite: ACCT 1135 + BCIS 1215

Introduction to an integrative and practical view of concepts, methods, and techniques to develop a budget. Focuses on the budgeting process, its challenges, common issues, and approaches to mitigate problems and improve the learning curve of budget planning.

Theory Hours: 45

ACCT 2320 - Introduction to Tax I (Individual)

3 credit hour(s)
Prerequisite: ACCT 2110 or (ACCT 1220 + ACCT 1998)

Studies the current federal tax laws, providing a working knowledge of preparing taxes for individuals and sole proprietorships. Federal tax law topics include gross income, exclusions, deductions, credits, accounting periods and methods, and property transactions.

N**ote(s):**

- Previously ACCT 2340. Read more.

Theory Hours: 45

ACCT 2350 - Introduction to Tax II (Corporate)

3 credit hour(s)
Prerequisite: ACCT 2320 or (ACCT 1220 + ACCT 1998)

Introduction to the tax law currently implemented by the Internal Revenue Service on business entities including C Corporations, S Corporations, Partnerships and fiduciaries.

N**ote(s):**

- Previously ACCT 2341. Read more.

Theory Hours: 45

ACCT 2520 - Introduction to Auditing

3 credit hour(s)
Pre- or corequisite: ACCT 1135

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.

Theory Hours: 45

ACCT 2996 - Topics in Accounting
1-6 credit hour(s)

Special topics are offered occasionally and the selection is different every semester. Special Topic courses do not repeat material presented by regular semester courses. The purpose of special topics is to provide students with new, one-time, and developing information in accounting.

N**ote(s):**

- All courses ending in 96 are special topics. (See Schedule of Classes.)
- Previously ACCT 2096 - 2996. Read more.

ACCT 2997 - Independent Study in Accounting
1-8 credit hour(s)
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 accounting. Student develops and executes a solution applying analytical techniques and critical thinking to the problem. An oral presentation may be required.

N**ote(s):**

- Previously ACCT 2097. Read more.

ACCT 2998 - Accounting Internship
3 credit hour(s)
Prerequisite: ACCT 1135 + department approval

Provides students the opportunity to work a minimum of 135 hours in a new job experience in accounting or training-related supervised workstations. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously ACCT 2098. Read more.

Internship Hours: 135

ACCT 2999 - Accounting Capstone
1 credit hour(s)
Prerequisite: Department approval

Focuses on assessment of student learning outcomes for the Accounting program of study.

N**ote(s):**

- Should be taken in student's last term.

Theory Hours: 15

African American Studies

AFST 1110 - Introduction to Africana Studies
3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

An interdisciplinary course that introduce students to the histories, cultures, and experiences of global people of African descent.

N**ote(s):**

- Previously AFST 1150. Read more.

Theory Hours: 45

AFST 2140 - Black Women in the African Diaspora
3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This survey course reviews the contributions of Black women to the Black Diasporic story.

Theory Hours: 45

Air Force Aerospace Studies

AFAS 1120 - The Foundation of the United States Air Force I
1 credit hour(s)
Corequisite: AFAS 1192 + 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.

N**ote(s):**

- Meets once weekly
- Fall only

Theory Hours: 15

AFAS 1121 - The Foundation of the United States Air Force II
1 credit hour(s)
Corequisite: AFAS 1292 + concurrent enrollment in leadership laboratory required for cadet status.

Provides an introduction to the USAF, including an overview of basic characteristics, missions and organization of the USAF.

N**ote(s):**

- Meets once weekly
- Spring only

Theory Hours: 15

AFAS 1192 - Leadership Laboratory I
1 credit hour(s)

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.

N**ote(s):**

- Enrollment in the laboratory is required with AFAS 1120 course
- Graded CR/NC
- Fall only

Lab Hours: 52.5

AFAS 1292 - Leadership Laboratory II
1 credit hour(s)

Continues course of study begun in AFAS 1120 and AFAS 1192.

N**ote(s):**

- Enrollment in the laboratory is required with AFAS 1121 course
- Graded CR/NCSpring only

Lab Hours: 52.5

AFAS 2192 - Leadership Laboratory III
1 credit hour(s)

Provides application of elements of personal leadership. Provides students an opportunity to demonstrate command and leadership abilities and knowledge of Air Force operating procedures.

N**ote(s):**

- Enrollment in the laboratory is required with AFAS 2250
- Graded CR/NC
- Fall only

Lab Hours: 52.5

AFAS 2229 - Field Training Fitness Prep
1 credit hour(s)
Pre- or corequisite: AFAS 1192 or AFAS 1292

Prepares cadets for leadership through various methods of military fitness training. Course instills Air Force physical fitness standards and provides training in all aspects of health, including physical fitness, nutritional awareness, stress management, and other aspects of health. Requires lab activities in the fitness center.

Theory Hours: 15

AFAS 2250 - The Evolution of USAF Air and Space Power I
1 credit hour(s)
Corequisite: AFAS 2192 + 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 for AFROTC cadet to AFROTC officer candidate. In addition, aspects of the AS 200 course begin to prepare students for field training exercises.

N**ote(s):**

- Meets once weekly
- Fall only

Theory Hours: 15

AFAS 2251 - The Evolution of USAF Air and Space Power II
1 credit hour(s)
Corequisite: AFAS 2292 + 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.

N**ote(s):**

- Meets once weekly
- Spring only

Theory Hours: 15

AFAS 2292 - Leadership Laboratory II
1 credit hour(s)

Continues course of study begun in AFAS 2250 and AFAS 2192.

N**ote(s):**

- Enrollment in the laboratory is required with AFAS 2251
- Graded CR/NC
- Spring only

Lab Hours: 52.5

American Sign Language

SIGN 1110 - American Sign Language I
4 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

American Sign Language I is an introductory level language course in the language of the American Deaf Culture. Content includes ASL vocabulary and conversational skills; linguistic features of ASL; and skills in narrative/storytelling. In-class activities, comprehension and expressive examinations, narrative and storytelling assignments in addition to semester projects are venues for students to demonstrate their learning. In addition, Deaf Culture and Deaf Community issues are addressed.

N**ote(s):**

- Previously ASL 1101. Read more.

Theory Hours: 60

SIGN 1120 - American Sign Language II
4 credit hour(s)
Prerequisite: SIGN 1110

American Sign Language II is a continuation course that builds on concepts and skills developed in American Sign Language I. Students gain further exposure to ASL structure and grammar, and Deaf Culture and the Deaf community. Emphasis is on increasing students' ability to comprehend other signers and express themselves with more elaboration when conversing or presenting in ASL.

N**ote(s):**

- Previously ASL 1102. Read more.

Theory Hours: 60

SIGN 2110 - American Sign Language III
3 credit hour(s)
Prerequisite: SIGN 1120

This is an intermediate level course in American Sign Language (ASL). Expected areas of intermediate skill and knowledge development include: language comprehension and production, conversational use, narratives, ASL language features and further knowledge

of and interaction with Deaf culture and the Deaf community.

N**ote(s):**

- Previously ASL 2201. Read more.

Theory Hours: 45

SIGN 2120 - American Sign Language IV

3 credit hour(s)
Prerequisite: SIGN 2110

American Sign Language (ASL) IV is a continuation of the intermediate level ASL III course. Emphasis is on further development of students' comprehension and production skills through a more advanced study of ASL discourse, grammatical structures, and semantics. Creative use of expression, classifiers, body posture, and signing space will be practiced along with videotext viewing and video production. Topics in Deaf culture and interaction with the Deaf community will be integral to the course.

N**ote(s):**

- Previously ASL 2202. Read more.

Theory Hours: 45

SIGN 2130 - Fingerspelling

3 credit hour(s)
Pre- or corequisite: SIGN 2120 or department approval

This course will assist the student in acquiring fluent fingerspelling through the use of intense receptive and expressive drills. Lexical borrowing and the semantic and morphological categories involved in restructuring English fingerspelled citation forms will be studied. Recordings of a variety of fingerspelling styles will be presented to ensure that the students acquire a comprehensive background. Students will also be recorded to allow for self-analysis of their fingerspelling skills.

N**ote(s):**

- Previously ASL 2212. Read more.

Theory Hours: 45

SIGN 2214 - Introduction to Deaf Culture & the Deaf Community

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Provides a broad introduction to concepts related to the Deaf, Deaf culture, and the languages of people within Deaf communities in particular and Deaf society in general. The course examines current issues and languages in the Deaf community, including technology and diversity.

N**ote(s):**

- Previously ASL 2214. Read more.

Theory Hours: 45

SIGN 2998 - Internship in American Sign Language

1-3 credit hour(s)

This course will require students work 45, 90, or 135 hours, depending on the internship placement. The internship will serve as an applied learning experience by observing, analyzing and participating in a related workplace.

N**ote(s):**

- Previously ASL 2298.

Internship Hours: 45

American Studies

AMST 1105 - Introduction to American Studies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

This course is an interdisciplinary exploration of U.S. history, society, thought, and imagination with special focus on the Rio Grande Valley as a microcosm of the nation. This course will examine the social construction of identity and difference, the culture of everyday life, and local and global perspectives of the United States, historically, in our present moment, and with a look toward the future. This course will introduce students to prevalent theories and methods within the discipline including, but not limited to critical race, feminist, and post-colonial theory.

Theory Hours: 45

AMST 1130 - Introduction to Politics in Popular Culture

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

This course considers a range of theoretical approaches to the study of popular culture, including cultural studies and feminist theory as well as key concepts and key debates in the study of popular culture. It explores the ways popular culture is implicated in the formation of social determinants such as ethnicity, race, gender, class, and sexuality and conversely, how these social determinants are implicated in the formation of popular culture. The course also considers the ways in which popular culture serves as a site of ongoing political struggle. The aim of the course is to provide students with a critical vocabulary to make sense of broader significance and relevance of popular culture--why popular culture matters. To accomplish this, we will investigate a number of popular expressive forms including magazines, fandom, digital music, and hip hop.

Note(s):

- Previously CST 2260. Read more.

Theory Hours: 45

AMST 1140 - Introduction to Critical Race and Indigenous Studies

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

This course offers an introduction to the field of American Studies through an interdisciplinary examination of race, class and ethnicity in the United States and in a global context. Using a schedule of keywords, we will engage a range of central themes and concerns. We will examine histories of injustice, and resistance to injustice. Readings and assignments encourage students to notice the privilege and oppression at the core of U.S. society. The class will challenge the widely accepted assumption that we as a nation have moved beyond race and racism. Through readings, films, online sources, and our assignments, this course aims to increase our knowledge

of inequity in our society, and the impact of those inequities on various societies and individuals.

N**ote(s):**

- Previously CST 1150. Read more.

Theory Hours: 45

AMST 1150 - Introduction to Southwest Studies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

This course introduces the complex histories, social issues, and cultural experiences of peoples of the southwestern United States. Course materials and discussions also demonstrate the possibilities of interdisciplinary study of regional American culture. It is multicultural in content and multidisciplinary in methodology. We will examine cross-cultural relationships among the peoples of the Southwest within the framework of their expressions and experiences in art, culture, religion; social and political economy.

Theory Hours: 45

AMST 1160 - Environment, Science & Technology

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

This course examines how theoretical concepts of environment, science, and technology are bound up with everyday practices and broader understandings of nature and society (i.e, bodies, natural resources, race, gender, and sexuality). This course is interdisciplinary in its approach.

N**ote(s):**

- Previously CST 1182. Read more.

Theory Hours: 45

AMST 1170 - Introduction to Asian American Studies

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

This course explores the diverse histories and contemporary social, cultural, and political experiences of Asian Americans and Pacific Islanders in the United States. We will take an interdisciplinary approach as we examine the formation of "Asian American," who is included and excluded from the category, how it functions as a diverse network of solidarity, as well as an imperfect racialization whose meaning shifts over time. The course introduces students to the key scholarly works, theories, and frameworks that inform the field of Asian American Studies and considers the political stakes of academic research on Asian American and Pacific Islander communities. We will focus on the intersecting categories of race and ethnicity, gender, sexuality, and class as well as major themes and threads including U.S. imperialism and colonialism, migration, labor, popular culture, citizenship, and racialization among others. The course provides the opportunity to examine the cultural and political formations of Asian American and Pacific Islander people and communities which encompass over 50 cultures and societies including but not limited to those of East, South, Southeast, Western Asia, North Africa, and the Pacific Islands.

Theory Hours: 45

AMST 2110 - American Life and Thought (Capstone)

3 credit hour(s)
Prerequisite: Students must have successfully completed 6 hours of AMST prior to AMST 2110

This course introduces students to cultural studies and the alternative interpretations of American history and culture. Particular attention will be paid to indigenous history, country music, tattoos, and American mobilization for war. Course materials and lectures will frequently utilize cultural traditions to explore key concepts and issues. Additionally, this course will require students to assume an analytical and critical perspective on academic interpretive models. We will read texts that exemplify critical Marxist, feminist, and reflexive anthropological approaches.

Theory Hours: 45

AMST 2996 - Special Topics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously CST 2096-2996. Read more.

AMST 2998 - Internship in American Studies

1-3 credit hour(s)

This course requires students to work 45, 90, or 135 hours, depending on the internship placement. The internship will serve as an applied learning experience by observing, analyzing and participating in a related workplace.

Internship Hours: 45

Anthropology

ANTH 1115 - Introduction to Anthropology

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or FYEX 1110

Anthropology is the systematic study of the humanity both past and present. The course introduces students to the four subfields of anthropology, which include archaeology, biological, linguistic and cultural anthropology. Students will learn about the concepts and methods that anthropologists use to study our species and gain a broader perspective on the human experience.

N**ote(s):**

- Previously ANTH 1101. Read more.

Theory Hours: 45

ANTH 1120C - Introduction to Archaeology Lecture and Lab

4 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or FYEX 1110

Archaeology is the study of the human past through

the analysis of material remains humans have left behind. This course explores the basic theoretical and methodological underpinnings of the discipline, as well as the techniques that archaeologists employ to describe the empirical world, produce data, and interpret how people lived in the past. Examples of archaeological research from around the world will be used to increase students' understanding of concepts presented in lecture. Students will also apply the archeological principles in the laboratory portion of the course.

N**ote(s):**

- Previously ANTH 1121 & ANTH 1192. Read more.

Theory Hours: 45
Lab Hours: 45

ANTH 1135 - Introduction to Biological Anthropology

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or FYEX 1110

This course provides a basic introduction to the broad field of biological anthropology. The research interests of biological anthropologists include the history and development of modern evolutionary biology, molecular and population genetics, modern primates, the primate and human fossil record, and modern human biological diversity.

N**ote(s):**

- Previously ANTH 1150. Read more

Theory Hours: 45

ANTH 1140 - Introduction to Cultural Anthropology

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or FYEX 1110

This is an introductory course that provides an overview of cultural anthropology as a subfield within the broader discipline of anthropology and as a research approach within the social sciences more generally. The course presents core concepts and methods of cultural anthropology that are used to understand the ways in which human beings organize and experience their lives through distinctive cultural practices. More specifically, this course explores social and cultural differences and similarities around the world through a variety of topics such as: language and communication, economics, ways of making a living, marriage and family, kinship and descent, race, ethnicity, political organization, supernatural beliefs, sex and gender, and globalization. This course ultimately aims to present a broad range of perspectives and practices of various cultural groups from across the globe.

N**ote(s):**

- Previously ANTH 1130. Read more.

Theory Hours: 45

ANTH 1155 - Introduction to Linguistic Anthropology

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or FYEX 1110

This is an introductory course which provides an overview of the discipline of Linguistic Anthropology. The course will discuss the implications of language within anthropology, as well as within the sciences and social sciences more generally. The course explores the core concepts and methods of linguistic anthropology, such as the basic structure of language, first and second language acquisition, bilingualism, and social and regional variations that are used to help students understand what it means to be human and the role of language in human societies.

N**ote(s):**

- Previously ANTH 1110. Read more.

Theory Hours: 45

ANTH 1160 - World Archaeology

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or FYEX 1110

Archaeology is the systematic study of the human past through material remains. This course introduces students to the physical remains of past societies and compares and contrasts archaeological development in different regions. Students will explore the dynamics of the human past and its influences on contemporary society.

N**ote(s):**

- Previously ANTH 1120. Read more.

Theory Hours: 45

ANTH 2130 - Introduction to Forensic Anthropology

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: ANTH 1135*

This course will introduce you to the field of forensic anthropology, its main concepts, and their application in the broader medico legal system. This will include discussion of the structure of the medico legal system, the organizational hierarchy of death investigation, the role and ethical responsibilities of the forensic anthropologist, an introduction to the information that is provided by anthropological analysis and the methods used to obtain this information, the importance of the chain of evidence, the role of expert testimony, the importance of research, and the steps of designing effective research projects.

N**ote(s):**

- Previously ANTH 2251. Read more.

Theory Hours: 45

ANTH 2140 - Indigenous Peoples of North America

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course is a general survey of the history and ethnology of indigenous groups in North America. The course is designed to give students a comprehensive view of major issues pertaining to the indigenous cultures of North America, such as family structure, social organization, subsistence and contemporary economies, environmental adaptation, Indian-White relations,

religious practices, and contemporary issues.

N**ote(s):**

- Previously ANTH 2231. Read more.

Theory Hours: 45

ANTH 2150 - Indigenous Peoples of the American Southwest

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course is a study of indigenous cultural groups of the American Southwest. Students will explore historical and contemporary cultural and social patterns of American Indian, Hispanic and Anglo-American groups

N**ote(s):**

- Previously ANTH 2238. Read more.

Theory Hours: 45

ANTH 2160 - Prehistoric Peoples of the American Southwest

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course will explore many aspects of prehistoric peoples in the American Southwest. Beginning with the populating of the Southwest, this course will discuss interactions between these populations and their environment, as well as technological advances, subsistence practices, social structures, and settlement patterns. The course will also explore the processes of change and how prehistoric populations compare with modern ones.

N**ote(s):**

- Typically offered Spring semester only.
- Previously ANTH 2255. Read more.

Theory Hours: 45

ANTH 2222 - Ancient Mesoamerica

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Traces Mesoamerican archaeology from the earliest inhabitants through the Aztec period. Emphasizes cultural processes and dynamics of cultural evolution.

N**ote(s):**

- Typically offered Spring semester only.

Theory Hours: 45

ANTH 2224 - Ancient Andes

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course provides an introduction to the history and archaeology of the peoples and places of the Central Andes region. In this course, students will examine and critically evaluate archaeological finds to explore the ancient cultures of this region, including cultural interactions and how Andean cultures experienced tremendous continuity and adaptation through time.

Theory Hours: 45

ANTH 2265 - The Anthropology of Drugs

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This survey course explores the nature and use of mind-altering drugs from a cross-cultural perspective. Topics covered in this class include the varieties and effects of mind-altering drugs around the world, socio-cultural contexts and functions of drugs such as religious, medicinal, and recreational usages, varieties of social control of drugs, and the political economy of world trade in both licit and illicit drugs.

Theory Hours: 45

ANTH 2290 - Anthropology Practicum

Variable credit hour(s)
Prerequisite: Department approval

Provides opportunities for students in anthropology practice by working with professionals conducting theoretical, laboratory, and/or field research in cultural, linguistic, physical/biological anthropology and archaeology.

ANTH 2996 - Special Topics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously ANTH 2096-2996. Read more.

ANTH 2998 - Internship in Anthropology

1-3 credit hour(s)

This course requires students work 45, 90, or 135 hours, depending on the internship placement. The internship will serve as an applied learning experience by observing, analyzing and participating in a related workplace.

N**ote(s):**

- Previously ANTH 2298.

Applied Technologies

AT 1005 - Survey of Applied Technologies

3 credit hour(s)

In this course students will participate in an overview of career opportunities available to students in the programs of study offered by the School of Applied Technologies. Students will uncover the real life aspects of these careers, including information on salaries, workload and job satisfaction. Students will map the path from a career aspiration to the actions and timelines that will make that career possible.

Theory Hours: 45

AT 1096 - 1996 - Special Topics

1 - 9 credit hour(s)
Prerequisite: Department approval

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

Arabic

ARBC 1110 - Arabic I

4 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Introduction to Arabic for students with no prior exposure. Following this class, students will be able to perform in specific situations at the Novice level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale. All five modes of communication are addressed (interpersonal, presentational speaking, presentational writing, interpretive reading, and interpretive listening). Modern Standard Arabic (MSA) and an Arabic dialect are taught using an integrated approach. Students will also develop their understanding of Arabic-speaking cultures.

N**ote(s):**

- Previously ARBC 1101. Read more.

Theory Hours: 60

ARBC 1120 - Arabic II

4 credit hour(s)
Prerequisite: ARBC 1110 or department approval

Continuation of Arabic 1110. Following this class, students will be able to perform in specific situations at the Novice High to Intermediate Low level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale. All five modes of communication are addressed (interpersonal, presentational speaking, presentational writing, interpretive reading, and interpretive listening). Modern Standard Arabic (MSA) and an Arabic dialect are taught using an integrated approach. Students will continue to develop their understanding of Arabic-speaking cultures.

N**ote(s):**

- Previously ARBC 1102. Read more.

Theory Hours: 60

ARBC 2996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously ARBC 2096-2996. Read more.

Architectural Drafting

ARDR 1101 - Building Materials and Methods I

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

An introduction to building construction technology to include an investigation of overall standard building systems.

Theory Hours: 30
Lab Hours: 45

ARDR 1102 - Introduction to A/E/C Software

3 credit hour(s)

Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

Students will be given exercises tailored to introduce common problems in the A/E/C industry that require software support to solve. Multiple software will be engaged to complete the exercises, including 2d, 3d, BIM, rendering, layout, and others.

Theory Hours: 30
Lab Hours: 45

ARDR 1104 - Professional Practice

2 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Through lectures and field trips students will learn about the professional roles of Construction Designer, Developer, Architect, Certifier, Drafter, Engineer, Contractor, Construction Engineer, Owner, Operator, and Manager. Students will learn the relationships between the various roles in the industry, and identify which most interests them.

Theory Hours: 30

ARDR 1116 - Introduction to Architectural Drafting

3 credit hour(s)
Pre- or corequisite: ARDR 1101

Introduces the fundamentals of architectural graphic representation as the foundation of all A/E courses. Introduces computer-aided drafting to the production of architectural drawings for building construction.

Theory Hours: 30
Lab Hours: 45

ARDR 1121 - Introduction to CAD

3 credit hour(s)
Pre- or corequisite: BCIS 1110
Applies the usage of CAD to architectural/ engineering drafting.
Theory Hours: 30
Lab Hours: 45

ARDR 1201 - Building Materials and Methods II

3 credit hour(s)

Prerequisite: ARDR 1101
A continuation of Building Materials and Methods I (ARDR 1101), into the study of building construction technology to include further investigation of overall standard building systems.

Theory Hours: 30
Lab Hours: 45

ARDR 1202 - A/E/C Software for Residential Development

3 credit hour(s)

Prerequisite: ARDR 1102
Students will be given training exercises tailored to issues the A/E/C industry faces when working on Residential Development that require software support to solve. Multiple software will be engaged to complete the exercises, including 2d, 3d, BIM, rendering, layout, and others.

Theory Hours: 30

Lab Hours: 45

ARDR 1203 - Construction Documents for Residential Development

4 credit hour(s)
Prerequisite: ARDR 1101 + ARDR 1102
Corequisite: ARDR 1201 + ARDR 1202

Students will work individually and in teams to produce documentation relevant to residential development. Discussions of space planning, site zoning and planning, and building moisture management relevant to residential development will be covered in depth. Other concerns, such as wood framing details and sustainability issues, will also be covered.

Theory Hours: 15
Lab Hours: 135

ARDR 1215 - Commercial Drafting (Bearing Wall)

4 credit hour(s)
Prerequisite: ARDR 1116 + ARDR 1121 + CM 1205
Pre- or corequisite: ARDR 1201
Applies computer-aided drafting to the production of architectural design development drawings for commercial building with an emphasis on load bearing wall construction.

Theory Hours: 15
Lab Hours: 135

ARDR 1301 - Building Materials and Methods III

3 credit hour(s)
Prerequisite: ARDR 1101

Continues ARDR 1101 studying construction materials and methods with an emphasis on steel and concrete systems.

Theory Hours: 30
Lab Hours: 45

ARDR 1302 - A/E/C Software for Commercial Development

3 credit hour(s)
Prerequisite: ARDR 1102

Students will complete exercises tailored to issues the A/E/C industry faces when working on Commercial Multi-Use Developments that require software support to solve. Multiple softwares will be engaged to complete the exercises including 2d, 3d, BIM, rendering, layout, and others.

Theory Hours: 30
Lab Hours: 45

ARDR 1303 - Construction Documents for Commercial Development

4 credit hour(s)
Prerequisite: ARDR 1101 + ARDR 1102
Corequisite: ARDR 1301 + ARDR 1302

Students will work in teams to produce documentation relevant to Commercial multi-use development. Steel framing, vertical circulation, and building enclosure systems in commercial development contexts will be covered in depth. Other concerns such as steel and roof detailing, and sustainability issues will also be covered.

Theory Hours: 15
Lab Hours: 135

ARDR 1315 - Commercial Drafting (Skeletal Frame)

4 credit hour(s)
Prerequisite: ARDR 1116
Pre- or corequisite: ARDR 1201
Corequisite: ARDR 1321

Applies computer-aided drafting to the production of architectural design development drawings for commercial building with an emphasis on skeletal frame construction.

Theory Hours: 15
Lab Hours: 135

ARDR 1316 - Building Information Modeling Applications

2 credit hour(s)
Pre- or corequisite: ARDR 1315 + ARDR 1321

A supervised practical application of Building Information Modeling (BIM) commands and processes used to produce architectural design development drawings for commercial building.

Theory Hours: 15
Lab Hours: 45
Additional Lab Hours: 15

ARDR 1321 - Commercial Drafting Software Applications (Skeletal Frame)

2 credit hour(s)
Prerequisite: ARDR 1121 + CM 1205
Corequisite: ARDR 1315

Applies current software applications to the production of A/E construction drawings in support of ARDR 1315.

Theory Hours: 15
Lab Hours: 45
Additional Lab Hours: 15

ARDR 1401 - Building Materials and Methods IV

3 credit hour(s)

Prerequisite: ARDR 1101
A continuation of Building Materials and Methods III (ARDR 1301), into the study of building construction technology to include further investigation of overall commercial building systems.

Theory Hours: 30
Lab Hours: 45

ARDR 1402 - A/E/C Software for Commercial Building Systems

3 credit hour(s)

Prerequisite: ARDR 1102
Students will be given training exercises tailored to issues the A/E/C industry faces when working on commercial single-occupant development that require software support to solve. Multiple software will be engaged to complete the exercises, including 2d, 3d, BIM, rendering, layout, and others.

Theory Hours: 30
Lab Hours: 45

ARDR 1403 - Construction Documents for Commercial Building Systems

4 credit hour(s)
Prerequisite: ARDR 1101 + ARDR 1102
Corequisite: ARDR 1401 + ARDR 1402

Students will work in teams to produce documentation relevant to Commercial Single-Occupant Developments. Commercial discussions of Structural Walls, Site Circulation, and Mechanical, Electrical, and Plumbing Systems will be covered in depth. Other concerns, such as wall and foundation detailing and sustainability issues, will also be covered.

Theory Hours: 15
Lab Hours: 135

ARDR 2096-2996 - Special Topics

1-7 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

ARDR 2297 - Independent Study

1-7 credit hour(s)
Prerequisite: Department approval

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.

ARDR 2298 - Internship

1-4 credit hour(s)
Prerequisite: Department approval

In cooperation with local industry, the student works for one term in an appropriate, defined, training program. The position is not paid.

Internship Hours: 45

Architecture

ARCH 1115 - Introduction to Architectural Graphics

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 + ARCH 1120

Introduction to manual and digital drawing as well as modeling techniques for architectural and interior design. Students will learn how to represent composition, form and space by orthographic drawing, paraline and perspective views, and freehand sketching. Three-dimensional model building techniques will also be introduced.

N**ote(s):**

- Previously ARCH 1111. Read more.

Studio Hours: 90

ARCH 1120 - Introduction to Architecture

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course provides students the tools and vocabulary to analyze, interpret and discuss the built environment from the social, historical, perceptual and technical determinants. Students are introduced to elements, principles, and theories of architecture through their social, historical, and technical determinants. The course seeks to lay a foundation in architectural studies, including introducing students to fundamental vocabulary and concepts.

N**ote(s):**

- Previously ARCH 1121. Read more.

Theory Hours: 45

ARCH 1122 - Architectural Design Studio I

3 credit hour(s)
Prerequisite: ARCH 1115

Enhancement of general graphic communication skills and introduction to fundamental design including exploration, development and defense of design concepts; structural order; 2D and 3D processes in manual and digital architectural graphic expression; model building; general communication and presentation techniques; and development of course portfolio. Course is Studio/critique-based with considerable amount of work/hours required. This course is designed to be taken during student's last year in the Pre-Architecture program.

N**ote(s):**

- Previously ARCH 1109. Read more.

Studio Hours: 90

ARCH 1125 - Design Fundamentals

3 credit hour(s)
Prerequisite: ARCH 1115

Introduces fundamental principles and processes of two-, three-, and four-dimensional design. Design aesthetics, perception, technique, composition, evaluation of materials and methods, practicing design methodologies, exploring design principles and theories, and graphic authorship are explored through various types of assignments.

Studio Hours: 90

ARCH 1215 - Introduction to Environmental Problems

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Examination of the fundamental concepts and issues related to the natural environment that planners face. Focus on land use and open space planning, planning and use of resources, interactions of urban residents and the physical environment, and the role of government in formulating appropriate policies and strategies.

N**ote(s):**

- Previously CRP 1181. Read more.

Theory Hours: 45

ARCH 2110 - Architectural Design Studio II

6 credit hour(s)
Prerequisite: ARCH 1115

Pre- or corequisite: ARCH 1120 and ARDR 1102

Provides an intermediate design studio format focused on the development of student-lead projects coupled with critical evaluation of graphic skills and architectural intent.

N**ote(s):**

- Previously ARCH 2201

Studio Hours: 180

ARCH 2117C - Architectural Visualization II

3 credit hour(s)
Pre- or corequisite: ARCH 2325

Students will advance on technical skills and workflows obtained in Architectural Visualization I to observe, document, transform and create multi-scalar ideas into irresistible visual expressions. This course will cover architectural drawing conventions of plan, section, elevation, axonometric projection, perspective construction, diagramming, mapping and imaging to effectively communicate design ideas through visual means.

Theory Hours: 30
Lab Hours: 45

ARCH 2120 - World Architecture I

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Lecture survey of the architectural and urban traditions of world cultures from prehistory to the Enlightenment. (unique)

N**ote(s):**

- Typically offered Fall semester only.
- Previously ARCH 2225. Read more.

Theory Hours: 45

ARCH 2125 - World Architecture II

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

A survey of modern architectural and urban traditions from 1700 to the present.

N**ote(s):**

- Typically offered Spring semester only.
- Previously ARCH 2226. Read more.

Theory Hours: 45

ARCH 2155 - Architectural Design Studio III

6 credit hour(s)
Prerequisite: ARCH 2110

Lecture survey of the architectural and urban traditions of world cultures from prehistory to the Enlightenment.

Note(s):

- Previously ARCH 2202. Read more.

Studio Hours: 180

ARCH 2315 - Architectural Design I

6 credit hour(s)
Prerequisite: ARCH 1115
Pre- or corequisite: ARCH 1120 and ARDR 1102

This course introduces fundamental principles and processes of architectural design. Students will explore topics such as design aesthetics, perception, technique, composition, evaluation of materials and methods, design methodologies, design principles and theories, and graphic authorship. Students will be exposed to interconnected architectural concepts of process, organizational strategies, and analysis of material methodology, while critically utilizing abstract and practiced graphical architectural conventions.

Studio Hours: 180

ARCH 2325 - Architectural Design II

6 credit hour(s)
Prerequisite: ARCH 2315

Studio introduces principles of urban design and planning through an exploration of a series of multi-scaled architectural projects that examine public goals and constraints, urban infrastructure and fabric, sustainability, historical and sociocultural issues.

Studio Hours: 180

Art Education

ARTE 2214 - Art in Elementary and Special Classrooms

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Art in Elementary and Special Classrooms Course is designed to introduce elementary education majors to the teaching of visual art. Students will study art, art history; childhood art developmental stages and will write a research paper on an artist and prepare an art lesson plan inspired by that artist. Students will create art projects using various materials and methods and learn about the integration of the arts into other core subjects.

Theory Hours: 30
Lab Hours: 60
Studio Hours: 90

Art History

ARTH 1110 - Art Appreciation

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course introduces and explores visual arts, providing an awareness of the significance of the arts at personal, societal and historical levels including both fine and applied arts.

N**ote(s):**

- Previously ARTH 1101. Read more.

Theory Hours: 45

ARTH 1116 - History of Design

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Introduces significant developments in the history of design as situated within its sociopolitical, cultural, and economic contexts. Design types ranging from furniture, interiors, products, and commercial to graphic design will be examined. The evolution of design will be traced in regards to materials, technology, social taste, and the effects of the shifting patterns of production and

consumption. This course will also consider how issues of gender, race, and class influence design.

Theory Hours: 45

ARTH 2110 - History of Art I

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This survey course explores the art and architecture of ancient pre-historic cultures through the end of the fourteenth century. While focused primarily on the art of the Western civilizations, this course will also provide insights into the works of other major cultures in order to provide alternate views of art and history. Emphasis will be placed on the relationship of artworks to political, social, spiritual, intellectual, and cultural movements that affect and are affected by their creation and development.

N**ote(s):**

- Previously ARTH 2201. Read more.

Theory Hours: 45

ARTH 2120 - History of Art II

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This survey course will explore the architecture, sculpture, ceramics, paintings, drawings, and glass objects from the 14th century to the modern era. While focused primarily on the art of the Western civilizations, this course will also provide insights into the works of other major cultures in order to provide alternate views of art and history. Emphasis will be placed on the relationship of artworks to political, social, spiritual, intellectual, and cultural movements that affect and are affected by their creation and development.

N**ote(s):**

- Previously ARTH 2202. Read more.

Theory Hours: 45

ARTH 2130 - Modern Art

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course is an overview of European and American art and architecture during the Modern era. Students will analyze the various movements in art as they relate to the historical settings in which the works were created. Emphasis will be placed on the relationship of artworks to political, social, spiritual, intellectual and cultural movements as they affected and were affected by their creation and development.

N**ote(s):**

- Previously ARTH 2250. Read more.

Theory Hours: 45

ARTH 2140 - Art of the American Southwest

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course examines the major cultures and artistic traditions of the southwest and their historical bases from prehistoric times to the present.

N**ote(s):**

- Previously ARTH 2251. Read more.

Theory Hours: 45

ARTH 2201 - History of Women Artists

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course examines the creative achievements of women artists within the art-historical continuum with focus on the changing role of women in the evolution of art.

N**ote(s):**

- Previously ARTH 2200. Read more.

Theory Hours: 45

ARTH 2310 - Art History Careers

3 credit hour(s)
Prerequisite: Department Approval
Recommended: Successful completion of two (2) ARTH courses

Students will utilize art historical perspectives and fundamental skills derived from prior art historical course work to make connections on how art is critical to shaping worldview. Students will engage in various career oriented and pre-research activities to prepare them to achieve their future transfer or employment goals. Students will deliberate on what they intend to do with their degree with focus on how they plan to use their Art History coursework.

N**ote(s):**

- Previously ARTH 2210. Read more.

Theory Hours: 45

ARTH 2996 - Special Topics

3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously ARTH 2096-2996. Read more.

Art Studio

ARTS 1111 - Introduction to Studio Art

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

Introduction to Studio Art is a hands on studio course, for non - art majors. Students will cover the techniques, materials, and terminology in both 2-Dimensional and 3-Dimensional image and form making. Major studio concepts are covered in Drawing, Design, Painting, Printmaking, Ceramics, Photography and Sculpture. Emphasis is placed in "Hands on" problem solving and includes historic overview where applicable.

N**ote(s):**

- Previously ARTS 1102. Read more.

Studio Hours: 90

ARTS 1220 - Art Practices I

3 credit hour(s)

Pre- or corequisite: Reading and Writing Skills 2

This course introduces the exploration of processes, ideas, and diverse media of visual arts. It addresses the thematic concepts that are central to the nature of art making today, with emphasis given to issues of LIGHT, FRAME, and MARK while developing an understanding of the elements and principles of design.

N**ote(s):**

- Previously ARTS 1125. Read more.

Studio Hours: 90

ARTS 1230 - Art Practices II

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course introduces the exploration of processes, ideas, and diverse media of visual arts. It addresses the thematic concepts that are central to the nature of art making today, with emphasis given to issues of MOTIVE and CHANGE while developing concepts, techniques, and processes involved in working in the third dimension.

N**ote(s):**

- Previously ARTS 1126. Read more.

Studio Hours: 90

ARTS 1240 - Design I

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course introduces the fundamentals of two-dimensional design as it applies to fine art and commercial contexts. Emphasis will be on basic color theory, elements of dynamic composition, vocabulary of visual arts and design, and development of visual conceptual skills. Students will use a variety of materials and techniques.

N**ote(s):**

- Previously ARTS 1121. Read more.

Studio Hours: 90

ARTS 1250 - Design II

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 + ARTS 1610

This course introduces the basic formal (aesthetic), spatial, and physical aspects of 3-D form as they can be applied to sculptural and functional design. Techniques that explore structure, mass, volume, scale, surface, form, and function are covered, along with various media, which may include paper, wood, clay, and/or metal.

N**ote(s):**

- Typically offered Fall and Spring terms only.
- Previously ARTS 1122. Read more.

Studio Hours: 90

ARTS 1320 - Ceramics I

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

An introduction to the medium of clay incorporating hand building and wheel throwing to introduce the student to both the sculptural and utilitarian uses of clay. The student will also be introduced to a variety of glazing and firing techniques.

N**ote(s):**

- Offered at Westside Campus only
- Previously ARTS 1168. Read more.

Studio Hours: 90

ARTS 1410 - Introduction to Photography

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course introduces the making of photographic images from a broad viewpoint to consider both as an art practice and as a cultural practice. The course covers technical information on camera use and functionality, composition and visual design, digital workflow and editing, professional functions of manipulating and enhancing images, and printing correctly and effectively. The historical aspects of photography are also covered.

N**ote(s):**

- Previously ARTS 1135. Read more.

Studio Hours: 90

ARTS 1610 - Drawing I

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

This course introduces the basic principles, materials, and skills of observational drawing. Emphasis is placed on rendering a 3-D subject on a 2-D surface with visual accuracy. Other topics include historical and contemporary references as well as an investigation of linear perspective, line, value, shape, space & composition.

N**ote(s):**

- Previously ARTS 1106. Read more.

Studio Hours: 90

ARTS 1620 - Life Drawing I

3 credit hour(s)
Prerequisite: ARTS 1610
Pre- or corequisite: Reading and Writing Skills 2

This course introduces the study of the human form as a primary vehicle for addressing formal and conceptual issues in drawing, using a variety of media to master proportion, structure, and visual expression of the figure.

N**ote(s):**

- Typically offered Fall and Spring Semesters only.
- Previously ARTS 2204. Read more.

Studio Hours: 90

ARTS 1630 - Painting I

3 credit hour(s)
Prerequisite: ARTS 1610 + (ARTS 1240 or ARTS 1220)

This course introduces the tradition of painting as a medium for artistic expression. Students will investigate materials, tools, techniques, history and concepts of painting. Emphasis is placed on developing descriptive and perceptual skills, color theory, and composition.

N**ote(s):**

- Previously ARTS 2207. Read more.

Studio Hours: 90

ARTS 1710 - Introduction to Printmaking

3 credit hour(s)
Prerequisite: ARTS 1610 + (ARTS 1240 or ARTS 1220)

This course provides direct experience of exploring basic printmaking processes, including relief, intaglio, and monoprint processes, as well as the investigation of materials/media, tools, techniques, history, and concepts of printmaking. Emphasis is given to solving problems through thematic development while producing a portfolio of prints.

N**ote(s):**

- Previously ARTS 2206. Read more.

Studio Hours: 90

ARTS 1810 - Jewelry and Small Metal Construction I

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

This course introduces the basic techniques, materials, and tools traditionally used in the creation of jewelry and/or small-scale sculptural objects.

N**ote(s):**

- Previously ARTS 2208. Read more.

Studio Hours: 90

ARTS 1830 - Shop Foundations

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

This course provides an introduction to the proper use of shop facilities with an emphasis on the safety procedures required for their proper use. The course will provide the student with a foundation of technical skills for use in the production of their work in subsequent classes.

Studio Hours: 90

ARTS 1840 - Sculpture I

3 credit hour(s)
Prerequisite: ARTS 1830

This course introduces the student to a variety of medium and techniques used in the production of sculpture; along with the historic, conceptual, and esthetic foundations of the sculptural process.

Studio Hours: 90

ARTS 2010 - Portfolio Development

3 credit hour(s)
Prerequisite: Two (2) ARTS 2000 level courses

This course presents the practicalities of building an art career with emphasis on developing a professional portfolio through visual aids, resumes, statements, and presentations. It covers professional practices of the studio artist including self-promotion, contracts, research tools for exhibition venues and other art related opportunities.

N**ote(s):**

- Typically offered Fall and Spring term.
- Previously ARTS 2210. Read more.

Theory Hours: 90
Studio Hours: 90

ARTS 2131 - Illustration Arts

3 credit hour(s)
Prerequisite: FDMA 1260 + ARTS 1610 + (ARTS 1240 or ARTS 1220)

Integrates traditional drawing, non-traditional drawing, and electronic drawing techniques together to create a portfolio of illustrative designs. Emphasis will be placed on artistic concepts combined with text and skilled execution of scenarios that artfully communicate ideas and purpose.

Studio Hours: 90

ARTS 2211 - Portraiture

3 credit hour(s)
Prerequisite: ARTS 1610 + Reading and Writing Skills 2

The examination of the portrait in drawing and painting, emphasizing development of personal skills in depicting likeness and personality. Various artistic media are used to explore the anatomy of the human head and face and its power to express emotion. The role of the portrait throughout history is examined together with development of skills.

N**ote(s):**

- Typically offered Summer Term only.

Studio Hours: 90

ARTS 2310 - Ceramics II

3 credit hour(s)
Prerequisite: ARTS 1320

This course continues the students' instruction in ceramics, with an emphasis given to the continuing development of form, surface, and firing processes, expanded critical awareness, and the development of a personal aesthetic.

N**ote(s):**

- Offered at Westside Campus only
- Previously ARTS 2268. Read more.

Studio Hours: 90

ARTS 2420 - Visualizing Ideas

3 credit hour(s)
Prerequisite: ARTS 1410

The course is dedicated to teaching how to visualize ideas within the photographic medium by combining theoretical content and aesthetic form to create a conceptually rich body of work. It explores advanced digital photography, including perfecting use of the camera and relevant digital software, and honing inkjet printing skills. We will explore new techniques and workflows, and use them to respond to a variety of themes and concerns. We will look at a number of contemporary photographic practitioners, and discuss a multitude of historical and contemporary approaches to the same ideas we will be probing.

N**ote(s):**

- Previously ARTS 1136. Read more.

Studio Hours: 90

ARTS 2610 - Drawing II

3 credit hour(s)
Prerequisite: ARTS 1610

This course introduces color and colored media as an element of composition while emphasizing descriptive and perceptual drawing skills and conceptual approaches to contemporary drawing.

N**ote(s):**

- Previously ARTS 2205. Read more.

Studio Hours: 90

ARTS 2620 - Life Drawing II

3 credit hour(s)
Prerequisite: ARTS 1610 + Reading and Writing Skills 2
Pre- or corequisite: ARTS 1620

This course introduces color and colored media as an element of composition while emphasizing descriptive and perceptual drawing skills and conceptual approaches to contemporary drawing.

N**ote(s):**

- Typically offered every other year.
- Previously ARTS 2214. Read more.

Studio Hours: 90

ARTS 2630 - Painting II

3 credit hour(s)
Prerequisite: ARTS 1630 + Reading and Writing Skills 2

This course focuses on the expressive and conceptual aspects of painting, building on the observational, compositional, technical, and critical skills gained previously. Students will investigate a variety of approaches to subject matter, materials, and creative processes through in-class projects, related out-of-class assignments, library research or museum/gallery attendance, written responses, and critiques.

N**ote(s):**

- Typically offered Spring term only.
- Previously ARTS 2217. Read more.

Studio Hours: 90

ARTS 2710 - Intermediate Printmaking

3 credit hour(s)
Prerequisite: ARTS 1710 or department approval

This course provides direct experience in exploring advanced printmaking concepts, including screen printing, multiple block relief printing, plate lithography, and mixed media printmaking. Emphasis is given to developing a portfolio of prints focusing on individual expression, collaborative work, and digital imagery.

N**ote(s):**

- Typically offered every other year.
- Previously ARTS 2216. Read more.

Studio Hours: 90

ARTS 2810 - Jewelry and Small Metal Construction II

3 credit hour(s)
Prerequisite: ARTS 1810

Fabrication skills are further developed and refined while additional advanced fabrication methods are introduced. Emphasis is placed on developing a deeper understanding of form and content as it relates to creating on an intimate scale.

N**ote(s):**

- Previously ARTS 2218. Read more.

Studio Hours: 90

ARTS 2818 - Jewelry Casting

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

This course introduces students to a wide range of non-ferrous casting techniques. Sand Casting, cuttle-fish casting, centrifugal casting, vacuum casting and experimental casting may be covered. Students will learn to carve waxes and cast non-wax objects. Students will create sprue trees, invest waxes, schedule/program kiln burn-outs and participate in pouring their castings.

Note(s):

- Previously ARTS 2830. Read more.

Studio Hours: 90

ARTS 2820 - Jewelry and Small Metal Construction Portfolio

3 credit hour(s)
Prerequisite: ARTS 1810

Advanced study in bench jewelry and/or small metal construction techniques through the creation of a series of personal works.

N**ote(s):**

- Previously ARTS 2228. Read more.

Studio Hours: 90

ARTS 2994 - Illustration Arts Portfolio

3 credit hour(s)
Prerequisite: ARTS 2131
Recommended: ARTS 1410*

An Advanced study in Illustration, typography and design communication through the development of a series of artistically-driven works. Emphasis is placed upon a multi-media approach, synthesizing both illustration and design into project samples that will culminate in a physical professional portfolio.

N**ote(s):**

- Previously ARTS 2132. Read more.
- *Students will be using digital photography in this course.

Studio Hours: 90

ARTS 2996 - Special Topics

3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously ARTS 2096-2996. Read more.

ARTS 2998 - Arts Internship

3 credit hour(s)
Prerequisite: At least two (2) 2000 level ARTS courses and Department Approval

Provides students the opportunity to work and apply knowledge and skills learned in the classroom in a "real life" setting for a minimum of 135 hours. Students are not paid for their work but are supervised jointly by CNM and the employer. Students will also exhibit their work during this course. Sections may require exhibition of personal jewelry artwork, ceramics pieces, prints, paintings, etc.

N**ote(s):**

- Previously ARTS 2298.

Internship Hours: 135

Artificial Intelligence and Machine Learning

AIML 1310 - Introduction to Artificial Intelligence

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Cover basic concepts and applications of artificial intelligence (AI), including AI project cycles. Focus on issues surrounding AI including ethics, bias, culture, regulations, and professional expectations.

N**ote(s):**

- Previously AIML 1010. Read more.

Theory Hours: 45

AIML 1320 - Fundamentals of Artificial Intelligence

3 credit hour(s)
Prerequisite: AIML 1310
Pre- or corequisite: CSCI 1220

Compares and applies machine learning solutions for computer vision, natural language processing, and data analytics.

N**ote(s):**

- Previously AIML 2010. Read more.

Theory Hours: 45
Lab Hours: 15

AIML 2310 - Deep Learning

3 credit hour(s)
Prerequisite: AIML 1320

Deep learning mimics the human brain enabling systems to make predictions with incredible accuracy. Students in this course identify the main deep learning algorithms and applications.

N**ote(s):**

- Previously AIML 2110. Read more.

Theory Hours: 45
Lab Hours: 15

AIML 2320 - Natural Language Processing

3 credit hour(s)
Prerequisite: AIML 1320

Natural language processing machines understand and respond to text or voice with text or speech of their own. Students in the course identify the main natural language processing algorithms and applications.

N**ote(s):**

- Previously AIML 2120. Read more.

Theory Hours: 45
Lab Hours: 15

Astronomy

ASTR 1010 - Introduction to Solar System Astronomy

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: Math Skills 3

Astronomy 1010 provides a historical introduction to the science of astronomy, with an emphasis on the nature and evolution of models of the solar system. We spend time on the fundamentals of modern astronomy, including motion, forces, gravity, and the nature of light. We focus on the dynamics and physical properties of solar system objects, including planets, moons, asteroids, and comets. Finally, our study culminates with an investigation of the origin of the solar system. Additional topics may include recent advances in astronomical research and findings from current solar system exploration by automated spacecraft. Astronomy 1010 is a course designed for students having little or no background in astronomy or physics. The course focuses on interpretation of the nature of the solar system based on modern observational techniques and the properties of light and matter.

N**ote(s):**

- Students not meeting the Reading and Writing Skills 2 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.

Theory Hours: 45

ASTR 1010L - Introduction to Solar System Astronomy Laboratory

1 credit hour(s)
Pre- or corequisite: ASTR 1010
Recommended: Math Skills 3

This is an optional laboratory course for the exploration of the principles and phenomena discussed in the Introduction to Solar System Astronomy lecture course. This course includes laboratory activities (indoor and outdoor) investigating the properties of the objects within our Solar System in addition to an analysis of Solar System phenomena. Topics include measuring the properties of Solar System objects (their sizes, distances, etc.), analyzing their motions, developing an understanding of the observational effects of Earth's own motion, and an introduction to the methods employed by astronomers to make new discoveries.*A working knowledge of basic algebra will be useful in this course.

N**ote(s):**

- Previously ASTR 1092. Read more.

Lab Hours: 45

ASTR 1110 - Introduction to Stellar and Galactic Astronomy

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 3
Recommended: ASTR 1110L*

Stars, galaxies, and the structure of the universe are explored in this descriptive course. Starting with a review of the fundamentals of astronomy, the course then moves on to the formation, evolution, and death of stars. The course then continues with the nature of galaxies, galaxy evolution, current concepts in cosmology, and the large scale structure of the universe. Astronomy 1110 is a course designed for students having little or no background in astronomy or physics. The course focuses on interpretation of the nature of the universe based on modern observational techniques and the properties of light and matter.

N**ote(s):**

- Students not meeting the Reading and Writing Skills 2 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- * It is strongly recommended that students take the lab course concurrently with the lecture. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.

Theory Hours: 45

ASTR 1110L - Introduction to Stellar and Galactic Astronomy Laboratory

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 3
Pre- or corequisite: ASTR 1110

Astronomy 1110L is an optional laboratory for the investigation of the principles and phenomena discussed in Astronomy 1110. This course includes laboratory experiments concerning the nature of light, laws of motion, an introduction to the internet and computer simulations of data taking and analysis similar to current research in astronomy.

N**ote(s):**

- Students not meeting the Reading and Writing Skills 2 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously ASTR 1192. Read more.

Lab Hours: 45

ASTR 1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously ASTR 1096-1996. Read more.

ASTR 2996 - Special Topics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously ASTR 2096-2996. Read more.

Automotive Technology

AUTC 1110 - Introduction to Automotive Systems

4 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Introduces essential shop skills including safety, tool identification and use, under-car and under-hood servicing, repair information retrieval and proper use and care of equipment. Introduces the relationships between all vehicle systems and sub-systems. Prepares students to perform basic service operations required of entry level technicians. Introduces students to program and CNM.

Theory Hours: 30
Lab Hours: 90

AUTC 1120 - Brake Systems

3 credit hour(s)
Pre- or corequisite: AUTC 1110 or department 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.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

AUTC 1130 - Suspension and Alignment

3 credit hour(s)
Pre- or corequisite: AUTC 1110 or department 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.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

AUTC 1140 - Automotive Electrical

4 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Presents critical skills necessary for identifying and correcting problems found in automotive electrical/electronic systems. Included DVOM and analog meter use, voltage drop testing, wiring schematic interpretation and electrical troubleshooting procedures.

Theory Hours: 30
Lab Hours: 90

AUTC 1210 - Manual Transmissions

3 credit hour(s)
Prerequisite: AUTC 1110 + AUTC 1120 + AUTC 1130 + AUTC 1140

Introduces fundamentals of design and operation in front and rear drive manual transmissions, differentials and drive line components. Activities include the disassembly,

measurement, inspection and repair of various transmissions in the vehicle and on the bench.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

AUTC 1220 - Engine Repair

4 credit hour(s)
Prerequisite: AUTC 1110 + AUTC 1120 + AUTC 1130 + AUTC 1140

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.

Theory Hours: 30
Lab Hours: 90

AUTC 1230 - Automatic Transmissions

4 credit hour(s)
Prerequisite: AUTC 1110 + AUTC 1120 + AUTC 1130 + AUTC 1140

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.

Theory Hours: 30
Lab Hours: 90

AUTC 1240 - Automotive Electronics

3 credit hour(s)
Prerequisite: AUTC 1110 + AUTC 1120 + AUTC 1130 + AUTC 1140

Builds on skills developed in AUTC 1140. Covers testing and diagnostic procedures in more complex automotive electronic systems. Includes lighting circuits, body computers and sensors, use of lab scopes and scan tools.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

AUTC 1310 - Automotive Restoration and Modification

2 credit hour(s)
Prerequisite: AUTC 1110 + AUTC 1140 + AUTC 1240

Focuses on the exploration of the mechanical, structural, paint and body restoration of automobiles. Presents various modalities of restoration and modification of current and vintage automobiles. Students will have opportunities to engage in and observe the restoration and modification practices occurring on vehicles today. Throughout the course, students will have opportunities to work on vehicles while learning about vehicle modification principles and techniques currently used by local after-market industries.

Theory Hours: 15
Lab Hours: 45

AUTC 1315 - Introduction to Hybrid and Electric Vehicles

2 credit hour(s)

Introduction to Hybrid and Electric vehicles, (EV's), focuses on the safety related issues involving Hybrid and EV's. Course presents Hybrid/EV's different drive systems, high voltage battery function and design, battery converter systems and high voltage battery accessory components.

Theory Hours: 15
Lab Hours: 45

AUTC 1320 - Parts Specialist

2 credit hour(s)
Prerequisite: AUTC 1110 or department approval

Prepares students for the fundamentals and operation of the automotive parts industry. Presents skills necessary for students to succeed as a Parts Counter Specialist. Introduces essential skills including general operations, customer relations, vehicle systems knowledge, computer skills, catalog skills, inventory management, and merchandising.

Theory Hours: 15
Lab Hours: 45

AUTC 1325 - Light Duty Diesel Service and Diagnosis

2 credit hour(s)

This course will focus on the diagnosis, operating principles and basic design of light duty diesel engines. Reinforces combustion engine theory, compare and contrast the difference in gas and diesel engines, and introduces the student to light diesel diagnostics emission system testing, service, and repair.

Theory Hours: 15
Lab Hours: 45

AUTC 2096-2996 - Special Topics

1-7 credit hour(s)
Prerequisite: Department approval

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

AUTC 2111 - Air Conditioning and Heating

3 credit hour(s)
Prerequisite: AUTC 1210 + AUTC 1220 + AUTC 1230 + AUTC 1240

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.

Theory Hours: 15
Lab Hours: 90

AUTC 2120 - Engine Performance I

3 credit hour(s)
Prerequisite: AUTC 1210 + AUTC 1220 + AUTC 1230 + AUTC 1240

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.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

AUTC 2130 - Engine Performance II

4 credit hour(s)
Prerequisite: AUTC 1210 + AUTC 1220 + AUTC 1230 + AUTC 1240

Provides intermediate and advanced information to test and repair computer controlled automotive drive trains. It concentrates on ignition systems, computer sensor diagnosis, emission control devices and five gas exhaust analysis advanced diagnostic procedures, OBD II design and function an overview of hybrid systems. It provides further advanced mastery of ASE/NATEF engine performance program standards.

Theory Hours: 30
Lab Hours: 90

AUTC 2197 - Independent Study

1-6 credit hour(s)
Prerequisite: Department approval

Focuses on a specific problem while working with an instructor.

AUTC 2198 - Automotive Internship

6 credit hour(s)
Prerequisite: AUTC 1210 + AUTC 1220 + AUTC 1230 + AUTC 1240 or department approval

Provides an opportunity for the student to work for one term on a cooperative basis in an appropriate automotive repair facility. Students will identify an automotive repair facility, apply for an internship, and complete a 12-week assignment.

Internship Hours: 270

AUTC 2250 - Transportation Alternative Fuels

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Presents the history, present practices, political issues, and future of alternative fuels for the transportation industry. Includes discussions and hands-on demonstrations of hybrid, CNG/propane, electric, hydrogen (fuel cell), and biodiesel technologies. May include guest speakers from local industries.

Theory Hours: 30

Aviation Maintenance

AVMT 1005 - Aviation Math

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg
Pre- or corequisite: AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

Introduction to aircraft terminology, nomenclature, and provides an overview of basic mathematical operations and computations. Also provides an understanding of aircraft weight and balance and its integration into the maintenance function.

Theory Hours: 30
Lab Hours: 45

AVMT 1010 - Aviation Science

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg
Pre- or corequisite: AVMT 1005 + AVMT 1015 + AVMT 1020 + AVMT 1025

Provides basic concepts of motion, fluid dynamics, heat and sound, aerodynamics, aircraft structure and theory of flight. Provides basic understanding of drawings and drawing symbols and schematic diagrams. Performs aircraft ground operations and fuel servicing techniques.

Theory Hours: 30
Lab Hours: 45

AVMT 1015 - Materials & Processes

3 credit hour(s)
Pre- or corequisite: AVMT 1005 + AVMT 1010 + AVMT 1020 + AVMT 1025

Introduction to aircraft terminology, nomenclature, materials and processes, fluid lines and fittings, precision measuring equipment, mechanics tools, aircraft hardware, aircraft cleaning and corrosion control. Covers the process and procedures required to inspect, repair, and fabricate rigid and flexible fluid lines. Covers aircraft hardware identification and the use of precision measuring tools. Covers identification of various forms of corrosion and cleaning techniques.

Theory Hours: 30
Lab Hours: 45

AVMT 1020 - Maintenance Forms & Publications

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1025

Provides an overview of FAA regulations, publications, forms, and records and how they relate to aviation maintenance activities. Provides an opportunity to become familiar with manufacturer's maintenance publications and their use in performing maintenance and repair. Defines the qualifications, privileges, and limitations of a maintenance technician.

Theory Hours: 30
Lab Hours: 45

AVMT 1025 - Basic Electricity

4 credit hour(s)
Pre- or corequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020

The student is introduced to aircraft terminology, nomenclature, basic electrical principles of direct and alternating currents, aircraft batteries, precision measuring equipment, and interpretation of electrical circuit diagrams as they pertain to every day shop problems.

Theory Hours: 45
Lab Hours: 45
Additional Lab Hours: 15

AVMT 1105 - Airframe Electrical

3 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

The student is introduced to aircraft terminology, nomenclature, basic airframe electrical components, principles of direct and alternating current generating systems, precision measuring equipment, and interpretation of electrical circuit diagrams as they pertain to every day shop problems.

Theory Hours: 30
Lab Hours: 45

AVMT 1110 - A/C Materials & Finishes

4 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

The student is introduced to aircraft terminology, nomenclature, wood structures, fabric coverings, aircraft finishes, aircraft composite materials, structures, and construction techniques. This course provides general knowledge in this subject area as it pertains to every day shop problems.

Theory Hours: 45
Lab Hours: 45
Additional Lab Hours: 15

AVMT 1115 - A/C Sheet Metal

4 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

The student is introduced to aircraft terminology, nomenclature, aircraft sheet metal structure construction and repair methods as they pertain to every day shop problems.

Theory Hours: 45
Lab Hours: 45
Additional Lab Hours: 15

AVMT 1120 - A/C Assembly & Rigging

3 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

The student is introduced to aircraft terminology, nomenclature, basic welding process of aircraft structures, inspection methods, and assembly and rigging procedures as they pertain to every day shop problems.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 15

AVMT 1125 - A/C Landing Gear Systems

3 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

The student is introduced to aircraft terminology, nomenclature, landing gear systems, special servicing equipment, and the basic operating principles of hydraulic and pneumatic systems as they pertain to every day shop problems.

Theory Hours: 30
Lab Hours: 45

AVMT 1130 - A/C Fuel Systems

2 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

The student is introduced to aircraft terminology, nomenclature, and aircraft fuel systems as they pertain to every day shop problems.

Theory Hours: 15
Lab Hours: 45

AVMT 1135 - A/C Environmental Systems

3 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

The student is introduced to aircraft terminology, nomenclature, airframe environmental systems such as cabin atmosphere, ice and rain control, and fire protection and maintenance requirements for these systems as they pertain to every day shop problems.

Theory Hours: 30
Lab Hours: 45

AVMT 1140 - A/C Instruments

3 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

The student is introduced to aircraft terminology, nomenclature, aircraft instruments, navigation/communication systems, and position and warning systems and the technical data to maintain these system as they pertain to every day shop problems.

Theory Hours: 30
Lab Hours: 45

AVMT 1145 - Airframe Inspection

3 credit hour(s)
Pre- or corequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

The student is introduced to aircraft terminology, nomenclature, and airframe inspection methods as they pertain to every day shop problems.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 15

AVMT 1305 - Powerplant Electrical

2 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

The student is introduced to aircraft terminology, nomenclature, basic powerplant electrical components, principles of direct and alternating current generating systems, precision measuring equipment, and interpretation of electrical circuit diagrams as they pertain to every day shop problems.

Theory Hours: 15
Lab Hours: 45

AVMT 1310 - Reciprocating Eng. 1

3 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

Introduction to aircraft terminology, nomenclature, and provides an overview of basic reciprocating engine design and operation. Presents information on inspection, checking, servicing, and repair of reciprocating engines and engine installations.

Theory Hours: 30
Lab Hours: 45

AVMT 1315 - Reciprocating Eng. 2

4 credit hour(s)
Pre- or corequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025 + AVMT 1310

This course will expand upon issues with reciprocating engines.

Theory Hours: 45
Lab Hours: 45
Additional Lab Hours: 15

AVMT 1320 - Turbine Engines

4 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

Introduction to aircraft terminology, nomenclature, and provides an overview of basic turbine engine design and operation. Presents information on inspection, checking, servicing, and repair of turbine engines and engine installations.

Theory Hours: 45
Lab Hours: 45
Additional Lab Hours: 15

AVMT 1325 - Powerplant Systems 1

3 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

Introduction to aircraft terminology, nomenclature, and provides an overview of powerplant lubrication, induction and airflow, cooling, and exhaust and reverser systems. Presents information on inspection, checking, servicing, troubleshooting, and repair of these powerplant systems.

Theory Hours: 30
Lab Hours: 45

AVMT 1330 - Propellers

2 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

Introduction to aircraft terminology, nomenclature, and provides an overview of propeller systems for reciprocating and turbine engines. Presents information on inspection, checking, servicing, troubleshooting, and repair of propeller systems and installations.

Theory Hours: 15
Lab Hours: 45

AVMT 1335 - Powerplant Fuel Systems

3 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

Introduction to aircraft terminology, nomenclature, and provides an overview of powerplant fuel metering and delivery systems for reciprocating and turbine engines. Presents information on inspection, checking, servicing, troubleshooting, and repair of powerplant fuel metering and delivery systems and installations.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 15

AVMT 1340 - Powerplant Systems 2

3 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

Introduction to aircraft terminology, nomenclature, and provides an overview of powerplant instruments, fire protection, and ignition and starting systems for reciprocating and turbine engines. Presents information on inspection, checking, servicing, troubleshooting, and repair of powerplant instruments, fire protection, and ignition and starting systems and installations.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 15

AVMT 1345 - Engine Inspection

3 credit hour(s)
Prerequisite: AVMT 1005 + AVMT 1010 + AVMT 1015 + AVMT 1020 + AVMT 1025

Introduction to aircraft terminology, nomenclature, and provides an overview of engine inspection processes and procedures. Presents information on engine conformity and airworthiness checks.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 15

Basic Patient Care Skills

BPCS 1092 - Basic Patient Care Skills

1 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Introduces students to the principles of providing basic patient care including communication, patient safety and infection control with practice in gloving, gowning and sterile procedures. Provides instruction and supervised practice of vital signs, transfer, moving and positioning techniques, protection of airway, Oxygen delivery devices, basic ECG monitoring, drains, tubes, IVs, pumps and other considerations for the hospitalized patient.

Lab Hours: 45

Beverage

BEV 1010 - Beverage Production Equipment and Maintenance

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg
Pre- or corequisite: BEV 1100 or BEV 1200 or BEV 1300

Presents students with correct operation and maintenance of all beverage production, packaging equipment, associated machinery, and safety gear.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age or older at the start of the term.
- BEV 1010 replaced BEV 1110 in the Fall 2021 term. Students who received credit for BEV 1110 may not have to take BEV 1010. See the program director or school advisor for more information.

Theory Hours: 15
Lab Hours: 90

BEV 1096-1996 - Special Topics

1-3 credit hour(s)
Prerequisite: Department approval

Presents various topics.

BEV 1100 - Beer Production and Styles

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

Introduces origins, basic production methods, and identification of major beer styles. Development of sensory evaluation skills for visual, aroma, taste, and tactile components of both typical beers and faults.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age or older at the start of the term.

Theory Hours: 15

BEV 1110 - Brewing Equipment and Maintenance

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1 + Math Skills 2 Alg

Presents students with correct operation and maintenance of all brewing and packaging equipment, associated machinery, and safety gear.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age or older at the start of the term.
- This course will no longer be offered beginning in Fall 2022, please enroll in BEV 1010.

Theory Hours: 15
Lab Hours: 90

BEV 1111 - Beer and Society

1 credit hour(s)

This course introduces cultural and social aspects of beer around the world from ancient times to the future. Students will explore stories of beer through selected readings, seminars, discussions, guided beer tastings, and food pairings. (Prerequisite: You must be 21 or over to take this course.)

Theory Hours: 15

BEV 1130 - Beer Production I

3 credit hour(s)
Pre- or corequisite: (BEV 1110 or BEV 1010) + BEV 1100

Provides theory and hands-on application of raw materials selection and handling, malting, and wort production. Quality assurance and safety procedures are stressed at every step.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age or older at the start of the term.

Theory Hours: 15
Lab Hours: 90

BEV 1140 - Beer Production II

3 credit hour(s)
Pre- or corequisite: BEV 1130

Provides theory and hands-on application of cellar operations, packaging, storage, stock rotation. Quality assurance and safety procedures are stressed at every step. Introduces government regulations and tax issues pertaining to the brewing industry.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age or older at the start of the term.

Theory Hours: 15
Lab Hours: 90

BEV 1160 - Beverage Service I

3 credit hour(s)
Pre- or corequisite: CULN 1100 or HRTM 1120 or BEV 1100 or BEV 1200 or BEV 1300

Introduces identification, production, and service of beverages common to the foodservice industry, including beer, wine, distilled beverages and cocktails, coffee, tea, and non-alcoholic beverages. Development of sensory evaluation skills for visual, aroma, taste, and tactile components. Introduces basic food pairing techniques.

N**ote(s):**

- To enroll in this course, students do not need to be 21 years of age or older as tasting is not a requirement.

Theory Hours: 45

BEV 1192 - Draught Systems

1 credit hour(s)
Pre- or corequisite: BEV 1100

Overview of draught systems, including safety, design, maintenance, operation, and troubleshooting.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age or older at the start of the term.

Lab Hours: 45

BEV 1200 - Wine Production and Styles

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

Introduces origins, components, basic production methods, and identification of major wine styles and regions. Development of sensory evaluation skills for visual, aroma, taste, and tactile components of wines.

N**ote(s):**

- To enroll in this course, students must be at least

21 years of age at the start of the term.

Theory Hours: 15

BEV 1230 - Wine Production I

3 credit hour(s)
Pre- or corequisite: BEV 1010 + BEV 1200

Provides theory and hands-on applications in ingredient selection, growing, harvesting, pressing, and processing grapes to produce various styles of wine. Quality assurance and safety procedures are stressed at every step.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age at the start of the term.

Theory Hours: 15
Lab Hours: 90

BEV 1240 - Wine Production II

3 credit hour(s)
Pre- or corequisite: BEV 1230

Provides theory and hands-on application of fermentation, aging, cellaring, blending, and packaging wine. Quality assurance and safety procedures are stressed at every step. Introduces government regulations and tax issues pertaining to the wine making industry.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age at the start of the term.

Theory Hours: 15
Lab Hours: 90

BEV 1292 - Food and Beverage Pairing

1 credit hour(s)
Prerequisite: BEV 1100 or BEV 1160 or BEV 1200 or BEV 1300

Introduces traditional and analysis-based techniques for pairing food and beverages in both single- and multicourse settings.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age at the start of the term.

Lab Hours: 45

BEV 1300 - Distilled Spirits Production and Styles

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

Introduces origins, components, basic production methods, and identification of major distilled spirits. Development of sensory evaluation skills for visual, aroma, taste, and tactile components of distilled spirits.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age at the start of the term.

Theory Hours: 15

BEV 1330 - Distilled Spirits Production I

3 credit hour(s)
Pre- or corequisite: BEV 1010 + BEV 1300

Provides theory and hands-on application of raw materials selection and handling, production and fermentation of various types of distiller's wash, and pot-distillation. Quality assurance and safety procedures are stressed at every step.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age at the start of the term.

Theory Hours: 15
Lab Hours: 90

BEV 1340 - Distilled Spirits Production II

3 credit hour(s)
Pre- or corequisite: BEV 1330

Provides theory and hands-on application of re-distillation of distilled spirits to produce neutral spirit and various other finished spirits, including proofing, aging, blending, and packaging distilled spirits. Quality assurance and safety procedures are stressed at every step. Introduces government regulations and tax issues pertaining to the distilled spirits industry.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age at the start of the term.

Theory Hours: 15
Lab Hours: 90

BEV 1392 - Mixology

1 credit hour(s)

Prerequisite: BEV 1100 or BEV 1160 or BEV 1200 or BEV 1300

Overview of classic and contemporary cocktails focusing on mixology and advanced beverage service.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age at the start of the term.

Lab Hours: 45

BEV 2010 - Beverage Product Development and Marketing

3 credit hour(s)
Prerequisite: BEV 1140 or BEV 1240 or BEV 1340

Introduces students to the theoretical considerations and practical realities of the process of conceiving, developing, creating, and marketing a beverage.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age at the start of the term.

Theory Hours: 45

BEV 2096-2996 - Special Topics

1-3 credit hour(s)
Prerequisite: Department approval

Presents various topics.

BEV 2097 - Independent Study

1-8 credit hour(s)
Prerequisite: Department approval

Student works with the instructor on specific topics directly related to the course or program of study. The meeting time is arranged between the student and the instructor.

BEV 2160 - Beverage Service II

3 credit hour(s)
Prerequisite: BEV 1160

Focuses on advanced service and food pairing techniques for beer and wine. Marketing, managing, and integrating a beverage program in a variety of foodservice and hospitality operations.

N**ote(s):**

- To enroll in this course, students must be at least 21 years of age or older at the start of the term.

Theory Hours: 45

BEV 2260 - Bar and Beverage Management

3 credit hour(s)
Prerequisite: HRTM 1120 or CULN 1100 or BEV 1160

Introduces principles and practices regarding the selection, control, promotion, and service of beverages. Examines current and past industry and consumer trends and their impact on hospitality beverage programs.

N**ote(s):**

- Similar NM courses: NMSU HRTM 420 Bar and Beverage Management

Theory Hours: 45

BEV 2798 - Internship

1 credit hour(s)
Prerequisite: Department Approval

Provides students the opportunity to work a minimum of 45 hours in a new job experience in a brewing or beverage management environment. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously BEV 2198

Internship Hours: 45

BEV 2898 - Internship

2 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 90 hours in a new job experience in a brewing or beverage management environment. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously BEV 2298

Internship Hours: 90

BEV 2998 - Internship

3 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 135 hours in a new job experience in a brewing or beverage management environment. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously BEV 2098

Internship Hours: 135

Biology

BIOL 1110 - General Biology

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: BIOL 1110L*

This course introduces non-science majors to basic biological concepts including, but not limited to, the properties of life, biochemistry, cell biology, molecular biology, evolution, biodiversity, and ecology.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- * It is strongly recommended that students take the lab course concurrently with the lecture. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.
- Previously BIO 1010. Read more.

Theory Hours: 45

BIOL 1110L - General Biology Lab

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: BIOL 1110

This laboratory course for non-science majors compliments the concepts covered in the associated general biology lecture course. Students will learn quantitative skills involved in scientific measurement and data analysis. Students will also perform experiments related to topics such as biochemistry, cell structure and function, molecular biology, evolution, taxonomic classification and phylogeny, biodiversity, and ecology.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously BIO 1092. Read more.

Lab Hours: 45

BIOL 1125 - Human Biology

4 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Basic scientific principles are applied to understanding the human body and explored in a biology laboratory setting. Students will learn about how the Scientific Method is developing our understanding of major organ systems and how those systems function together. The course will also explore how our concepts of human physiology have changed through years of accumulation of scientific knowledge, how human physiology and evolution has been influenced by environmental changes, and how

we influence our environment to maintain homeostasis. Course work will include group activities in the laboratory to see how organ systems work together and the development of a small group project that incorporates the information learned about human biology and how it relates to other aspects of life outside the realm of sciences.

N**ote(s):**

- Meets lab class requirement
- Previously BIO 1220. Read more.

Theory Hours: 60

BIOL 1130 - Introductory Anatomy and Physiology

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: BIOL 1130L*

This course introduces the anatomy (structure) and physiology (function) of the human body, which includes the study of basic chemistry, molecules, cells, tissues, organs, organ systems, and terminology related to these concepts.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- * It is strongly recommended that students take the lab course concurrently with the lecture. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.
- Previously BIO 1310. Read more.

Theory Hours: 45

BIOL 1130L - Introduction to Anatomy and Physiology Lab

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: BIOL 1130 or BIOL 2225

This course introduces laboratory exercises in regards to human anatomy and physiology of the human body. This includes histological study, biochemical processes, mammal organ dissections, and the use of models to illustrate anatomical arrangement.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously BIO 1392. Read more.

Lab Hours: 45

BIOL 1140 - Biology for Health Sciences

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: BIOL 1140L + CHEM 1120

This introductory biology course for students interested in health science careers focuses on the concepts of chemistry, cell biology, metabolism, genetics, and regulation of gene expression.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously BIO 1410. Read more.

Theory Hours: 45

BIOL 1140L - Biology for Health Sciences Lab

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg
Pre- or corequisite: BIOL 1140

This course is a laboratory that complements the concepts learned in the theory course. Students will learn skills involved in scientific measurement, microscopy, and mathematical analysis. Students will also perform experiments and data analysis related to cell structure and function, chemistry, enzyme activity, and genetics.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously BIO 1492. Read more.

Lab Hours: 45

BIOL 1215 - Biology for Environmental Sciences

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: BIOL 1215L*

An introduction to ecology, current environmental problems and control measures. Emphasis on human impact, modern technology, natural ecosystems, social, political, and economic processes. The student will have the knowledge to become environmentally responsible and contribute to the quality of human life. This course is intended for non-biology majors in their first year (1000 level) of their college career.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- * It is strongly recommended that students take the lab course concurrently with the lecture. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.
- Previously BIO 1110. Read more.

Theory Hours: 45

BIOL 1215L - Biology for Environmental Sciences Lab

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: BIOL 1215

This course investigates relevant environmental science principles with emphasized analysis of water, soil, and air pollutants. Part of the course requires potential field trips and dissection.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or

Corequisite to this course.
- Previously BIO 1192. Read more.

Lab Hours: 45

BIOL 1996 - Special Topics
1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously BIO 1096-1996. Read more.

BIOL 2110 - Principles of Biology: Cellular and Molecular Biology
3 credit hour(s)
Pre- or corequisite: CHEM 1215 + CHEM 1215L
Corequisite: BIOL 2110L

This course introduces students to major topics in general biology. This course focuses on the principles of structure and function of living things at the molecular, cellular and organismic levels of organization. Major topics included are introduction to the scientific process, chemistry of cells, organization of cells, cellular respiration, photosynthesis, cell division, DNA replication, transcription, and translation.

N**ote(s):**

- Previously BIO 1510. Read more.

Theory Hours: 45

BIOL 2110L - Principles of Biology: Cellular and Molecular Biology Lab
1 credit hour(s)
Corequisite: BIOL 2110

This course introduces students to major topics in general biology. This course focuses on the principles of structure and function of living things at the molecular, cellular and organismic levels of organization. Major topics included are introduction to the scientific process, chemistry of cells, organization of cells, cellular respiration, photosynthesis, cell division, genetics, DNA replication, transcription, and translation.

N**ote(s):**

- Previously BIO 1592. Read more.

Lab Hours: 45

BIOL 2151 - Medical Imaging Anatomy & Physiology I
4 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This is the first in a series of two courses that explore human anatomy and physiology for the student entering medical imaging programs. It is a combined course that includes both lecture theory and lab practices. Basic chemistry and biology concepts are covered along with what it means to be a scientist. An in-depth examination of 1) How organs are distributed within the human body, 2) Bone physiology and anatomy, and 3) Nervous System physiology and anatomy are covered. In addition, students learn the basics of the integumentary and muscular systems.

N**ote(s):**

- This course is intended for learners in the following programs: Diagnostic Medical Sonography, Radiologic Technology, Cardiovascular Sonography, and Electroneurodiagnostic Technology.

Theory Hours: 45
Lab Hours: 45

BIOL 2161 - Medical Imaging Anatomy & Physiology II
4 credit hour(s)
Prerequisite: BIOL 2151

This is the second in a series of two courses that explore human anatomy and physiology for the student entering medical imaging programs. It is a combined course that includes both lecture theory and lab practices. An in-depth examination of 1) Cardiovascular Physiology and Anatomy, 2) Digestive Tract, Endocrinology, and Urinary System including fluid dynamics and 3) Reproductive Systems with a focus on pregnancy are covered. In addition, students learn the basics of the Respiratory System and heredity.

N**ote(s):**

- This course is intended for learners in the following programs: Diagnostic Medical Sonography, Radiologic Technology, Cardiovascular Sonography, and Electroneurodiagnostic Technology.

Theory Hours: 45
Lab Hours: 45

BIOL 2210 - Human Anatomy and Physiology I
3 credit hour(s)
Prerequisite: [(BIOL 1140 + BIOL 1140L) or (BIOL 2110 + BIOL 2110L)] + (CHEM 1120 or CHEM 1215) or appropriate placement score
Recommended: BIOL 2210L *

This course is the first of two that serve as an introduction to human anatomy and physiology for biology majors and allied health students. The course entails describing, explaining, and analyzing structure and function from the submicroscopic to the organismal level with emphasis on anatomic, directional, and sectional terminology, basic cellular structure and metabolism, tissue differentiation and characteristics, and organ system structure and function; Specifically the integumentary, skeletal, muscular, and nervous systems.

N**ote(s):**

- Previously BIO 2210. Read more.
- * It is strongly recommended that students take the lab course concurrently with the lecture. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.

Theory Hours: 45

BIOL 2210L - Human Anatomy and Physiology I Lab
1 credit hour(s)
Prerequisite: CHEM 1120L or CHEM 1215L or appropriate placement score

Pre- or corequisite: BIOL 2210

This is the first in a series of two laboratory courses designed to introduce laboratory practices and techniques for human anatomy and physiology, from the basic cell structure through the organ system level; specifically the integumentary, skeletal, muscle, and nervous systems.

N**ote(s):**

- Previously BIO 2292. Read more.

Lab Hours: 45

BIOL 2225 - Human Anatomy and Physiology II

3 credit hour(s)
Prerequisite: BIOL 2210
Recommended: BIOL 2225L *

This course is the second of two that serve as an introduction to human anatomy and physiology for biology majors and allied health students. The course entails describing, explaining, and analyzing structure and function from the submicroscopic to the organismal level with emphasis on specific cellular, tissue, and organ structure and physiology, and organ system structure and function; specifically the endocrine, cardiovascular, respiratory, urinary, and reproductive systems. Additionally, an analysis of these concepts is included: fluid and electrolyte balance, pregnancy, growth and development from zygote to newborn, and heredity.

N**ote(s):**

- * It is strongly recommended that students take the lab course concurrently with the lecture. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.
- Previously BIO 2310. Read more.

Theory Hours: 45

BIOL 2225L - Human Anatomy and Physiology II Lab

1 credit hour(s)
Prerequisite: BIOL 2210L
Pre- or corequisite: BIOL 2225

This is the second in a series of two laboratory courses designed to introduce laboratory practices and techniques for human anatomy and physiology, from the basic cell structure through the organ system level; specifically the endocrine, cardiovascular, lymphatic, respiratory, urinary, and reproductive systems.

N**ote(s):**

- Previously BIO 2392. Read more.

Lab Hours: 45

BIOL 2310 - Microbiology

3 credit hour(s)
Prerequisite: (BIOL 1140 + BIOL 1140L) or [(BIOL 2110 + BIOL 2110L) + (BIOL 2410 + BIOL 2410L)] + (CHEM 1120 or CHEM 1215) or appropriate placement score
Recommended: BIOL 2310L

Introduction to the basic principles of microbiology, microbial pathogenesis, host defenses and infectious diseases. The course will emphasize concepts related to the structure and function of microorganisms, including their mechanisms of metabolism and growth. Host-parasite interactions will also be emphasized, including mechanisms of microbial pathogenesis and mechanisms of host defenses against infectious diseases.

N**ote(s):**

- Previously BIO 2110. Read more.

Theory Hours: 45

BIOL 2310L - Microbiology Lab

1 credit hour(s)
Prerequisite: CHEM 1120L or CHEM 1215L or appropriate placement score
Pre- or corequisite: BIOL 2310

This course will emphasize both the theory and hands-on application of techniques used in a microbiology laboratory for the growth and identification of bacterial species. Students will learn microscopy skills and staining techniques for the observation of bacteria. Students will also learn aseptic techniques used for isolation of bacteria, inoculation of cultures, and interpretation of selective and differential growth media for the identification of bacterial species.

Note(s):

- Previously BIO 2192. Read more.

Lab Hours: 45

BIOL 2410 - Principles of Biology: Genetics

3 credit hour(s)
Prerequisite: (BIOL 2110 + BIOL 2110L) or (BIOL 2310 + BIOL 2310L)
Pre- or corequisite: CHEM 1225 + CHEM 1225L
Corequisite: BIOL 2410L

This course introduces the fundamental principles of heredity; DNA structure and replication; the processes of transcription, translation, and regulation of gene expression; and structural, functional, and comparative genomics. The course covers the application of major genetic concepts, principles, and techniques to understand and solve biological questions.

N**ote(s):**

- Biology majors should take BIOL 2110/L while students only interested in the Biotechnology programs may take either prerequisite course.
- Previously BIO 1610. Read more.

Theory Hours: 45

BIOL 2410L - Principles of Biology: Genetics Lab

1 credit hour(s)
Corequisite: BIOL 2410

This laboratory course introduces the fundamental principles of heredity and uses the scientific method to understand and solve genetic questions. Emphasis is placed on transmission genetics, molecular genetics, genomics, and biotechnology, with work focused on discussion and problem-solving activities. Students must engage with primary literature (e.g., written paper or annotated bibliography). Students must give oral presentations. Wet lab work is not required.

N**ote(s):**

- Previously BIO 1692. Read more.

Lab Hours: 45

BIOL 2510 - Pathophysiology I

3 credit hour(s)
Prerequisite: BIOL 2310 + BIOL 2310L
Pre- or corequisite: BIOL 2210
Recommended: BIOL 2210L

This course focuses on the pathophysiology of cellular adaptation, injury and repair. Thereafter, the course focuses on the pathophysiology of anemia, neoplasms and white blood cell malignancies, brain and nervous system diseases, special senses, musculoskeletal system and joint diseases, and integumentary diseases. Immune defenses against infectious diseases and immunologic diseases are also covered. In addition, the etiology, pathophysiology, clinical manifestations and other clinical considerations of diseases in these systems will be discussed.

N**ote(s):**

- Previously BIO 2710. Read more.

Theory Hours: 45

BIOL 2520 - Pathophysiology II

3 credit hour(s)
Prerequisite: BIOL 2510
Pre- or corequisite: BIOL 2225
Recommended: BIOL 2210L and BIOL 2225L

Pathophysiology II builds on the concepts studied in Pathophysiology I. This course will focus on the molecular and cellular basis of diseases of the cardiovascular, clotting and coagulation, respiratory, gastrointestinal, urinary and endocrine systems. In addition, the etiology, pathophysiology, clinical manifestations and other clinical considerations of diseases in these systems will be discussed.

N**ote(s):**

- Previously BIO 2711. Read more.

Theory Hours: 45

BIOL 2710 - Biotechnology I

4 credit hour(s)
Prerequisite: [(BIOL 2110 + BIOL 2110L) **or** (BIOL 2310 + BIOL 2310L)] + CHEM 1215 + CHEM 1215L
Pre- or corequisite: CHEM 1225 + CHEM 1225L

The goal of this course is to provide you with the core conceptual foundation and hands on experience required to perform basic laboratory techniques used in a biotechnology laboratory. It is essential that these skills are mastered, since this will be the basis for all of the techniques used in future courses (BIOL 2715 and BIOL 2720). This class will provide theory and experience in lab safety and measurement, bacterial transformations and cloning, recombinant DNA, gel electrophoresis, tissue culture and basic bioinformatics skills.

N**ote(s):**

- Previously BIOT 1020. Read more.

Theory Hours: 30
Lab Hours: 90

BIOL 2715 - Biotechnology II

4 credit hour(s)
Prerequisite: BIOL 2710
Pre- or corequisite: BIOL 2410 + BIOL 2410L

The goal of this course is to provide theory and experience with protocols used to characterize and manipulate nucleic acids. This course will reinforce and build upon techniques learned in Biotechnology I. Techniques include DNA isolation and quantification, PCR, qPCR, gel electrophoresis, recombinant DNA technology, cloning, DNA sequencing, site-directed mutagenesis, tissue culture, and basic bioinformatics skills. Current issues and topics related to biotechnology will be explored.

N**ote(s):**

- Previously BIOT 2110. Read more.

Theory Hours: 30
Lab Hours: 90

BIOL 2720 - Biotechnology III

3 credit hour(s)
Prerequisite: BIOL 2715

Provides theory and experience with protocols used to characterize and manipulate nucleic acids and proteins. Builds on techniques learned in Biotechnology II. Techniques include RNA and protein isolation and quantification, RT-PCR, RNA interference, mammalian transfections, polyacrylamide gel electrophoresis, 2-D gel analysis, Western blotting, ELISAs, and basic bioinformatics and proteomics skills. Current issues and topics related to biotechnology will be explored.

N**ote(s):**

- Previously BIOT 2210. Read more.

Theory Hours: 15
Lab Hours: 90

BIOL 2996 - Special Topics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously BIO 2096-2996. Read more.

Business Administration

BUSA 1110 - Introduction to Business

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: BCIS 1110

Fundamental concepts and terminology of business including areas such as management, marketing, accounting, economics, personnel, and finance; and the global environment in which they operate.

N**ote(s):**

- Previously BA 1101. Read more.

Theory Hours: 45

BUSA 1115 - Business English I

3 credit hour(s)

Prerequisite: Reading and Writing Skills 1

This course focuses on the skill development with an emphasis on correct grammar, punctuation, sentence structure, vocabulary, preparation of business letters and reports, and on presenting information in a logical, forceful and acceptable form.

N**ote(s):**

- Previously BA 1121. Read more.

Theory Hours: 45

BUSA 1130 - Business Professionalism

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Focuses on developing professional behavior appropriate for the business environment. Topics include: life management, goal setting, workplace etiquette, job search skills, interviewing, teamwork and team building, motivation, leadership, business communication and workplace interaction.

N**ote(s):**

- Previously BA 1131. Read more.

Theory Hours: 45

BUSA 1170 - Introduction to Quality Management

1 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Introductory practices of total quality management practices aimed at all levels of an organization to continually improve performance to include competitiveness in today's business world.

N**ote(s):**

- Previously BA 1150. Read more.

Theory Hours: 15

BUSA 1171 - Fundamentals of Continuous Quality Improvement

1 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Focuses on data for clarifying customer expectations for service and product quality; choosing quality standards for business performance; selecting measures and indicators of quality and customer satisfaction; assessing effective ways to evaluate and improve both quality and customer satisfaction, improving quality based on customer feedback; and planning for practical application.

N**ote(s):**

- Previously BA 1151. Read more.

Theory Hours: 15

BUSA 1172 - Quality Tools

1 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Focuses on recognizing and understanding applications for quality tools, developing skill and confidence in using quality tools, selecting and integrating quality tools to improve a specific work process, and planning for practical application of quality tools at work and in personal life.

N**ote(s):**

- Previously BA 1152. Read more.

Theory Hours: 15

BUSA 1180 - Business Math

3 credit hour(s)
Pre- or corequisite: Math Skills 2 Alg

Applies basic mathematical operations to business and accounting applications.

* Students need to have basic math skills for this course.

N**ote(s):**

- Previously ACCT 1109. Read more.

Theory Hours: 45

BUSA 1198 - Project Management Fundamentals

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: BCIS 1110

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.

N**ote(s):**

- Previously PM 1130. Read more.

Theory Hours: 45

BUSA 1210 - Records Management

3 credit hour(s)
Recommended: BCIS 1110*

Principles, methods and procedures for the selection, operation and control of manual and automated records systems.

* Student needs a basic understanding of Word and file management skills for this course.

N**ote(s):**

- Previously OTEC 1161. Read more.

Theory Hours: 45

BUSA 1310 - Office Procedures

3 credit hour(s)
Prerequisite: BUSA 1115 + BCIS 1220
Pre- or corequisite: BCIS 1215 + OTEC 2201

Student will learn the importance of following the proper procedures for maintaining an efficient office required in today's technology advanced business environment. Through the use of a simulation, students will utilize the skills acquired through their training program and work experience to prepare documents and complete common business tasks.

* Students will benefit from a foundational knowledge in writing, editing and proofreading and have advanced keyboarding skills.

N**ote(s):**

- Typically offered Fall & Spring terms only.
- Previously OTEC 2260. Read more.

Theory Hours: 45

BUSA 1410 - Introduction to Insurance and Risk Management

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: BCIS 1110

BUSA 1410 is an introductory course providing students with an overview of specific topics concerning what insurance is, who provides it, and how it is regulated. This course also describes the functions of marketing, underwriting, rate making and claims, all of which are essential to providing insurance. The course provides a broad overview and introduction to the risk management process and its purpose, the elements of loss exposures, and the characteristics and provisions of insurance policies.

Theory Hours: 45

BUSA 1996 - Special Topics in Business

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously BA 2096 - 2996/PM 1096-1996/PM 2096-2996. Read more.

BUSA 2088 - Business Specialty

1-3 credit hour(s)

This course allows students to apply a Business elective credit towards a Business program requirement.

Theory Hours: 15-45

BUSA 2100 - Agile Project Management

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: BCIS 1110

Students will build off of their existing project management knowledge to dive deeply into Agile project management methodologies. They will work through a summative project where they will use Agile concepts, tools and techniques to successfully manage a technical project from start to finish.

Theory Hours: 45

BUSA 2120 - Introduction to Global Business

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: BUSA 1110*

Introduces international business and the globalization of the economy. The students are introduced to objectives, opportunities and challenges facing those who engage in business in foreign countries. Foreign organizations, cultural dynamics, trade channels, legal environment and political considerations are discussed.

*Students will benefit from a foundational knowledge of business principles and practices.

N**ote(s):**

- Previously BA 2100. Read more.

Theory Hours: 45

BUSA 2170 - Quality Management

3 credit hour(s)
Pre- or corequisite: BUSA 1110

Quality Management is an advanced course focusing on the role of leadership in a quality–management environment. Specifically, the course will examine the characteristics, functions, and influence of leaders within the interconnected strategies that emphasize the application of the five pillars of a Total Quality organization: Customer Satisfaction, Systematic Support, Total Involvement, Measurement, and Continuous Improvement. Topics will include leadership, quality teams, Lean Management techniques and Business Process Re-Engineering (BPR).

N**ote(s):**

- Previously BA 2157. Read more.

Theory Hours: 45

BUSA 2180 - Introduction to E-Commerce

3 credit hour(s)
Recommended: BCIS 1110*

Survey of methods and practices in e-commerce. Topics include the evolution and forms of e-commerce, secure online business transactions, and basic business concepts of e-commerce.

N**ote(s):**

- *Students need basic computer skills to be successful in this course.
- Previously BA 1115. Read more.

Theory Hours: 45

BUSA 2195 - Budget and Resource Management

3 credit hour(s)
Prerequisite: BCIS 1110 + (BUSA 1198 or CNST 1220)

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.

N**ote(s):**

- Previously PM 2200. Read more.

Theory Hours: 45

BUSA 2198 - Project Management Applications

3 credit hour(s)
Pre- or corequisite: BUSA 2195

This course applies the Project Management Body of Knowledge (PMBOK) to managing projects, schedules, labor, and resources. This body of knowledge aligns with the Certified Associate Project Manager (CAPM) certification, which is a nationally recognized documentation of the fundamental knowledge,

terminology and processes of effective project management.

N**ote(s):**

- Previously PM 2250. Read more.

Theory Hours: 45

BUSA 2220 - Human Resource Management

3 credit hour(s)
Prerequisite: BUSA 1110 or MGMT 2110

This course covers topics relevant to the role of the human resource department in today's firm. Topics include: human resource management, compensation and benefits, labor relations, E.E.O., affirmative action, employment and placement, training and development, and other related topics.

N**ote(s):**

- Previously BA 2238. Read more.

Theory Hours: 45

BUSA 2240 - Customer Service in Business

3 credit hour(s)
Pre- or corequisite: BUSA 1130 or ESOL 1030

Established concepts of service quality in relationship to business success and maximization of returns to the organization. Explores techniques for delivering quality and service in a variety of business settings.

N**ote(s):**

- Previously BA 2230. Read more.

Theory Hours: 45

BUSA 2270 - Organizational Behavior

3 credit hour(s)
Prerequisite: BUSA 1130

Covers the fundamentals of human behavior within business organizations, organizational relationships and communication processes that affect motivation and human behavior.

N**ote(s):**

- Previously BA 2234. Read more.

Theory Hours: 45

BUSA 2330 - Retail Management

3 credit hour(s)
Prerequisite: BUSA 1110 or MGMT 2110

Focuses on the changing demographics of retail marketing, the growth of new retail formats, the phases of retailing, and the organization, management, and operation of retail enterprises.

N**ote(s):**

- Previously BA 2236. Read more.

Theory Hours: 45

BUSA 2340 - Sales

3 credit hour(s)
Prerequisite: MKTG 2110 or HT 2141

An analysis of the principles and techniques of personal selling as a form of persuasive communication. Sales principles, consumer behavior, the process of the sales interview, and demonstration of selling and promotional skills are explored.

N**ote(s):**

- Previously BA 2226. Read more.

Theory Hours: 45

BUSA 2410 - Leadership and Group Dynamics

3 credit hour(s)
Pre- or corequisite: BUSA 1130

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.

N**ote(s):**

- Previously BA 2282. Read more.

Theory Hours: 45

BUSA 2460 - Business Ethics

3 credit hour(s)
Prerequisite: BUSA 1110 or BUSA 1130

The course examines the underlying dimensions of ethics in business, investigating ethics in relationship to the organization and its culture, stakeholders, and society. Exploration of ethical issues from a historical perspective, analyzing actual events through the lens of ethical business decision-making, including legal/political, sociocultural, economic and environmental considerations will be undertaken.

*Students will benefit from a foundational knowledge of business principles and practices.

N**ote(s):**

- Previously BA 2281. Read more.

Theory Hours: 45

BUSA 2798 - Internship In Business Administration

1 credit hour(s)
Prerequisite: Departmental Approval

Provides students the opportunity to work a minimum of 45 hours in a new job experience in business or training-related supervised workstations. Students are supervised jointly by CNM and the company.

Internship Hours: 45

BUSA 2898 - Internship in Business Administration

2 credit hour(s)
Prerequisite: Department Approval

Provides students the opportunity to work a minimum of 90 hours in a new job experience in business or training-related supervised workstations. Students are supervised jointly by CNM and the company.

Internship Hours: 90

BUSA 2996 - Topics

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. *See Schedule of Classes.*
- Previously BA 2196. Read more.

BUSA 2997 - Independent Study

1-8 credit hour(s)
Prerequisite: Department approval

Student works with the instructor on specific topics directly related to the course or program of study. The meeting time is arranged between the student and the instructor.

N**ote(s):**

- Previously BA 2097/PM 2097. Read more.

BUSA 2998 - Internship in Business Administration

3 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 135 hours in a new job experience in business or training-related supervised workstations. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously BA 2098/PM 2098. Read more.

Internship Hours: 135

BUSA 2999 - Business Capstone

1 credit hour(s)
Prerequisite: Department approval

Focuses on assessment of student learning outcomes for Business program of study.

N**ote(s):**

- Taken in student's last term
- Previously BA 2999. Read more.

Theory Hours: 15

Business Computer Information Systems

BCIS 1110 - Fundamentals of Information Literacy and Systems

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: IRW 0980
Recommended: 25 wpm keyboarding skill.

Examination of information systems and their impact on commerce, education, and personal activities. Utilization of productivity tools for communications, data analysis, information management and decision-making. **This course is designed for Associate of Science and Associate of Applied Sciences business type (non-computer science) degree programs.**

Theory Hours: 45

BCIS 1115 - Introduction to Computers

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: IRW 0980
Recommended: 25 wpm keyboarding skill

This is a lecture and hands-on course on different technologies commonly used in business and different agencies like computers, printer and other computer devices. It includes introduction to hardware, operating software, and MS Office applications like Excel, Word, Access, PowerPoint, Publisher & other MS Office Tools. The class will include an overview of the history of technology and its future, as well as giving a fundamental introduction to industry-standard application software for word processing, spreadsheet, database management, and graphics. Basic computer use, files and file structure, windows, the Internet, programming, ethics, and security will also be addressed. **This course is designed for Associate of Arts in a business curriculum.**

Theory Hours: 45

BCIS 1210 - Introduction to MS Access

3 credit hour(s)
Prerequisite: BCIS 1110

This course introduces MS Access software. Students will learn design, development, and maintenance of relational database management systems. Students will be expected to implement the concepts by developing projects. Students will learn techniques for adding, updating, querying, and sorting data, create forms, queries and reports using the stored data.

N**ote(s):**

- Previously BCIS 2212. Read more.

Theory Hours: 45

BCIS 1211 - MS Outlook

1 credit hour(s)
Recommended: BCIS 1110*

Covers concepts such as managing messages, appointments, contacts and tasks, as well as, tracking activities. Students should have basic computer knowledge and skills, including Windows operating systems, keyboarding, file management.

Theory Hours: 15
Lab Hours: 10

BCIS 1215 - Introduction to MS Excel I

3 credit hour(s)
Prerequisite: BCIS 1110

This course introduces Microsoft Excel spreadsheet software. Coverage includes creating, editing, manipulating, and printing workbooks, charts, features and commands, spreadsheet design, formulas, and functions.

N**ote(s):**

- Previously BCIS 2217. Read more.

Theory Hours: 45

BCIS 1220 - Introduction to MS Word

3 credit hour(s)
Prerequisite: BCIS 1110

This course introduces MS Word software. Basic word processing techniques and applications will be covered. Students will create, revise, store, share and retrieve documents. Students will learn various formatting techniques, use of tables, use of references tools.

N**ote(s):**

- Previously BCIS 2220. Read more.

Theory Hours: 45

BCIS 1230 - Introduction to MS PowerPoint

2 credit hour(s)
Recommended: BCIS 1110*

Introduction to the electronic presentation, specifically how to use, design and edit presentation graphics for use in a variety of personal and business applications. Students will learn how to create and work with design templates, auto layouts, and background slides. Also covered are how to add tables, charts, clip art, pictures, video, sound and animation effects.

Theory Hours: 30
Lab Hours: 20

BCIS 1330 - Introduction to Analytics and Data Visualization

3 credit hour(s)
Pre- or corequisite: BCIS 1110

This course introduces basic concepts and applications of analytics and key concepts in data visualization and reporting. Topics include an overview of the analytical process and the role of the analyst, applied descriptive statistics, exploratory data analysis and methods used in graphical representation of data, exploration and reporting of data, and basic linear regression methods.

N**ote(s):**

- Previously BA 1325. Read more.

Theory Hours: 45

BCIS 1340 - Data Concepts

3 credit hour(s)
Pre- or corequisite: BCIS 1110

This course provides a foundational understanding of data concepts, terminology, and principles. Students will explore various aspects of data, including data types, data sources, data formats, data management, data ethics, and the role of data in decision-making.

Theory Hours: 45

BCIS 1350 - Database Analysis and Design

3 credit hour(s)
Pre- or corequisite: BCIS 1340

This course provides a comprehensive introduction to the principles and techniques of database analysis and design. Students will learn how to model data, design relational databases, and develop database systems that meet real-world business needs.

Theory Hours: 45

BCIS 2218 - MS Excel II

3 credit hour(s)
Prerequisite: BCIS 1215

This course provides an in-depth study of Microsoft Excel spreadsheet software. Coverage includes integration of Excel with other MS Office programs, using multiple worksheets/workbooks, what-if analyses, macros and forms, pivot tables and charts, and use of the Data Analysis Tool Pack.

Theory Hours: 45

BCIS 2221 - MS Word II

3 credit hour(s)
Prerequisite: BCIS 1220

This course provides an in-depth study of MS Word software. Students will learn how to create professional business documents, templates, customize themes, mail merge, and reports with citations and references.

Theory Hours: 45

Business Finance

BFIN 1110 - Personal Financial Planning for College Students

3 credit hour(s)
Recommended: Reading and Writing Skills 2*

Introduces students to the basics of money management and financial skills necessary to meet real-world challenges. The course is interactive and will cover concepts and decision making through illustrations and real-life problems. Topics covered include budgeting, managing money, borrowing money and planning for the future.

N**ote(s):**

- * Students should have basic reading and writing skills for this course.
- This course is also offered fully in Spanish.

Theory Hours: 45

BFIN 1115 - Financial Services Career Exploration

3 credit hour(s)

This course is designed to prepare students for a possible career in the financial services industry. Students will interact with financial industry experts, develop skills and knowledge necessary to obtain employment in the financial industry, and discover financial capability. Students will also gain personal finance, academic, and life skills necessary for successful transition into college and/or future employment.

N**ote(s):**

- Previously FIN 1005. Read more.

Theory Hours: 45

BFIN 1996 - Special Topics

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

BFIN 2110 - Introduction to Finance

3 credit hour(s)
Prerequisite: (BUSA 1180 or Mathematics Requirement) + ACCT 2110
Recommended: ACCT 2120

Introduces tools and techniques of financial

management. Includes time value of money; financial planning; diversification and risk; debt and equity investment decisions; and financial statement analysis.

Note(s):

- Previously FIN 2210. Read more.

Theory Hours: 45

BFIN 2210 - Healthcare Finance

3 credit hour(s)
Prerequisite: ACCT 2110

This course provides an overview of the general principles of healthcare accounting. It includes the fundamentals pertaining to revenues, expenses, financial reporting, capital planning, operating budgets, and vendor management applied in the health care environment.

Note(s):

- Previously FIN 2220. Read more.

Theory Hours: 45

BFIN 2996 - Special Topics

1-3 credit hour(s)

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

BFIN 2997 - Independent Study

1-6 credit hour(s)
Prerequisite: Department approval

Allows student and instructor to define 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.

Note(s):

- Previously FIN 2097. Read more.

BFIN 2998 - Internship

3 credit hour(s)
Prerequisite: ACCT 2110 + department approval

Provides students the opportunity to work a minimum of 135 hours in a new job experience in finance, banking, or training-related supervised workstations. Students are supervised jointly by CNM and the company.

Note(s):

- Previously FIN 2098. Read more.

Internship Hours: 135

Business Law

BLAW 2110 - Business Law I

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Survey of the legal environment of business and common legal principles including: the sources of law, dispute resolution and the U.S. court systems, administrative law, tort law, contract law, agency and employment law, business structure and governance, ethics and corporate social responsibility. Explores sources of liability and presents strategies to minimize legal risk.

Note(s):

- Previously BA 2240. Read more.

Theory Hours: 45

Cardiovascular Sonography

CVS 1215 - Cardiovascular Anatomy in Imaging

1 credit hour(s)
Prerequisite: COMM 2120 + (PHYS 1115 or PHYS 1230) + (MATH 1220 or MATH 1220P or MATH 1240 or MATH 1350 or MATH 1430) + (BIOL 2161 or BIOL 2225) + department approval
Pre- or corequisite: (HLTH 1001 or HLTH 1003) + DMS 1130
Corequisite: CVS 1225 + CVS 1293 + CVS 163

A comprehensive study of sectional and relational anatomy with emphasis on organs of sonographic interest. Students will develop the ability to recognize normal anatomical structures on sonographic images, apply knowledge of standard imaging planes, and correlate sonographic findings with other diagnostic imaging modalities.

Theory Hours: 15

CVS 1220 - Cardiac Pathophysiology I

3 credit hour(s)
Prerequisite: CVS 1215 + CVS 1225 + CVS 1293 + CVS 1630 + DMS 1130 + (HLTH 1001 or HLTH 1003)
Pre- or corequisite: DMS 1530
Corequisite: CVS 1625 + CVS 1690 + CVS 1693

This course presents an in-depth view of the etiology, signs and symptoms, risk factors and diagnosis of common cardiac and pericardial disease states as they pertain to echocardiography. Instruction is provided in the application of theory for the interpretation of two-dimensional echocardiography, M-mode, color flow imaging, and pulsed and continuous wave doppler in the diseased state. Topics covered in this course include, but are not limited to, ischemic heart disease, heart failure, cardiomyopathies, systemic and pulmonary hypertensive diseases, cardiac tumors and pericardial disease. Advanced techniques in echocardiography are also discussed, as they relate to these disease processes.

Theory Hours: 45

CVS 1225 - Vascular Sonography I

2 credit hour(s)
Corequisite: CVS 1215 + CVS 1293 + CVS 1630

This foundational course provides a comprehensive overview of the vascular system through the study of anatomy, physiology, and pathophysiology as they relate to diagnostic imaging. Emphasis is placed on the correlation between clinical presentation, disease mechanisms, and sonographic findings. The course emphasizes the application of foundational hemodynamic principles to the interpretation of diagnostic criteria used in duplex ultrasound. The course prepares students to identify normal and abnormal vascular patterns and to interpret diagnostic data in alignment with evidence-

based assessment practices.

Theory Hours: 30

CVS 1293 - Echo-Vascular Lab I

3 credit hour(s)
Corequisite: CVS 1215 + CVS 1225 + CVS 1630

This first course in the cardiovascular lab series combines the theory, rationale, application, performance, and interpretation of standard 2D echocardiograms and standard duplex vascular sonograms. Standard views recommended by the American Society of Echocardiography and the Intersocietal Accreditation Commission on Vascular Testing will be taught and performed. Cardiovascular cross-sectional anatomy will be reviewed as it pertains to imaging. This course will cover fundamentals of 2D imaging, m-mode, color flow imaging and spectral Doppler.

Lab Hours: 135

CVS 1620 - Cardiac Pathophysiology II

3 credit hour(s)
Prerequisite: CVS 1220 + CVS 1625 + CVS 1690 + CVS 1693 + DMS 1530
Corequisite: CVS 2125 + CVS 2190 + CVS 2193 + CVS 2620

This course presents an in-depth view of the etiology, signs and symptoms, risk factors and diagnosis of common valvular disease states as they pertain to echocardiography. Instruction is provided in the application of theory, techniques, and interpretation of two-dimensional echocardiography, M-mode, color flow imaging, and pulsed and continuous wave Doppler in the diseased state. Advanced techniques in echocardiography are also discussed, as they relate to these disease processes.

Theory Hours: 45

CVS 1625 - Vascular Sonography II

2 credit hour(s)
Corequisite: CVS 1220 + CVS 1690 + CVS 1693

This intermediate course expands foundational vascular knowledge by introducing more complex vascular systems and functional assessment strategies. Emphasis is placed on the role of physiologic testing in vascular evaluation, as well as the integration of non-imaging data with sonographic and clinical findings. The course supports development of diagnostic reasoning skills and prepares students to apply protocol-driven assessments in diverse clinical contexts.

Theory Hours: 30

CVS 1630 - Cardiovascular Physics

2 credit hour(s)
Corequisite: CVS 1215 + CVS 1225 + CVS 1293

This course presents principles of advanced physics such as hemodynamics, flow analysis, Doppler techniques and electrophysiology. Students will learn how to apply these priciples to perform qualitative and quantitative hemodynamic assessment. This course will also cover the computer processing techniques behind Doppler analysis.

Theory Hours: 30

CVS 1690 - CV Clinical Sonography I

5 credit hour(s)
Corequisite: CVS 1220 + CVS 1625 + CVS 1693

Supervised clinical experience in area hospitals and health care facilities to develop the student's sonographic imaging skills in a diagnostic environment.

Clinical Intensive Hours: 300

CVS 1693 - Echo-Vascular Lab II

2 credit hour(s)
Corequisite: CVS 1220 + CVS 1625 + CVS 1690

This second course in the cardiovascular lab series combines the theory, rationale, application, performance, and interpretation of standard 2D echocardiograms, advanced duplex vascular sonograms and standard 2D transesophageal echocardiograms. Standard views recommended by the American Society of Echocardiography and the Intersocietal Accreditation Commission on Vascular Testing will be taught and performed. Measurements from M-mode and 2D will be discussed, demonstrated and performed. Cardiovascular cross-sectional anatomy will be reviewed as it pertains to imaging. Advanced techniques of color flow, spectral Doppler and tissue Doppler imaging will be presented and applied.

Lab Hours: 90

CVS 2120 - Cardiac Pathophysiology III

2 credit hour(s)
Prerequisite: CVS 1620 + CVS 2125 + CVS 2190 + CVS 2193 + CVS 2620
Pre- or corequisite: PHIL 2120
Corequisite: CVS 2690 + CVS 2699

This course presents an in-depth view of pediatric and congenital echocardiography. Instruction is provided on embryology, pathophysiology, surgical repair of congenital heart disease, echocardiographic techniques, and interpretation of two-dimensional echocardiography, M-mode, color flow imaging, and pulsed and continuous wave Doppler.

Theory Hours: 30

CVS 2125 - Advanced Vascular Sonography

1 credit hour(s)
Corequisite: CVS 1620 + CVS 2190 + CVS 2193 + CVS 2620

This advanced course focuses on the evaluation of complex vascular systems, emphasizing clinical applications of Doppler ultrasound in both native and altered anatomy. Students will explore advanced diagnostic strategies, including the vascular assessment of surgical and transplant cases, and expand their understanding of the sonographer's role in interventional and procedural settings. The course emphasizes protocol development, critical analysis of hemodynamic data, integration of imaging with clinical context, and post-procedural follow-up.

Theory Hours: 15

CVS 2190 - CV Clinical Sonography II

5 credit hour(s)
Corequisite: CVS 1620 + CVS 2125 + CVS 2193 + CVS 2620

Supervised clinical experience in area hospitals and

health care facilities to develop the student's sonographic imaging skills in a diagnostic environment. Students will work on performing complete exams, synthesizing diagnostic data and identifying disease states.

Clinical Intensive Hours: 300

CVS 2193 - Echo-Vascular Lab III

2 credit hour(s)
Corequisite: CVS 1620 + CVS 2125 + CVS 2190 + CVS 2620

This third course in the cardiovascular lab series deals with the theory, rationale, application, performance, and interpretation of advanced 2D echocardiograms and advanced duplex vascular sonograms. Standard views recommended by the American Society of Echocardiography and the Intersocietal Accreditation Commission on Vascular Testing will be taught and performed. The student is required to perform a variety of standard and advanced echocardiographic and vascular exams, as part of a real-world simulation Capstone project, to successfully complete this course.

Lab Hours: 90

CVS 2620 - Advanced Procedures in Echocardiography

1 credit hour(s)
Corequisite: CVS 1620 + CVS 2125 + CVS 2190 + CVS 2193

This course is designed to provide students with the theory regarding the application and evaluation of advanced cardiac procedures. Topics include, but are not limited to, ultrasound enhancing agents, speckle tracking, strain imaging, 3D/4D imaging, exercise and pharmacologic stress echocardiography, and transesophageal echocardiography. Students will understand the echocardiographer's role in the assessment and follow-up evaluation of left ventricular assist devices, transcatheter valve repair or replacements, and left atrial appendage devices.

Theory Hours: 15

CVS 2690 - CV Clinical Sonography III

5 credit hour(s)
Corequisite: CVS 2120 + CVS 2699

Supervised clinical experience in area hospitals and health care facilities to develop the student's sonographic imaging skills in a diagnostic environment. Students will work on performing complete exams in a timely manner, synthesizing diagnostic data and identifying disease states.

Clinical Intensive Hours: 300

CVS 2699 - Cardiovascular Registry Review

2 credit hour(s)
Corequisite: CVS 2120 + CVS 2690

This course will prepare students for the Adult Echocardiography and Vascular Technology ARDMS registry exams.

Theory Hours: 30

Carpentry

CARP 1005 - Carpentry Blueprint Reading

4 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Includes lumber sizing, scaling, centering and triangle theory, interpretation of elevations, drawings, floor plans, symbols, notations, dimensions and structural information.

Theory Hours: 60

CARP 1016 - Core Curriculum

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1 + Math Skills 2 Alg
Pre- or corequisite: CNST 1170 + CNST 1110

An introduction to Craft Skills set forth by National Center for Construction Education and Research (NCCER) Standardized Curriculum. In this class students will explore basic job site safety, construction math, an introduction to hand and power tools, along with basic communication and employability skills.

Theory Hours: 30
Lab Hours: 45

CARP 1300 - Basic Woodworking

3 credit hour(s)

Introduction to multiple wood species, differences between hard and soft woods, and the workability of different wood species. Students will also interpret and learn how to create shop drawings, building on skills from Blueprint Reading. Layout, joinery, construction components and finishing will also be covered in this class.

Theory Hours: 15
Lab Hours: 90

CARP 1320 - Carpentry Fundamentals

3 credit hour(s)
Pre- or corequisite: CARP 1300

Includes safety and use of hand and power tools. Students design a project, generate an estimate and bill of materials, and build and complete the project.

Theory Hours: 15
Lab Hours: 90

CARP 1325 - Construction Trades Blueprint Reading

3 credit hour(s)

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.

Theory Hours: 45

CARP 1492 - Interior/Exterior Finishing

4 credit hour(s)
Pre- or corequisite: Reading and Writing Skills I

Provides advanced carpentry students instruction in finishing techniques, as well as practical hands on learning by taking advantage of building opportunities on an off campus.

Theory Hours: 15

Lab Hours: 135

CARP 1692 - Advanced Furniture Making

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1 + CARP 1320

Covers advanced design and construction of simple furniture including safety and use of hand and power tools. Includes designing and constructing a furniture project.

Lab Hours: 90

CARP 1892 - Spanish Colonial Furniture Making

2 credit hour(s)
Prerequisite: CARP 1320

Students will learn basic joinery, hand carving and popular colonial furniture making techniques common to Spanish colonial furniture; includes designing and constructing a furniture project.

Lab Hours: 90

CARP 2005 - Carpentry Blueprint Reading II

4 credit hour(s)
Prerequisite: CARP 1005 or department approval

Introduces blueprint applications for residential homes, multiple family dwellings and commercial buildings, along with material estimating and volume measure.

Theory Hours: 60

CARP 2040 - Introduction to CNC Woodworking

3 credit hour(s)
Pre- or corequisite: CARP 1320

Introduces the use of Computer Numerical Controls (CNC) machines to etch a surface, carve a design, or cut out a shape using a subtractive manufacturing work flow.

Theory Hours: 30
Lab Hours: 45

CARP 2096-2996 - Special Topics

3-7 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

CARP 2130 - Metal Stud Framing

2 credit hour(s)
Pre- or corequisite: CARP 1005 + CNST 1270

Introduces common materials and methods used in metal framing and commercial carpentry. Provides practical, hands-on, experience erecting and installing metal stud framing.

Theory Hours: 15
Lab Hours: 45

CARP 2230 - Concrete Forming and Rigging

2 credit hour(s)
Pre- or corequisite: CARP 1005 + CARP 1320

Introduces common materials and methods used for forming and placing concrete including rigging and lifting techniques used in a commercial setting.

Theory Hours: 15
Lab Hours: 45

CNST 1110 - Building Trades I

4 credit hour(s)
Pre- or corequisite: CARP 1005 + CNST 1170

This course will have two components: a classroom segment, where carpentry concepts will be explored, and a hands-on segment where students will be able to participate in the actual construction of a structure.

N**ote(s):**

- Previously CARP 1392. Read more.

Theory Hours: 15
Lab Hours: 135

CNST 1170 - Construction Methods I

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

This course will focus on carpentry industry, skills, materials, drawings, and documents. Overall safety will be addressed, including the use of hand and power tools. An applied course in foundation, footing, and stem-wall construction. Other topics include cutting and assembly of structural material for floor, wall, and roof systems in accordance with the International Building Code (IBC).

N**ote(s):**

- Previously CARP 1030. Read more.

Theory Hours: 45

CNST 1240 - Cabinet Making

3 credit hour(s)
Prerequisite: CARP 1320

Covers advanced design and construction of cabinets including safety and use of hand and power tools, and materials.

N**ote(s):**

- Previously CARP 1315. Read more.

Theory Hours: 15
Lab Hours: 90

CNST 1270 - Construction Methods II

3 credit hour(s)
Recommended: CNST 1170

This course is a continuation in construction methods and will focus on both Commercial & Residential carpentry. The proper safety use of hand and power tools will continue in the new subject areas. The student will enhance their skills in the installation of exterior wall and roof finishes, windows, and doors in accordance with the International Building Code (IBC). Students also practice insulation techniques, drywall installation, taping and texture of drywall, trim work, and other finish work in a safety-focused environment.

Note(s):

- Previously CARP 2030. Read more.

Theory Hours: 45

CNST 1310 - Furniture Making

3 credit hour(s)
Prerequisite: CARP 1320

Includes fundamental design and construction of simple furniture including safety and use of hand and power tools. Students will design and construct a furniture project.

N**ote(s):**

- Previously CARP 1305. Read more.

Theory Hours: 15
Lab Hours: 90

CNST 2997 - Construction Independent Studies

1-7 credit hour(s)
Prerequisite: Department approval

Focuses on a specific problem while working with an instructor.

N**ote(s):**

- Previously CARP 2997. Read more.

Chemistry

CHEM 1110 - Chemistry in Our Community

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: Math Skills 2 Alg + CHEM 1110L*

This course will introduce non-science majors to the basic chemistry required to understand topics of current interest affecting their communities, such as air and water quality, global climate change, use of fossil fuels, nuclear power, and alternative energy sources, to illustrate chemical principles, acquaint students with scientific methods, and to critically evaluate scientific claims as presented in the media and in other communicative forums.

N**ote(s):**

- Students not meeting the Reading and Writing Skills 2 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- * It is strongly recommended that students take the lab course concurrently with the lecture. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.
- Previously CHEM 1010. Read more.

Theory Hours: 45

CHEM 1110L - Chemistry in Our Community Laboratory

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: CHEM 1110 + Math Skills 2 Alg

This course will introduce non-science majors to the basic chemistry required to understand topics of current interest affecting their communities, such as air and water quality, global climate change, use of fossil fuels, nuclear power, and alternative energy sources. Experiments will illustrate chemical principles and acquaint students with scientific methods, data processing, critical thinking and scientific writing.

N**ote(s):**

- Students not meeting the Reading and Writing Skills 2 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously CHEM 1092. Read more.

Lab Hours: 45

CHEM 1115 - Chemistry in Art

3 credit hour(s)
Prerequisite: IRW 0980 or appropriate placement scores
Recommended: CHEM 1115L* and MATH 0970**

This course will introduce non-science majors to the basic chemistry required to understand topics of interest to the artistic community, such as solubility, color and preparation of pigments, electrochemistry, chemical safety and toxicity. The course will illustrate chemical principles, acquaint students with scientific methods, allow them to critically evaluate scientific claims as presented in the media and in other communicative forums, and emphasize the creation of works of art using their knowledge of chemistry.

Note(s):
*It is recommended that students take CHEM 1115L concurrently with CHEM 1115. The lab experience serves to enhance the student's understanding of the concepts discussed in lecture.

**It is recommended that students take MATH 0970 prior to taking CHEM 1115, as a working knowledge of basic algebra is useful.

Theory Hours: 45

CHEM 1115L - Chemistry in Art Laboratory

1 credit hour(s)
Prerequisite: IRW 0980 or appropriate placement scores
Pre- or corequisite: CHEM 1115
Recommended: MATH 0970**

Chemistry in Art Laboratory is a laboratory course designed to complement the theory and concepts presented in the Chemistry in Art lecture component. The laboratory allows students to develop basic chemical laboratory techniques for obtaining and analyzing experimental observations pertaining to chemistry and art using diverse methods and equipment.

Note(s):

- **It is recommended that students take MATH 0970 prior to taking CHEM 1115L, as a working knowldge of algebra is useful.

Lab Hours: 45

CHEM 1120 - Introduction to Chemistry

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg
Recommended: CHEM 1120L

This course covers qualitative and quantitative areas of non-organic general chemistry for non-science majors and some health professions. Students will learn and apply principles pertaining, but not limited to, atomic and

molecular structure, the periodic table, acids and bases, mass relationships, and solutions.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously CHEM 1410. Read more.

Theory Hours: 45

CHEM 1120L - Introduction to Chemistry Laboratory

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg
Pre- or corequisite: CHEM 1120

Introduction to Chemistry Laboratory is a laboratory course designed to complement the theory and concepts presented in the Introduction to Chemistry lecture component, and will introduce students to techniques for obtaining and analyzing experimental observations pertaining to chemistry using diverse methods and equipment.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously CHEM 1492. Read more.

Lab Hours: 45

CHEM 1215 - General Chemistry I for STEM Majors

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + (MATH 1215 or MATH 1215P or appropriate placement scores)
Recommended: CHEM 1215L

This course is intended to serve as an introduction to General Chemistry for students enrolled in science, engineering, and certain pre-professional programs. Students will be introduced to several fundamental concepts, including mole, concentration, heat, atomic and molecular structure, periodicity, bonding, physical states, stoichiometry, and reactions.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously CHEM 1710. Read more.

Theory Hours: 45

CHEM 1215L - General Chemistry I Laboratory for STEM Majors

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + (MATH 1215 or MATH 1215P or appropriate placement scores)
Pre- or corequisite: CHEM 1215

General Chemistry I Laboratory for Science Majors is the first-semester laboratory course designed to complement the theory and concepts presented in General Chemistry I lecture. The laboratory component will introduce students to techniques for obtaining and analyzing experimental observations pertaining to chemistry using diverse methods and equipment.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously CHEM 1792. Read more.

Lab Hours: 45

CHEM 1225 - General Chemistry II for STEM Majors

3 credit hour(s)
Prerequisite: CHEM 1215 within the past 3 years + CHEM 1215L within the past 3 years + (MATH 1220 or MATH 1220P or appropriate placement scores)
Recommended: CHEM 1225L

This course is intended to serve as a continuation of general chemistry principles for students enrolled in science, engineering, and certain pre-professional programs. The course includes, but is not limited to a theoretical and quantitative coverage of solutions and their properties, kinetics, chemical equilibrium, acids and bases, entropy and free energy, electrochemistry, and nuclear chemistry. Additional topics may include (as time permits) organic, polymer, atmospheric, and biochemistry.

N**ote(s):**

- Previously CHEM 1810. Read more.

Theory Hours: 45

CHEM 1225L - General Chemistry II Laboratory for STEM Majors

1 credit hour(s)
Prerequisite: CHEM 1215 within the past 3 years + CHEM 1215L within the past 3 years + (MATH 1220 or MATH 1220P or appropriate placement scores)
Pre- or corequisite: CHEM 1225

General Chemistry II Laboratory for Science Majors is the second of a two-semester sequence of laboratory courses designed to complement the theory and concepts presented in General Chemistry II lecture. The laboratory component will introduce students to techniques for obtaining and analyzing experimental observations pertaining to chemistry using diverse methods and equipment.

N**ote(s):**

- Previously CHEM 1892. Read more.

Lab Hours: 45

CHEM 1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously CHEM 1096-1996. Read more.

CHEM 2120 - Integrated Organic Chemistry and Biochemistry

4 credit hour(s)
Prerequisite: (CHEM 1120 + CHEM 1120L) or (CHEM 1215 + CHEM 1215L)

This course is a one- semester introduction to Organic Chemistry and Biochemistry designed for students in health and environmental occupations. The course surveys organic compounds in terms of structure, physical, and chemical properties, followed by coverage of the chemistry of specific classes of organic compounds in the biological environment. Students will apply course concepts to everyday organic and biological chemistry problems in preparation for careers in health and environmental fields.

N**ote(s):**

- Previously CHEM 2210. Read more.

Theory Hours: 60

CHEM 2130 - Organic Chemistry I

3 credit hour(s)
Prerequisite: CHEM 1225 + CHEM 1225L
Recommended: CHEM 2130L

This course is the first of a two semester sequence of Organic Chemistry, the chemistry of carbon containing compounds, as required for chemistry, medical science, and engineering majors. The course includes theoretical, qualitative, and quantitative discussion of Organic Chemistry concepts, including but not limited to a review of electronic structure and bonding, acids and bases, stereochemistry, an introduction to organic compounds, isomers, substitution and elimination reactions of alkyl halides, reactions of alkenes, alkynes, alcohols, ethers, epoxides, amines, and thiols, mass and infrared spectrometry, ultraviolet/visible spectroscopy, and nuclear magnetic resonance.

N**ote(s):**

- Previously CHEM 2710. Read more.

Theory Hours: 45

CHEM 2130L - Organic Chemistry I Laboratory

1 credit hour(s)
Pre- or corequisite: CHEM 2130

Organic Chemistry I Laboratory is the first semester laboratory course designed to complement the theory and concepts presented in Organic Chemistry I lecture. The laboratory component will introduce students to techniques for obtaining and analyzing experimental observations pertaining to Organic Chemistry using diverse methods and equipment.

N**ote(s):**

- Previously CHEM 2792. Read more.

Lab Hours: 45

CHEM 2135 - Organic Chemistry II

3 credit hour(s)
Prerequisite: CHEM 2130 + CHEM 2130L
Recommended: CHEM 2135L

This course is the second of a two semester sequence of Organic Chemistry, the chemistry of carbon containing compounds, as required for chemistry, medical science, and engineering majors. The course will emphasize structure, main physical properties, chemical reactivity, and reaction mechanisms relating to alcohols, arenes and carbonyl compounds, as well as continued integration of mass and infrared spectrometry, ultraviolet/visible spectroscopy, and nuclear magnetic resonance technique and analysis.

N**ote(s):**

- Previously CHEM 2810. Read more.

Theory Hours: 45

CHEM 2135L - Organic Chemistry II Laboratory

1 credit hour(s)
Prerequisite: CHEM 2130 + CHEM 2130L
Pre- or corequisite: CHEM 2135

Organic Chemistry II Laboratory is the second semester laboratory course designed to complement the theory and concepts presented in Organic Chemistry II lecture. The laboratory component will introduce students to techniques for obtaining and analyzing experimental observations pertaining to Organic Chemistry using diverse methods and equipment.

N**ote(s):**

- Previously CHEM 2892. Read more.

Lab Hours: 45

CHEM 2996 - Special Topics

1-3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously CHEM 2096-2996. Read more.

Chicano and Chicana Studies

CCST 1110 - Introduction to Comparative Global and Ethnic Societies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

The course explores historical and contemporary social forces that impact ethnic communities across the Americas. Students will examine social and economic dynamics of Indigenous, Latino, Asian Pacific, Africana communities and women's experiences in these societies.

Theory Hours: 45

CCST 1125 - Chicana/o Latina/o Musical Cultures and Expressions

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

The course explores diverse musical expressions of Chicana/o and Latina/o peoples in the present geographical boundaries of the United States. The course emphasizes the intercultural dynamics in the formation of Chicano and Latino music, which incorporates American, Latin American, African, Native American, and European roots.

Theory Hours: 45

CCST 2088 - Chicana and Chicano Studies Specialty

1-12 credit hour(s)

This course is used to transfer approved courses from other colleges and universities.

CCST 2110 - Introduction to Chicana and Chicano Studies

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

Introductory survey of the Mexican American experience in the United States, with special reference to New Mexico. Exploration of historical, political, social and cultural dimensions.

Note(s):

- Previously CHMS 1150. Read more.

Theory Hours: 45

CCST 2332 - Introduction to Chicana Studies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

This course is an introduction to the interdisciplinary field of Chicana Studies. Through a historical and contemporary investigation on labor, political involvement, cultural studies, and feminisms, the purpose of this course is to familiarize students with the diversity and complexity of Chicana experiences. Course materials will highlight and contextualize Chicana/Mexican/Indigenous women's challenge to notions of inferiority and rationalizations for dominance through social, economic, political, and power contestations. Moreover, careful analysis exposes how women resist and serve as agents of social and political change in the formation of society and state.

Theory Hours: 45

Commercial Carpentry Apprenticeship

CCAP 1115 - Commercial Carpentry Apprenticeship

5-7 credit hour(s)
Prerequisite: Current full-time employment in the carpentry industry or department approval.

Provides 75-105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.

Theory Hours: 75

CCAP 1125 - Commercial Carpentry Apprenticeship

5-7 credit hour(s)
Prerequisite: Current full-time employment in the carpentry industry or department approval.

Provides 75-105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.

Theory Hours: 75

CCAP 1215 - Commercial Carpentry Apprenticeship

5-7 credit hour(s)
Prerequisite: Current full-time employment in the carpentry industry or department approval.

Provides 75-105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.

Theory Hours: 75

CCAP 1225 - Commercial Carpentry Apprenticeship

5-7 credit hour(s)
Prerequisite: Current full-time employment in the carpentry industry or department approval.

Provides 75-105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.

Theory Hours: 75

CCAP 1315 - Commercial Carpentry Apprenticeship

5-7 credit hour(s)
Prerequisite: Current full-time employment in the carpentry industry or department approval.

Provides 75-105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.

Theory Hours: 75

CCAP 1325 - Commercial Carpentry Apprenticeship

5-7 credit hour(s)
Prerequisite: Current full-time employment in the carpentry industry or department approval.

Provides 75-105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.

Theory Hours: 75

CCAP 1415 - Commercial Carpentry Apprenticeship

5-7 credit hour(s)
Prerequisite: Current full-time employment in the carpentry industry or department approval.

Provides 75-105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.

Theory Hours: 75

CCAP 1425 - Commercial Carpentry Apprenticeship

5-7 credit hour(s)
Prerequisite: Current full-time employment in the carpentry industry or department approval.

Provides 75-105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.

Theory Hours: 75

Communication

COMM 1115 - Introduction to Communication

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or FYEX 1110

This survey course introduces the principles of communication in the areas of interpersonal, intercultural, small group, organizational, public speaking, and mass and social media.

Note(s):

- Previously COMM 1101. Read more.

Theory Hours: 45

COMM 1130 - Public Speaking

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or FYEX 1110
Recommended: (ENGL 1110 or ENGL 1110P)

This course introduces the theory and fundamental principles of public speaking, emphasizing audience analysis, reasoning, the use of evidence, and effective delivery. Students will study principles of communication theory and rhetoric and apply them in the analysis, preparation and presentation of speeches, including informative, persuasive, and impromptu speeches.

Theory Hours: 45

COMM 1140 - Introduction to Media Writing

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or FYEX 1110

This course combines a theoretical foundation with practical applications. It provides an introduction to journalism, as well as an overview of the most common types of writing required in public relations, advertising, and strategic communication.

Theory Hours: 45

COMM 1150 - Introduction to Mass Communication

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or FYEX 1110
Recommended: (ENGL 1110 or ENGL 1110P)

This course introduces students to the history, models, theories, concepts, and terminology of mass communication, focusing on various media and professions. The course will enable students to develop media literacy skills to interpret mass communication and understand the effects of media on society and their lives.

N**ote(s):**

- Directly transfers to UNM as equivalent course
- Previously COMM 1110. Read more.

Theory Hours: 45

COMM 2120 - Interpersonal Communication

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course provides an introduction to the study of interpersonal communication. Students will examine the application of interpersonal communication in personal and professional relationships.

N**ote(s):**

- Previously COMM 2221. Read more.

Theory Hours: 45

COMM 2130 - Media Theories

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P)

Introduces students to a variety of media theories and models. Focuses on the key issues in media theory, including the nature of mass media, influences on human behavior, and the media as reflector and creator of society.

N**ote(s):**

- Typically offered online
- Directly transfers to UNM as equivalent course
- Previously COMM 2268. Read more.

Theory Hours: 45

COMM 2140 - Small Group Communication

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P)

Explores the principles and practices of effective participation in small groups, with emphasis on critical thinking, problem solving, organizational skills, role theory, conflict resolution, and creative decision-making methods. It combines a theoretical foundation with practical application to help students better understand the dynamics of group communication in both professional and social contexts.

N**ote(s):**

- Directly transfers to UNM as equivalent course
- Previously COMM 2225. Read more.

Theory Hours: 45

COMM 2150 - Communication for Teachers

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P)

This course will investigate and critically evaluation the influence of identity, communication, and culture on instruction, learning, engagement, classroom community, and the teacher-student relationship.

N**ote(s):**

- Previously COMM 2270. Read more.

Theory Hours: 45

COMM 2160 - Gender Communication

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) + COMM 2120

This course focuses on exploring gendered identities and how they inform and are informed by communication. It includes consideration of the development and influence of gender over the lifespan, cultural understandings and critiques of gender, strategies for understanding gendered communication differences, and the implications and consequences of these differences in business, media, and educational and intimate contexts.

N**ote(s):**

- Typically offered online
- Previously COMM 2280. Read more.

Theory Hours: 45

COMM 2170 - Intercultural Communication

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) + COMM 2120

This course introduces students to the basic concepts, theories and skills necessary to succeed in an increasingly multicultural world.

N**ote(s):**

- Typically offered online
- Previously COMM 2281. Read more.

Theory Hours: 45

COMM 2180 - Business and Professional Communication

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P)

This course develops the interpersonal, small group, and public communication skills most useful in business relationships and professional organizations.

N**ote(s):**

- Previously COMM 2232. Read more.

Theory Hours: 45

COMM 2223 - Introduction to Nonverbal Communication Studies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

Examines how the face and eyes, gestures, touch, voice, physical appearance, space, time and environment communicate in personal and professional interactions.

* This course requires writing critical essays utilizing multiple source materials.

N**ote(s):**

- Transfers to UNM as 200-level Communication elective course. Does not transfer as the equivalent 300-level course at UNM

Theory Hours: 45

COMM 2240 - Organizational Communication Studies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

Focuses on communication networks, power and authority, manager/employee relationships, leadership and interviewing in organizational contexts.

* This course requires writing critical essays utilizing multiple source materials.

N**ote(s):**

- Typically offered online
- Previously COMM 2240. Read more.

Theory Hours: 45

COMM 2282 - Family Communication Studies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) + COMM 2120*

Examines family systems theory, communication patterns, rules, roles, themes, power, intimacy ethnicity and conflict in families.

* This course requires writing critical essays utilizing multiple source materials.

N**ote(s):**

- Typically offered online
- Previously COMM 2282. Read more.

Theory Hours: 45

COMM 2289 - Listening Communication Studies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) + COMM 2120*

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.

* This course requires writing critical essays utilizing multiple source materials.

N**ote(s):**

- Typically offered online

- Previously COMM 2289. Read more.

Theory Hours: 45

COMM 2996 - Special Topics

1-3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) + COMM 2120 *

Presents various topics.

* This course requires writing critical essays utilizing multiple source materials.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously COMM 2096-2996. Read more.

COMM 2998 - Internship in Communication

1-3 credit hour(s)

This course requires students work 45, 90, or 135 hours, depending on the internship placement. The internship will serve as an applied learning experience by observing, analyzing and participating in a related workplace.

N**ote(s):**

- Previously COMM 2298.

Internship Hours: 45

Community and Regional Planning

PLAN 1165 - Introduction to Community and Regional Planning

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Introduction to the social, economic, political and physical factors involved in development of cities and towns. Overview of the development of community and regional planning, as well as prominent theories of planning practice. Emphasizing the connection between theoretical and historic material and current planning practice and the interrelationships between various land uses.

Note(s):

- Previously CRP 1165. Read more.

Theory Hours: 45

PLAN 2265 - Sustainable Community Planning Methods

3 credit hour(s)
Prerequisite: PLAN 1165

An overview of sustainability covering topics such as the origins of sustainability, tools for sustainability planning, global dimensions of sustainability (including different approaches to planning), and visions for creating sustainable futures through the basic concepts, processes and techniques of planning.

Note(s):

- Previously CRP 2265. Read more.

Theory Hours: 45

Community Health Worker

CHW 1010 - Community Health Worker Fundamentals

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: PHLS 1120

This course provides an interdisciplinary introduction to Community Health Work. It provides students with the opportunity to learn the theory and skills to function as a community health worker. This course introduces the CHW student to the profession of community health, effective communications skills and interpersonal skills needed to work effectively in the community.

Note(s):

Si quiere hacer este clase en Espanol, por favor contaco este oficina:

- Contacte a los Programas Bilingües

English: If you want to take this class in Spanish, please contact this office :

- Contacte a los Programas Bilingües

Theory Hours: 30

CHW 1020 - Health Promotion

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: PHLS 1120

This course introduces the student to basic skills needed to be proficient as a Community Health Worker. Topics include health coaching skills, service coordination skills and technical teaching skills.

Note(s):

"Si te inscribes en la versión en español de este curso por favor contacta a los programas bilingües:

- Contacte a los Programas Bilingües

Theory Hours: 30

CHW 1190 - Community Health Worker Practicum

1 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: CHW 1010 + CHW 1020 + HLTH 1003

Through off-site learning experiences, this course provides the Community Health Worker student with the core competencies required by the New Mexico Department of Health for certification as a Generalist as well as a Specialist 1.

Practicum Hours: 45

Computer Assisted Drafting

CAD 1001 - Basics of CAD

1 credit hour(s)
Pre- or corequisite: BCIS 1110

Introduces the fundamentals of computer aided drafting.

Computer Information Systems

CIST 1213 - Web Publishing

3 credit hour(s)
Pre- or corequisite: BCIS 1110 or CIST 1220 or CSCI 1108

Use Content Management Systems (CMS) to publish websites optimized for search engine success. Introduce visitor tracking and web analytics. Use the CMS dashboard to develop content, select themes, install plugins, and manage users.

N**ote(s):**

- Previously CIS 1713. Read more.

Theory Hours: 45
Additional Lab Hours: 15

CIST 1217 - Overview of Web Technologies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: BCIS 1110 or CIST 1220 or CSCI 1108

Identify the markup, style, and coding languages common to web development. Apply HTML and Cascading Style Sheets (CSS) to create web documents. Use a content management system to develop a website. Distinguish between browser and server-side coding. Explore the interactions between the web server, network, and web browser.

N**ote(s):**

- Previously CIS 1715. Read more.

Theory Hours: 45
Additional Lab Hours: 15

CIST 1220 - Programming Fundamentals

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This is an entry level programming course designed to teach students the basic concepts of computer programming. By the end of the course, students will have the skills and confidence needed to succeed in future programming language courses.

N**ote(s):**

- A challenge exam is available for this course for students with more advanced programming experience.
- Previously CIS 1220. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 1261 - JavaScript Web Programming

3 credit hour(s)
Prerequisite: BCIS 1110 or CIST 1220 or CSCI 1108

Use JavaScript libraries and frameworks including jQuery to implement web widgets and validate form data. Create interactive web pages with JavaScript manipulation of HTML and CSS. Use AJAX and other technologies for browser- to- server interactions.

N**ote(s):**

- Previously CIS 1730. Read more.

Theory Hours: 45
Additional Lab Hours: 15

CIST 1263 - PHP Web Programming

3 credit hour(s)
Prerequisite: BCIS 1110 or CIST 1220 or CSCI 1108

Use PHP/MySQL libraries and frameworks to develop dynamic database-driven websites. Explore a range of PHP solutions including image management, network socket data transfer, and XML parsing.

N**ote(s):**

- Previously CIS 1750. Read more.

Theory Hours: 45
Additional Lab Hours: 15

CIST 1410 - IT Essentials: Hardware

3 credit hour(s)
Pre- or corequisite: BCIS 1110

Covers PC hardware and peripherals, mobile device hardware, networking and troubleshooting hardware and network connectivity issues. The basics of computer hardware technologies are introduced in a lab-oriented environment and will assist in preparation for the CompTIA A+ Hardware certification.

N**ote(s):**

- This course has an additional course fee that covers the cost of the certification voucher for CompTIA A+ Hardware exam. This exam is the final for the course, and must be taken at a certified testing center (such as CNM's Workforce Training Center).
- Successful completion of both the CompTIA A+ Hardware and CompTIA A+ Software exams constitute the CompTIA A+ certification. CIS 1610 IT Essentials: Software covers the software portion of the A+ certification.
- Due to the rigor of the exams, students are discouraged from taking two CIS courses with certification exams in the same semester.
- Previously CIS 1410. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 1411 - Introduction to Networks

3 credit hour(s)
Pre- or corequisite: CIST 1410

An introduction to the TCP/IP and OSI networking models and concepts for implementing those models in Wide Area and Local Area Networks. TCP/IP network fundamentals will be presented. Topics include network device configuration, IPv4 and IPv6 network addressing, basic security administration and network troubleshooting principles. This course uses the Cisco Networking Academy curriculum and is preparation for current industry certifications.

N**ote(s):**

- Previously CIS 1425. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 1412 - Network Device Configuration

3 credit hour(s)
Prerequisite: CIST 1411

This course covers the architecture, components, and operations of routers and switches in a small network and introduces wireless local area networks (WLAN) and security concepts. Students learn how to configure routers and switches, perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, configure static and dynamic addressing, and configure and secure a basic WLAN. This course uses the Cisco Networking Academy curriculum and is preparation for current industry certifications.

N**ote(s):**

- Previously CIS 2421. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 1413 - Network Administration Concepts

3 credit hour(s)
Prerequisite: CIST 1410

Students will learn to design, configure, and troubleshoot various types of networks, implement security measures to protect network assets, analyze network protocols and services, diagnose network issues, and monitor network performance. Students will engage in hands-on/virtual lab exercises, performance-based assessments, and written assessments to apply their knowledge and skills. Upon completion of this course, students will be equipped for a successful career in network administration. The course aligns with the domains and objectives of the CompTIA Network+ and TestOut Network Pro certification exams.

N**ote(s):**

- This course has an additional course fee that covers the cost of the certification voucher for CompTIA Network+ exam. This exam is the final for the course, and must be taken at a certified testing center (such as CNM's Workforce Training Center).
- Due to the rigor of the exams, students are discouraged from taking two CIS courses with certification exams in the same semester.
- Previously CIS 1415. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 1605 - Internet of Things

3 credit hour(s)
Prerequisite: BCIS 1110 or CIST 1220 or CSCI 1108

Examines the evolution of the Internet and how the interconnection of people, processes, data, and things is transforming every industry. This hands-on IoT course addresses the main stages of digitization including identifying and communicating a business or social problem and designing and connecting IoT devices to interact with the physical world. Students will develop high-demand skills such as creative problem-solving, critical thinking, collaboration and communication in hands-on lab and hackathon experiences.

N**ote(s):**

- Course taught in a computer lab
- Previously CIS 1605. Read more.

Theory Hours: 45
Additional Lab Hours: 15

CIST 1610 - IT Essentials: Software

3 credit hour(s)
Pre- or corequisite: CIST 1410

Covers common features and functionality of known operating systems, system management, file management, common security threats and vulnerabilities. The basics of computer software technologies are introduced in a lab-oriented environment and will assist in preparation for the CompTIA A+ Software certification.

N**ote(s):**

- This course has an additional course fee that covers the cost of the certification voucher for CompTIA A+ Software exam. This exam is the final for the course, and must be taken at a certified testing center (such as CNM's Workforce Training Center).
- Successful completion of both the CompTIA A+ Hardware and CompTIA A+ Software exams constitute the CompTIA A+ certification. CIS 1410 IT Essentials: Hardware covers the hardware portion of the A+ certification.
- Due to the rigor of the exams, students are discouraged from taking two CIS courses with certification exams in the same semester.
- Previously CIS 1610. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 1680 - Linux Essentials

3 credit hour(s)
Prerequisite: BCIS 1110 or CSCI 1108 or CIST 1220

Introduces the Linux operating system with emphasis on command line application. Students will learn management of the Linux file system, processes, storage devices, users and groups. Learning objectives also include configuration of boot activity, network, and printers.

N**ote(s):**

- Previously CIS 1680. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 1858 - Introduction to Cyber Security

3 credit hour(s)
Pre- or corequisite: BCIS 1110 or CSCI 1108

This course is an overview of the field of Cyber Security and cyber areas. It will cover terminology, principles, best practices and ethics which will provide a foundation for understanding detailed aspects of the weaknesses, attacks, and defenses used to attack or protect critical infrastructure. The course is designed as a starting point for IT, business and health care management professionals to help develop a cyber security mindset in both professional and personal lives.

N**ote(s):**

- Previously CIS 1858. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 1996 - Special Topics

1-3 credit hour(s)

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

CIST 2088 - Computer Information System Specialty

Varied credit hour(s)

This course allows students to apply computer information technology elective credit towards a Computer Information System program requirement.

N**ote(s):**

- Previously CIS 2088. Read more.

CIST 2097 - Independent Study

1-6 credit hour(s)
Prerequisite: Department 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.

N**ote(s):**

- All courses ending in 97 are independent study courses
- Previously CIS 2097. Read more.

CIST 2210 - Introduction to SQL (Structured Query Language)

3 credit hour(s)
Prerequisite: BCIS 1110 or CIST 1220 or CSCI 1108

Introduction to Structured Query Language (SQL) within the context of an Oracle database. Students will create basic and complex queries (joining, sub-queries, aggregate functions, grouping data), and learn to manipulate data using insert, update and delete statements. Students will create tables, views, and constraints, and benefit by learning the industry standards while utilizing the latest database software and online training materials.

N**ote(s):**

- This course also prepares students for the 1st Oracle Associate Certification Test.
- Previously CIS 2520. Read more.

Theory Hours: 45
Additional Lab Hours: 15

CIST 2215 - iPhone Programming with Swift

3 credit hour(s)
Prerequisite: CIST 2220 or CIST 2235 or CIST 2275

Swift is a programming language created by Apple for building apps for iOS, Mac, Apple TV and Apple Watch. Students will learn to develop apps using the Swift language. The course is taught with Apple Equipment. Students can use their own equipment or check out the appropriate hardware

N**ote(s):**

- Previously CIS 2240. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2220 - .Net I/C#

3 credit hour(s)
Prerequisite: CSCI 1240
Pre- or corequisite: CIST 2210

Provides an accelerated introduction to the .NET Framework and the C# development environment within a C# context. Course scope includes review of C#.NET language syntax and structure, development of C#.NET event driven applications incorporating a graphical user interface (GUI) and user defined classes and interfaces. Course includes abstract classes, stressing inheritance and polymorphism, and concludes with a web application interfacing with a database.

N**ote(s):**

- Previously CIS 1280. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2225 - Game Development

3 credit hour(s)
Prerequisite: CIST 2220

Teaches how to develop computer games and simulations. Covers Agile software development, working as a team, building assets, creating scenes, coding object behaviors and other topics. Students will learn how to deploy a game/simulation to Windows, to the Web and/or to Android. Students may also learn to integrate game peripheral Software Development Kits for example: Oculus Rift, Google Cardboard, Kinect and/or other systems.

N**ote(s):**

- Previously CIS 2250. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2235 - Java Programming I

3 credit hour(s)
Prerequisite: CSCI 1240
Pre- or corequisite: CIST 2210

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.

N**ote(s):**

- Previously CIS 2235. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2237 - Android App Dev with Java and Kotlin

3 credit hour(s)
Prerequisite: CIST 2235

Focuses on advanced Java technologies. Course covers design, implementation and deployment of advanced programs based on Java which may include web

programming, small device applications (Android, phones, pads, etc.), and related technologies including web services, advanced graphics, databases, multimedia, and other relevant technologies.

N**ote(s):**

- Previously CIS 2237. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2251 - Python Programming II

3 credit hour(s)
Prerequisite: CSCI 1220

In this course, students will take Python machine learning ideas and create serverless web applications accessible by anyone with an Internet connection. Students will work through a series of common Python data science problems in an increasing order of complexity. Students will learn to create a web application around numerical or categorical predictions, Machine Learning tools like TensorFlow, understand the analysis of text, create powerful and interactive presentations, serve restricted access to data, and leverage web plugins to accept credit card payments and donations.

N**ote(s):**

- Previously CIS 2251. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2263 - Web Programming Framework

3 credit hour(s)
Prerequisite: CIST 1213
Pre- or corequisite: CIST 1263

This course introduces concepts, techniques, technologies and APIs for web application development. The main focus of the course is on design patterns employed by modern full-stack web frameworks.

N**ote(s):**

- Previously CIS 2763. Read more.

Theory Hours: 45
Additional Lab Hours: 15

CIST 2275 - C++ Programming II

3 credit hour(s)
Prerequisite: CSCI 1240

Continues coverage of C++ programming. Covers structures, enumerated data types, C++ function enhancements, classes and objects, inheritance, polymorphism and virtual functions. This advanced course provides a solid foundation in object-oriented programming methods.

N**ote(s):**

- Previously CIS 2275. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2277 - C++ Programming III

3 credit hour(s)
Prerequisite: CIST 2275

Covers advanced programming including stacks, queues, linked lists, template classes, inheritance and polymorphism and other computer science problems.

N**ote(s):**

- Previously CIS 2277. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2284 - .NET II/C#

3 credit hour(s)
Prerequisite: CIST 2220

The course focuses on the development of Microsoft .NET web applications using Microsoft's Visual Studio Integrated Developer Environment. Students will learn to apply Microsoft's .NET framework to build web applications that use a variety of web controls, can be used by users to access information stored in relational databases, implements site navigation and provides the capability to administer web site membership, roles and permissions. Students will define their web site using the Agile methodology then implement it using the techniques learned in the class.

N**ote(s):**

- Previously CIS 2284. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2321 - Visual Analytics

3 credit hour(s)
Prerequisite: BCIS 1340

This course explores the principles and practices of Business Intelligence (BI), which is a critical component of modern decision-making in organizations. Students will learn how to collect, analyze, and visualize data to support strategic and tactical business decisions.

N**ote(s):**

- Previously BCIS 2320. Read more.

Theory Hours: 45

CIST 2331 - Predictive Analytics

3 credit hour(s)
Prerequisite: BCIS 1340 or CSCI 1220

This course delves into the field of predictive analytics, equipping students with the skills to use historical data to make future predictions. Students will learn various predictive modeling techniques, data preprocessing, model evaluation, and the practical applications of predictive analytics in real-world scenarios.

N**ote(s):**

- Previously BCIS 2330. Read more.

Theory Hours: 45

CIST 2411 - Enterprise Networking

3 credit hour(s)
Prerequisite: CIST 1412

This course describes the architecture and considerations related to designing, securing, operating, and troubleshooting enterprise networks. Topics include wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access and software-defined networking, virtualization, and automation concepts that support the digitalization of

networks. Students configure and troubleshoot enterprise networks and learn to identify and protect against cybersecurity threats. Network management tools and key concepts of software-defined networking, including controller-based architectures and how application programming interfaces (APIs) enable network automation, are introduced. This course uses the Cisco Networking Academy curriculum and is preparation for current industry certifications.

N**ote(s):**

- Previously CIS 2424. Read more.

Theory Hours: 45
Lab Hours: 15
Additional Lab Hours: .333

CIST 2427 - Troubleshooting Networks

3 credit hour(s)
Pre- or corequisite: CIST 2411

Allows students to run a wide variety of applications over a network and apply troubleshooting techniques using software and LAN and WAN analyzing equipment.

N**ote(s):**

- Previously CIS 2427. Read more.

Theory Hours: 45
Additional Lab Hours: 15

CIST 2428 - Juniper Fundamentals

3 credit hour(s)
Prerequisite: CIST 2411

This course provides a core understanding of the Juniper Networks core operating system used in Enterprise and Service Provider level systems. Students will be eligible to take the JNCIA Associate Certification Exam.

N**ote(s):**

- Previously CIS 2428. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2450 - Fundamentals of Network Security

3 credit hour(s)
Prerequisite: CIST 1412

Introduces Network Security and overall security processes. The focus of the course will be hands-on experience for students with emphasis on: security policy design and management, security technologies, products and solutions.

N**ote(s):**

- Previously CIS 2450. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2616 - Intro to Competitive Robotics

3 credit hour(s)
Prerequisite: BCIS 1110 or CIST 1220 or CSCI 1108

Using projects and hands-on exercises, students will learn to build and program small scale robots. Arduino and Raspberry Pi prototyping platforms will be used to perform basic/intermediate navigation under program control, with various sensor inputs, feedback and control techniques. Robots built in this course will be capable of competing in PiWars, SkillsUSA and RoboRave robotics competitions.

N**ote(s):**

- Course taught in a computer lab
- Previously CIS 2011. Read more.

Theory Hours: 45
Additional Lab Hours: 15

CIST 2620 - Windows Server Administration

3 credit hour(s)
Pre- or corequisite: CIST 1413

This course addresses the implementation and support needs of IT professionals that are planning to deploy and support Window Servers. It provides in-depth, hands-on training for IT professionals responsible for the planning, implementation, management, and support of Windows Server operating systems. Assists in preparation for the Microsoft certification.

N**ote(s):**

- Previously CIS 2620. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2626 - Advanced Competitive Robotics

3 credit hour(s)
Prerequisite: CIST 2616 or department approval

Through hands-on exercises, projects, and robotics competition challenges, students will learn to design, build and program small-scale robots using the Arduino and Raspberry Pi prototyping platforms to perform intermediate/advanced navigation, decision making, and computer vision tasks under autonomous control. Robots built in this course will be capable of competing in PiWars, RoboRave, and VEXU robotics competitions at intermediate and advanced levels.

N**ote(s):**

- Course taught in a computer lab
- Previously CIS 2021. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2636 - Cloud Computing

3 credit hour(s)
Prerequisite: CIST 1413

Investigation of technology skills related to maintaining and optimizing cloud infrastructure services. These skills include the virtualization, configuration, maintenance, management, securing and troubleshooting of cloud infrastructure services.

N**ote(s):**

- Previously CIS 2636. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2640 - PowerShell for SysAdmins

3 credit hour(s)
Prerequisite: CIST 1413 + CIST 1680
Pre- or corequisite: CIST 2620

Students will be introduced to the fundamentals of PowerShell. Students will learn how to use PowerShell to manage tasks, automate tasks, and link various tools. Students will use the basic tools and commands to write PowerShell scripts to create interactive menus, read and write files, and create code that talks over the network to other scripts.

N**ote(s):**

- Previously CIS 2640. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2641 - AWS Solutions Architect Associate

3 credit hour(s)
Pre- or corequisite: CIST 2636

This course covers the fundamentals of building IT infrastructure on AWS. The course teaches students how to optimize use of the AWS Cloud by understanding AWS services and how they fit into cloud-based solutions.

N**ote(s):**

- Previously CIS 2641. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2650 - Advanced Windows Server

3 credit hour(s)
Prerequisite: CIST 2620

Students will learn how to install, configure, and manage Windows Server Services such as data storage, network and remote access services, web services, containers, cloud services, and securing Windows server environments.

N**ote(s):**

- This course may assist in preparation for Microsoft certification. Server version being taught is subject to change.
- Previously CIS 2650. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2680 - Linux Administration

3 credit hour(s)
Prerequisite: CIST 1680

Hands-on instruction of Linux system administration with an emphasis on security and performance. Prepares students to work as professional Linux system administrators. Learn the key principles to install and manage virtual machines, both their performance and security. Learn advanced networking concepts, including clustering and high availability

N**ote(s):**

- Previously CIS 2680. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2798 - Internship

1 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 45 hours at business or training-related supervised work stations. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously CIS 2798. Read more.

Internship Hours: 45

CIST 2801 - Introduction to DevSecOps

3 credit hour(s)
Prerequisite: CSCI 1220 + CIST 1680 + (CIST 1261 or CIST 1263 or CIST 2284)

An introduction to the fundamentals of planning and automating the development, maintenance, testing, securing, migration and delivery of software and databases.

N**ote(s):**

- Previously CIS 2801. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2853 - Cyber Defense Basics

3 credit hour(s)
Prerequisite: CIST 1680 + (CSCI 1220 or CSCI 1240 or CSCI 1230 or CSCI 1260)
Pre- or corequisite: CIST 2881

This course will provide fundamental skills needed to analyze the internal and external security threats against a computer network. Students will learn how to evaluate network and internet security issues and design, and how to implement successful security policies and firewall strategies to defend against system and network vulnerabilities.

N**ote(s):**

- Previously CIS 2853. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2860 - Digital Forensics and Incident Response

3 credit hour(s)
Prerequisite: CIST 1680 + (CSCI 1220 or CSCI 1240 or CSCI 1230 or CSCI 1260)
Pre- or corequisite: CIST 2881

This course offers students a structured approach to the field of computer forensics and the analysis of digital evidence. Through a combination of theoretical knowledge and hands-on practical exercises, students will develop the skills necessary to conduct effective computer forensic investigations. The course will cover various forensic investigation techniques and utilize standard forensic tools to successfully gather, preserve and analyze digital evidence. This class prepares students for a position as a cybersecurity incident handler.

N**ote(s):**

- Previously CIS 2860. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2881 - Cybersecurity Fundamentals

3 credit hour(s)

Prerequisite: CIST 1680
Pre- or corequisite: CIST 1413

This course covers a range of topics including network and computer security, general security concepts, communication security, infrastructure security, operational and organizational security, encryption technologies, system and network security types of attacks, risk management, intrusion detection and prevention, assessing risk, auditing, and security control procedures. The course is designed to prepare students for an industry certification exam.

N**ote(s):**

- This course has an additional course fee that covers the cost of the certification voucher for CompTIA Security+ exam. This exam is the final for the course, and must be taken at a certified testing center (such as CNM's Workforce Training Center).
- Due to the rigor of the exams, students are discouraged from taking two CIS courses with certification exams in the same semester.
- Previously CIS 2670. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2887 - Ethical Hacking

3 credit hour(s)
Prerequisite: CIST 1680 + (CSCI 1220 or CSCI 1240 or CSCI 1230 or CSCI 1260)
Pre- or corequisite: CIST 2881

This course introduces the essential concepts and practices of ethical hacking. Students will learn to use various ethical hacking tools and techniques to assess the security posture of a network and identify potential vulnerabilities that could be exploited by malicious actors. The course is based on the EC Council Ethical Hacking ECH Version 12 and TestOut Ethical Hacker Pro certification exam domains/objectives. By the end of the course, students will have a solid understanding of network security threats and vulnerabilities, and the ability to perform a comprehensive security assessment of a network. The course is suitable for students interested in pursuing a career in cybersecurity or who want to improve their understanding of network security and ethical hacking.

N**ote(s):**

- Previously CIS 2857. Read more.

Theory Hours: 45
Lab Hours: 15

CIST 2898 - Internship

2 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 90 hours at business or training-related supervised work stations. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously CIS 2898. Read more.

Internship Hours: 90

CIST 2899 - Software Development Capstone

3 credit hour(s)
Prerequisite: Departmental Approval

Students in this capstone course will be required to develop a substantial project to demonstrate the skills required as a software developer. This course will prepare students for job searches, resumes, cover letters and successful interviews. The capstone will also assess program learning outcomes.

N**ote(s):**

- Previously CIS 2899. Read more.

Theory Hours: 45

CIST 2996 - Special Topics

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously CIS 2096-2996. Read more.

CIST 2998 - Internship

3 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 135 hours at business or training-related supervised work stations. Students are supervised jointly by CNM and the company.

Note(s):

- Previously CIS 2998. Read more.

Internship Hours: 135

CIST 2999 - Capstone Course

1 credit hour(s)
Prerequisite: Department approval

Focuses on assessment of student learning outcomes for program of study.

N**ote(s):**

- Taken in student's last term.
- Previously CIS 2999. Read more.

Theory Hours: 15

Computer Science

CSCI 1096-1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

CSCI 1108 - CS for All: Introduction to Computer Modeling

4 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: BCIS 1110*

Introduction to Computational Science using modeling and simulation. Apply the fundamentals of computational

thinking to solve a realistic problem of interdisciplinary environment. Employing lab activities integrated into the course, students will learn the agent-based programming language to formulate their problem modules, experiment to find solutions, and evaluate the results. Students will practice cycling through the formulation, experiment, and evaluation process for a realistic conclusion.

N**ote(s):**

- *BCIS 1110 is recommended because a basic knowledge of computer utilization would be helpful.
- Meets lab class requirement.

Theory Hours: 60

CSCI 1153 - Programming in Matlab

4 credit hour(s)
Prerequisite: (MATH 1240 or higher except MATH 2110) or Math Skills 6
Recommended: BCIS 1110 or CSCI 1108*

An introduction to computing using MATLAB. To learn the general concepts of computing and programming, understand the relation between writing computer programs and solving problems.

N**ote(s):**

- Students should have fundamental computing skills before beginning this course. Both BCIS 1110 and CSCI 1108 provide these essential skills.

Theory Hours: 60

CSCI 1220 - Computer Programming Fundamentals: Python

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course is an introduction to fundamental programming concepts, with a focus on problem-solving techniques and algorithm development using the Python programming language. Students will learn how to create basic scripts, work with data types and variables, use control structures, and build functions. The course is designed for students with little or no prior experience in programming and is intended to provide a foundation in programming that can be applied in a variety of fields.

N**ote(s):**

- Previously CIS 1250. Read more.

Theory Hours: 45
Lab Hours: 15

CSCI 1230 - C Programming

4 credit hour(s)
Prerequisite: (BCIS 1110 or CSCI 1108) + (MATH 1240 or higher except MATH 2110) or Math Skills 6

Introduction to programming in the C language. Topics include input and output, operators and expressions, control structures for branching and looping, functions, pointers and arrays. Functions in the standard libraries will be covered.

N**ote(s):**

- Previously CSCI 1151. Read more.

Theory Hours: 60

CSCI 1240 - C++ Programming I

3 credit hour(s)
Prerequisite: (MATH 1215 or MATH 1215P) or appropriate placement scores
Pre- or corequisite: BCIS 1110 or CIST 1220

This course is an introduction to problem-solving methods and algorithm development using C++. Students will learn how to design, code, debug, and document programs. Students will explore basic programming concepts including variables, data types, operators and expressions. They will also learn how to work with the C++ preprocessor directives and libraries. Students will learn about input/output mechanisms, including command prompt interaction, reading and writing data to files. Students will be introduced to control structures such as branching, conditionals, iteration, and loops and arrays. They will also learn how to define and use functions to structure code and improve code reuse.

N**ote(s):**

- Previously CIS 1275. Read more.

Theory Hours: 45
Additional Lab Hours: 15

CSCI 1260 - Computer Programming Fundamentals Java I

4 credit hour(s)
Prerequisite: (BCIS 1110 or CSCI 1108) + (MATH 1240 or higher except MATH 2110) or Math Skills 6

This course is an introduction to problem-solving methods and algorithm development using Java. Students will learn how to design, code, debug, and document programs. Students will explore basic programming concepts including variables, data types, operators and expressions. They will also learn how to work with the Java preprocessor directives and libraries. Students will learn about input/output mechanisms, including command prompt interaction, reading and writing data to files. Students will be introduced to control structures such as branching, conditionals, iteration, and loops and arrays. They will also learn how to define and use functions to structure code and improve code reuse.

N**ote(s):**

- Previously CSCI 1152. Read more.

Theory Hours: 60

CSCI 2096-2996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

CSCI 2260 - Computer Programming Fundamentals: Java 2

4 credit hour(s)
Prerequisite: CSCI 1230 or CSCI 1260

This course is a continuation of Java object-oriented programming. This course is a deeper exploration of object-oriented programming. Including: Classes and objects, and associated topics such as constructors, properties, and methods, inheritance, polymorphism,

encapsulation, abstraction, excerption handling and best practices.

N**ote(s):**

- Previously CSCI 2251. Read more.

Theory Hours: 60

CSCI 2310 - Discrete Mathematics for Computer Science

4 credit hour(s)
Prerequisite: (CSCI 1230 or CSCI 1260 or CSCI 1153) + MATH 1510

Discrete mathematics required for Computer Science, including topics such as the basics of logic, number theory, method of proof, sequences, mathematical induction, set theory, counting and functions.

N**ote(s):**

- Previously CSCI 2201. Read more.

Theory Hours: 60

Construction Management

CM 1110 - Construction Materials and Techniques

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 3

Introduction to the construction industry, educational opportunities, materials, techniques and terminology of construction.

Theory Hours: 30
Lab Hours: 45

CM 1115 - Commercial and Residential Building Codes

2 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 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 affect and govern the construction process.

Theory Hours: 15
Lab Hours: 45

CM 1205 - Introduction to Building Information Modeling

3 credit hour(s)
Pre- or corequisite: BCIS 1110 or CNST 1120 or ARDR 1116

Introduces principles and techniques of Building Information Modeling as used in the construction industry.

Theory Hours: 30
Lab Hours: 45

CM 1210 - Mechanical Electrical Systems and Construction

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 3 or department approval

Introduces materials and equipment associated with the mechanical and electrical systems used in commercial and residential buildings.

Theory Hours: 30
Lab Hours: 45

CM 1215 - Construction Equipment and Methods

3 credit hour(s)

Prerequisite: Reading and Writing Skills 2 + Math Skills 3
Presents concepts related to equipment use for earthwork and moving, lifting and assembling components of commercial buildings. Introduces related accounting principles including productivity, equipment cost (ownership and operating), and time value of money.

Theory Hours: 45

CM 1233 - Sustainable Building Practices

3 credit hour(s)

Prerequisite: Reading and Writing Skills 2 + Math Skills 3
This course broadly poses the question: how do we plan for, design and build a sustainable future? Beginning with an overview of the earth's climate system, building sector economics, and the social responsibilities of design and planning, students will study sustainable construction practices. Students will become familiar with current initiatives and strategies for addressing these issues. By the end of the course, students will be able to implement their knowledge using industry specific metrics to create and evaluate projects.

Theory Hours: 30
Lab Hours: 45

CM 2096-2996 - Special Topics

1-7 credit hour(s)
Prerequisite: Department approval

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

CM 2105 - Construction Scheduling

3 credit hour(s)

Prerequisite: CNST 1220 or department approval
Introduction to techniques for transforming contract documents into project schedules, including Gantt, Pert and CPM development. Students break down a job into its basic tasks and reassemble it in a framework that controls time, work materials and related activities. During the course students will apply theory, knowledge and techniques to actual projects using computer scheduling programs.

Theory Hours: 15
Lab Hours: 90

CM 2125 - Structures

2 credit hour(s)
Prerequisite: CNST 1220

This course surveys structural system types, components

and loading. Students will identify various structural systems and identify and trace loads.

Theory Hours: 30

CM 2210 - General Contractor Preparation

3 credit hour(s)

This course covers licensing requirements, rules and regulations, business and law and other important aspects of owning and running a construction business.

N**ote(s):**

- Completion of this course substitutes for the Business and Law portion of the licensing exam.

Theory Hours: 45

CM 2997 - Independent Study

1-7 credit hour(s)
Prerequisite: Department 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 and drafting techniques. An oral presentation may be required.

CM 2998 - Internship

3 credit hour(s)
Prerequisite: Department approval

Provides opportunities for the student to work for one term on a cooperative basis in an appropriate defined training program.

N**ote(s):**

- The position is not paid

Internship Hours: 135

CNST 1120 - Construction Drawings

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 3

An introduction to the various construction documents with symbols. Emphasizing extraction of information and specifications from drawings.

N**ote(s):**

- Previously CM 1105. Read more.

Theory Hours: 30
Lab Hours: 45

CNST 1210 - Construction Cost Estimating

3 credit hour(s)
Prerequisite: CNST 1220

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.

Note(s):

- Previously CM 2115. Read more.

Theory Hours: 15
Lab Hours: 90

CNST 1220 - Construction Project Management I

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 3 or department approval

An introduction to residential building construction-site observation, quantity surveying, cost analysis, subcontractor and material prices solicitation and summary and tabulation for a total bid price.

Note(s):

- Previously CM 1220. Read more.

Theory Hours: 30
Lab Hours: 45

CNST 1320 - Construction Project Management II

3 credit hour(s)
Prerequisite: CNST 1220

Covers various methods of software-based 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.

N**ote(s):**

- Previously CM 2220. Read more.

Theory Hours: 15
Lab Hours: 90

Cosmetology

COS 1010 - Orientation

2 credit hour(s)
Pre- or corequisite: [COS 1040 + COS 1050 + COS 1192 + (HLTH 1001 or HLTH 1003)] or (COS 1020 + COS 1030)

Introduces Cosmetology. Presents theory in the area of professional image, first aid, work ethic, anatomy, physiology and salon success.

Theory Hours: 30

COS 1020 - Cosmetology Fundamentals I

6 credit hour(s)
Prerequisite: BCIS 1110 + (ENGL 1110 or ENGL 1110P) + Humanities Requirement + Creative and Fine Arts Requirement + Social and Behavioral Science Requirement + Math Skills 1
Pre- or corequisite: COS 1010
Corequisite: COS 1030

Introduces theory and practice; anatomy, physiology, preparation, procedures, products, infection control through sanitation, disinfection and sterilization; use of chemical agents, fumigants, UV light; hair sculpture and styling services, wigs, hair additions and hair coloring; skill development in technical procedures and applications, related chemistry problem solving, focusing on safety, client protection, consultation and client service records.

Theory Hours: 45
Lab Hours: 135

COS 1030 - Cosmetology Fundamentals II

6 credit hour(s)
Pre- or corequisite: COS 1010
Corequisite: COS 1020

Introduces anatomy, physiology, preparation procedures, products, materials and tools used in natural and artificial nails for hands and feet, shampoo service, hair analysis, and treatments for scalp and hair, permanent waving, relaxer treatments, techniques for chemical rearranging; demonstrating skills in client consultation, recommendations, related chemistry, safety, client protection, record keeping and quality customer service.

Theory Hours: 45
Lab Hours: 135

COS 1040 - Nail Technician Theory

6 credit hour(s)
Pre- or corequisite: HLTH 1001 or HLTH 1003
Corequisite: COS 1010 + COS 1050 + COS 1192

Introduces nail technician students to procedures, products, cosmetics, technical processes and applications, focusing on care of the hands and feet, natural nails and the forms of nail extensions for enhancement with artificial nails; and related chemistry problem solving, focusing on safety, client protection, consultation and client service records.

Theory Hours: 90

COS 1050 - Sanitation Bacteriology for Nail Technicians

3 credit hour(s)
Pre- or corequisite: HLTH 1001 or HLTH 1003
Corequisite: COS 1010 + COS 1040 + COS 1192

Introduces theory of; anatomy, physiology, preparation, procedures, products, infection control through sanitation, disinfection and sterilization; use of chemical agents, UV light, LED light; skill development in technical procedures and applications, focusing on care of the hands and feet; related chemistry problem solving, focusing on safety, client protection, consultation and client service records.

Theory Hours: 30
Lab Hours: 45

COS 1060 - Nail Salon Operation

2 credit hour(s)
Corequisite: COS 1040 + COS 1050 + COS 1070 + COS 1094

Focuses on opening a salon and business plan for nail technicians, to include written agreements, regulations, laws, salon operation, policies, practices, personnel, compensation, payroll deductions, use of telephone, advertising, retail and sales, client communication, public relations, social media, insurance and salon safety.

Theory Hours: 30

COS 1070 - State Laws for Nail Technicians

1 credit hour(s)
Corequisite: COS 1040 + COS 1050 + COS 1060 + COS 1094

Presents state laws, rules and regulations, professional image, ethics, professional standards for the nail technician profession. State Board requirements for licensure as a nail technician, critical thinking, teamwork, problem solving and principles of professionalism.

Theory Hours: 15

COS 1080 - Salon Theory I

2 credit hour(s)
Prerequisite: COS 1010 + COS 1020 + COS 1030
Corequisite: COS 1092 + COS 1192 + COS 1194

Presents intermediate theory in haircutting, coloring, lightening, hairstyling, facials, manicuring and pedicuring, community health issues, salon safety, problem solving, special projects, and salon success.

Theory Hours: 30

COS 1092 - Hair Service Lab II

5 credit hour(s)
Corequisite: COS 1080 + COS 1192 + COS 1194

Continues basic application of shampoo, rinses, scalp treatment, chemical rearranging, perm, relaxer, haircutting, coloring and styling in a supervised lab.

Lab Hours: 225

COS 1094 - Nail Technician Lab

4 credit hour(s)
Pre- or corequisite: HLTH 1001 or HLTH 1003
Corequisite: COS 1040 + COS 1050 + COS 1060 + COS 1070

Introduces students to the concepts and practices of a nail technician including anatomy, physiology, preparation, procedures, and products. In addition, the course focuses on client consultation, recommendations, record keeping, use of machines and appliances, massage, safety, client protection, and infection control. Develop skills in manicuring, pedicuring, nail extensions, advanced nail techniques, nail art.

Lab Hours: 180

COS 1096-1996 - Special Topics

1-6 credit hour(s)
Prerequisite: Department approval

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

COS 1192 - Nail Service Lab

2 credit hour(s)
Pre- or corequisite: [COS 1010 + COS 1040 + COS 1050 + (HLTH 1001 or HLTH 1003)] or (COS 1080 + COS 1092 + COS 1194)

This course introduces students to the theory and practice of nails, including anatomy, physiology, preparation, procedures, and products. In addition, the course focuses on client consultation, recommendations, record keeping, use of machines and appliances, massage, safety, client protection, manicuring, pedicuring, advanced nail techniques, sterilization, sanitation, bacteriology, retail techniques, and marketing.

Lab Hours: 90

COS 1193 - Skin/Nails Service

4 credit hour(s)
Prerequisite: COS 1010

Corequisite: COS 1080 + COS 1092

Introduces students to the theory and practice of skin and nails including: anatomy, physiology, preparation, procedures, products, facial treatments, makeup application, hair removal, eyelash/brow techniques and electro therapy. In addition, the course focuses on: client consultation, recommendations, record keeping, use of machines and appliances, application of cosmetics, massage, safety, client protection, manicuring, pedicuring, massage, advanced nail techniques, sterilization, sanitation, bacteriology, retail techniques and marketing.

Lab Hours: 180

COS 1194 - Skin Service Lab

2 credit hour(s)
Prerequisite: COS 1010 or COS 1050
Pre- or corequisite: COS 1080 + COS 1092 + COS 1192

Introduces students to the theory and practice of skin, including anatomy, physiology, preparation, procedures, products, facial treatments, makeup application, hair removal, eyelash/brow techniques, and electrotherapy. In addition, the course focuses on client consultation, recommendations, record keeping, use of machines and appliances, application of cosmetics, massage, safety, client protection, sterilization, sanitation, bacteriology, retail techniques, and marketing.

Lab Hours: 90

COS 2040 - Advanced Nail Tech Theory I

6 credit hour(s)
Prerequisite: COS 1010 + COS 1040 + COS 1050 + COS 1192 + (HLTH 1001 or HLTH 1003)
Corequisite: COS 2050 + COS 2493 + COS 2505 + COS 2511

This course provides knowledge and practical skills in natural nail care and salon operations, covering nail anatomy, common conditions, service modifications, and step-by-step techniques using professional tools and products. Students also learn about the history of nail care, client service, salon professionalism, and business aspects such as ownership models and management. Emphasis is placed on safety, hygiene, teamwork, and service standards essential to success in the beauty industry.

Theory Hours: 90

COS 2050 - Advanced Nail Tech Theory II

6 credit hour(s)
Corequisite: COS 2040 + COS 2493 + COS 2505 + COS 2511

This course offers advanced training in nail enhancement techniques and creative nail artistry, focusing on safe application, maintenance, finishing, and removal of enhancements. Students will learn to use professional tools, products, and hygiene practices, while developing skills in freehand nail art, design theory, and customization based on client preferences. Emphasis is placed on creative thinking and delivering high-quality, salon-ready services.

Theory Hours: 90

COS 2080 - Salon Theory II

1 credit hour(s)
Prerequisite: COS 1080 + COS 1092 + COS 1192 + COS 1194
Pre- or corequisite: COS 2093 + COS 2493 + COS 2494

Presents concentration of theory in the areas of first aid, anatomy, physiology, chemistry, electro and light therapy, sterilization, sanitation, bacteriology, shampoo, rinses, scalp treatments, chemical rearranging, perms, relaxers issues, salon safety, and salon success.

Theory Hours: 15

COS 2093 - Hair Service III

5 credit hour(s)
Pre- or corequisite: COS 2080 + COS 2493 + COS 2494

Presents the intermediate application of perms, relaxers, temporary, semi-permanent and permanent color, lightening, toning and special effects. Students will also learn scissors, shears, razor and clippers, products, materials and implements in cutting, wet styling, blow drying, finger waving, air waving, hair pressing, hair extensions, hair weaving, braiding, corn rowing and hair design.

Lab Hours: 225

COS 2492 - Facials/Manicuring/Pedicuring Lab III

4 credit hour(s)
Corequisite: COS 2080 + COS 2093

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.

Lab Hours: 180

COS 2493 - Manicuring/Pedicuring Lab

2 credit hour(s)
Pre- or corequisite: [(COS 1010 + COS 1040 + COS 1050 + COS 1192) or (COS 1080 + COS 1092 + COS 1192 + COS 1194)] and [(COS 2050 + COS 2505 + COS 2511) or (COS 2080 + COS 2093 + COS 2494)]

This course provides an intermediate application of

the theory and practice of nails, including preparation, procedures, and products. In addition, it focuses on client consultation, recommendations, record keeping, use of machines and appliances, massage, safety, client protection, manicuring, pedicuring, advanced nail techniques, sterilization, sanitation, bacteriology, retail techniques, and marketing in a supervised salon setting.

Lab Hours: 90

COS 2494 - Facials Lab II

2 credit hour(s)
Pre- or corequisite: COS 2080 + COS 2093 + COS 2493

This course provides intermediate applications of massage, facial treatments, and makeup applications. Theory on 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.

Lab Hours: 90

COS 2505 - Salon Operation Theory

2 credit hour(s)
Pre- or corequisite: [(COS 1010 + COS 1040 + COS 1050 + COS 1192) or (COS 2080 + COS 2093 + COS 2493 + COS 2494)] and [(COS 2040 + COS 2050 + COS 2493 + COS 2511) or (COS 2510 + COS 2511 + COS 2590 + COS 2692)]

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.

Theory Hours: 30

COS 2510 - Advanced Salon Theory

2 credit hour(s)
Corequisite: COS 2505 + COS 2511 + COS 2590 + COS 2692

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.

Theory Hours: 30

COS 2511 - State Laws/Regulations

1 credit hour(s)
Pre- or corequisite: [(COS 1010 + COS 1040 + COS 1050 + COS 1192) or (COS 2505 + COS 2510 + COS 2590 + COS 2692)] and [(COS 2040 + COS 2050 + COS 2493 + COS 2505) or (COS 2505 + COS 2510 + COS 2590 + COS 2692)]

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.

Theory Hours: 15

COS 2590 - Cosmetology Practicum

3 credit hour(s)
Corequisite: COS 2505 + COS 2510 + COS 2511 + COS 2692

This course will expose the student to salon business and retail concepts in a salon. Salon establishment and salon owner or mentor must have current licenses approved by the New Mexico Board of Barbers and Cosmetologist and Central New Mexico Community College.

Practicum Hours: 135

COS 2692 - Advanced Salon Lab

4 credit hour(s)
Corequisite: COS 2505 + COS 2510 + COS 2511 + COS 2590

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.

Lab Hours: 180

Counseling & Education Psychology

CEPY 2110 - Learning in the Classroom

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This class introduces you to the basic principles of learning, including cognition, motivation, and assessment. You will examine the relationships between theory, research, and practice in learning, memory, child development, motivation, and educational assessment for the school setting. This course will provide the student with concepts and principles of educational psychology that will form a framework for thinking about learning and instruction and how theories of learning are connected to classroom situations.

Note(s):

- Previously EDUC 2207. Read more.

Theory Hours: 45

Criminal Justice

CJUS 1110 - Introduction to Criminal Justice

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course provides an overall exploration of the historical development and structure of the United States criminal justice system, with emphasis on how the varied components of the justice system intertwine to protect and preserve individual rights. The course covers critical analysis of criminal justice processes and the ethical, legal, and political factors affecting the exercise of discretion by criminal justice professionals.

N**ote(s):**

- Previously CJ 1001. Read more.

Theory Hours: 45

CJUS 1120 - Criminal Law

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course covers basic principles of substantive criminal law including elements of crimes against persons, property, public order, public morality, defenses to crimes, and parties to crime.

N**ote(s):**

- Previously CJ 1002. Read more.

Theory Hours: 45

CJUS 1140 - Juvenile Justice

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course covers the diversity of the informal and formal juvenile justice system, the process of identifying delinquent behavior, the importance of legislation, law enforcement, courts, diversion, referrals, and juvenile correctional facilities.

N**ote(s):**

- Previously CJ 1502. Read more.

Theory Hours: 45

CJUS 1143 - Report Writing

3 credit hour(s)
Prerequisite: (ENGL 1110 or ENGL 1110P) + Math Skills 2 Alg

This course covers the fundamentals of writing concise and accurate police, corrections, security and pre-sentence reports; including writing and use of forms. This implies written communication that implements proven methods, current techniques, proper mechanics and processes necessary for quality report writing.

N**ote(s):**

- Previously CJ 1518. Read more.

Theory Hours: 45

CJUS 1320 - Patrol Procedures

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This class introduces basic patrol functions, practices and problems faced by today's law enforcement officers.

N**ote(s):**

- Previously CJ 1580. Read more.

Theory Hours: 30
Lab Hours: 45

CJUS 1330 - Constitutional Policing

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

Students will examine the constitutional principles related to the investigation of crimes, including search and seizure, arrests, confessions and pre-trial processing of offenders. The focus will be on individual rights found in the First, Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments of the United States Constitution and the comparable provisions of the New Mexico Constitution.

N**ote(s):**

- Previously CJ 1003. Read more.

Theory Hours: 45

CJUS 2110 - Professional Responsibility in Criminal Justice

3 credit hour(s)
Pre- or corequisite: CJUS 2130 + CJUS 2150 + CJUS 2140 + CJUS 2255L

This course covers the application of various ethical systems to decision making in criminal justice professions. This includes discussion of misconduct by criminal justice professionals and strategies to prevent misconduct. Well known philosophers will be discussed and incorporated into the course material.

N**ote(s):**

- Previously CJ 2998. Read more.

Theory Hours: 45

CJUS 2120 - Criminal Courts and Procedure

3 credit hour(s)
Prerequisite: CJUS 1120 + CJUS 1330

This course covers the structures and functions of American trial and appellate courts, including the roles of attorneys, judges, and other court personnel, the formal and informal process of applying constitutional law, rules of evidence, case law and an understanding of the logic used by the courts.

N**ote(s):**

- Previously CJ 2017. Read more.

Theory Hours: 45

CJUS 2130 - Police and Society

3 credit hour(s)
Prerequisite: CJUS 1120 + CJUS 1330

The course presents a focused practical introduction to the key principles and practices of policing. Topics covered include issues of law enforcement fragmentation and jurisdiction, philosophies of policing, enforcement discretion, deployment strategies, use of force, personnel selection, socialization, tactics, and stress.

Note(s):

- Previously CJ 2505. Read more.

Theory Hours: 45

CJUS 2140 - Criminal Investigations

3 credit hour(s)
Prerequisite: CJUS 1120 + CJUS 1330 + CJUS 1143

This course introduces criminal investigations within the various local, state, and federal law enforcement agencies. Emphasis is given to the theory, techniques, aids, technology, collection, and preservation procedures which insure the evidentiary integrity. Courtroom evidentiary procedures and techniques will be introduced.

N**ote(s):**

- Previously CJ 2515. Read more.

Theory Hours: 45

CJUS 2150 - Corrections System

3 credit hour(s)
Prerequisite: CJUS 1120 + CJUS 1330

This course introduces the corrections system in the United States, including the processing of an offender in the system and the responsibilities and duties of correctional professionals. The course covers the historical development, theory, and practice, as well as the institutional and community-based alternatives available in the corrections process.

N**ote(s):**

- Previously CJ 2511. Read more.

Theory Hours: 45

CJUS 2153 - Community-Based Corrections

3 credit hour(s)

Prerequisite: CJUS 1140 + CJUS 1330
A detailed analysis of community-based corrections. The philosophical basis of community corrections will be explored in the context of diversion, pretrial release programs, probation, parole, intermediate sanctions, alternative sanctions, mental health and substance abuse treatment in both the juvenile and adult systems.

Note(s):

- Previously CJ 2005. Read more.

Theory Hours: 45

CJUS 2156 - Institutional Corrections

3 credit hour(s)
Prerequisite: CJUS 1120 + CJUS 1330

Covers the historical evolution of jails and prisons for each jurisdiction, intake, classification, security, inmate subculture, security threat groups, programs and services, supervision, pre-release, and special management inmates.

N**ote(s):**

- Previously CJ 2513. Read more.

Theory Hours: 45

CJUS 2255 - Rules of Criminal Evidence

3 credit hour(s)
Prerequisite: CJUS 1120 + CJUS 1330

Covers the application of the Federal Rules of Evidence and the New Mexico Rules of Evidence in a criminal case from investigation through sentencing.

N**ote(s):**

- Previously CJ 2006. Read more.

Theory Hours: 45

CJUS 2255L - Investigations Laboratory

1 credit hour(s)
Pre- or corequisite: CJUS 2140

Introduces exercises and practical demonstrations related to the investigations of crime.

N**ote(s):**

- Previously CJ 2692. Read more.

Lab Hours: 45

CJUS 2310 - Domestic Violence

3 credit hour(s)
Prerequisite: CJUS 1110

This course is meant to provide a comprehensive introduction to the topic of family violence by introducing the student to crime victims. Students will develop an understanding of the impact of crime on the victim and the victim's role and rights in the criminal justice system.

N**ote(s):**

- Previously CJ 2010. Read more.

Theory Hours: 45

CJUS 2330 - Juvenile Corrections

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg + CJUS 1140

Covers: Juvenile Probation, Detention, Training Schools and Juvenile Parole. This course will require students to work in teams that will design programs and facilities for juvenile corrections. Designs will be evaluated for their practical value and compliance with ACA Standards,

N**ote(s):**

- Previously CJ 2512. Read more.

Theory Hours: 45

CJUS 2350 - Organized Crime/Terrorism

3 credit hour(s)
Prerequisite: CJUS 1120 + CJUS 1330

This course familiarizes the learner with a broad overview of the unlawful activities of people and groups whose purpose is to profit through legitimate gain by illegal enterprises or advance their agendas through violence. The course also examines terrorism and its relationship to traditional organized crime as well as its impact on law enforcement. The history of organized crime and terrorism will be explored as well as their relevance to criminal justice in today's world.

N**ote(s):**

- Previously CJ 2008. Read more.

Theory Hours: 45

CJUS 2420 - Public Policies and Strategies

3 credit hour(s)
Prerequisite: CJUS 1120 + CJUS 1330

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.

N**ote(s):**

- Previously CJ 2011. Read more.

Theory Hours: 45

CJUS 2514 - Introduction to Homeland Security

3 credit hour(s)

Prerequisite: CJUS 1120 + CJUS 1330

Covers the history, creation, legislative background and operations of the U.S. Department of Homeland Security. Explores the agencies that currently comprise the Department and describes their roles and responsibilities. Provides students with an opportunity to explore the future of Homeland Security and develop ideas leveraging advances in science and technology as basis for improvement of the Homeland Security mission set.

N**ote(s):**

- Previously CJ 2514. Read more.

Theory Hours: 45

CJUS 2530 - Management for Criminal Justice Professionals

3 credit hour(s)
Prerequisite: CJUS 1120 + CJUS 1330

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.

N**ote(s):**

- Previously CJ 2009. Read more.

CJUS 2580 - Leadership Principles for Public Safety

3 credit hour(s)

This course will cover introductory principles of leadership. Specifically, the course outlines principles of personal leadership, followed by consideration of principles related to organizational leadership, including the execution of the most important priorities found in the public safety realm. It concludes with a self-assessment as well as a presentation on how each leader can improve his/her team's engagement.

Theory Hours: 45

CJUS 2990 - Criminal Justice Practicum

3 credit hour(s)
Prerequisite: Department Approval

Supervised practical field experience in a Criminal Justice agency. A minimum of six (6) hours per week will be in direct service or contact. One (1) hour per week supervision and critique of activities.

N**ote(s):**

- Previously CJ 2690.

Practicum Hours: 135

CJUS 2996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

CJUS 2997 - Independent Study

1-6 credit hour(s)
Prerequisite: Department approval

Focuses on a specific problem while working with an instructor.

N**ote(s):**

- Previously CJ 2697. Read more.

CJUS 2998 - Criminal Justice Internship

3 credit hour(s)
Prerequisite: Department Approval

Varies

Internship Hours: 135

Culinary Arts

CULN 1010 - Culinary Fundamentals

3 credit hour(s)

Introduces the aspiring professional culinarian and the curious home cook to the fundamental skills required to be successful in the kitchen. Basic culinary skills, such as knife skills, cooking methods, basic culinary math, and safety and sanitation are introduced. Students will develop the ability to correctly follow recipes as well as begin to hone their instincts in the kitchen.

Theory Hours: 30
Lab Hours: 45

CULN 1096-1996 - Special Topics

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

CULN 1100 - Introduction to Culinary Skills

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg
Pre- or corequisite: HRTM 1310 or CULN 1103 or department approval
Corequisite: CULN 1110 or department approval

Provides theoretical foundation for executing basic kitchen operations, including cooking methods, proper use of tools and equipment, knife skills, sauce, stock, and soup production, quick breads, and breakfast items in a professional environment. Introduces students to applied mathematics as it applies to recipe production, yield adjustment, food costs, and cost ratios.

Theory Hours: 45

CULN 1103 - Safety and Sanitation Principles

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

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.

N**ote(s):**

- This course is only offered as a dual credit course in high schools.

Theory Hours: 45

CULN 1110 - Culinary Skills

4 credit hour(s)
Corequisite: CULN 1100

Introduces students to basic culinary skills, including principles of cooking methods, knife skills, identification and proper use of tools and equipment, production of soups, stocks and sauces, quick breads, and egg cookery. Instruction focuses on applying principles of *mise en place*, sanitation, teamwork, and time management to all kitchen operations.

Theory Hours: 15
Lab Hours: 135

CULN 1112 - Intermediate Culinary Skills

4 credit hour(s)
Prerequisite: CULN 1100 + CULN 1110 + BCIS 1110 + (HRTM 1310 or CULN 1103)

Introduces students to intermediate level culinary skill development, including: continued development of cooking methods, flavor building, vegetable cookery, starch cookery, understanding meat, meat cookery, understanding poultry, poultry cookery, understanding fish and shellfish, fish and shellfish cookery, and vegetarian cookery.

Theory Hours: 15
Lab Hours: 135

CULN 1130 - Introduction to Baking Fundamentals

4 credit hour(s)
Prerequisite: (CULN 1100 + CULN 1110 + BCIS 1110) + (HRTM 1310 or CULN 1103)

This course includes the theory, skills and techniques of baking fundamentals. Competencies include scaling, methods of mixing, processing of ingredients, ingredient functions and baking math. Topics include cookies, quick breads, pan breads, sweet yeast, cakes and decorating. Proper use of equipment and lab safety are stressed.

Theory Hours: 15
Lab Hours: 135

CULN 1132 - Applied Baking Principles

4 credit hour(s)
Prerequisite: (CULN 1100 + CULN 1110 + BCIS 1110) + (HRTM 1310 or CULN 1103)
Pre- or corequisite: CULN 1130

Students apply learned fundamentals and concepts from CULN 1130 to continue skill development. Through theory and demonstration, more difficult products and the components to complete them are covered. Topics include laminated dough, artisan bread, scratch cakes, tarts, pies, meringues, and pate a choux. Multitasking is stressed.

Theory Hours: 15
Lab Hours: 135

CULN 2020 - Entrepreneurial Food Operations

3 credit hour(s)
Prerequisite: CULN 1010 or CULN 1110 or BEV 1100 or ENTR 1110

Introduces students to entrepreneurial skills required to build a food service establishment, such as a restaurant, catering company, bakery, café, mobile food operation, and other types of food service outlets. Students will be introduced to management and operational skills necessary to succeed and will develop a business concept, including menu development and testing.

Theory Hours: 30
Lab Hours: 45

CULN 2096-2996 - Special Topics

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

CULN 2097 - Independent Study

1-10 credit hour(s)
Prerequisite: Department approval

Student work with the instructor on specific topics directly related to the course or program of study. The meeting time is arranged between the student and the instructor.

CULN 2210 - Garde Manger

4 credit hour(s)
Prerequisite: (CULN 1100 + CULN 1110) + (HRTM 1310 or CULN 1103)

Introduces students to skills associated with the Garde Manger kitchen, including: specific safety and sanitation skills in the cold kitchen, advanced stocks and sauces, salad and salad dressing preparation, sandwiches, hors d'oeuvres, sausages and cured meats, pates, terrines, other cold foods, buffet food presentation, pickling, and fermentation.

Theory Hours: 15
Lab Hours: 135

CULN 2214 - Advanced Culinary Skills

4 credit hour(s)
Prerequisite: CULN 1112 + BEV 1160 + HT 1111
Corequisite: CULN 2216

Provide students an introduction to back-of-the-house restaurant operations, including: operation and management fundamentals of operating a restaurant kitchen.

Theory Hours: 15
Lab Hours: 135

CULN 2216 - Advanced Food and Beverage Service

3 credit hour(s)
Prerequisite: CULN 1112 + BEV 1160 + HT 1111
Corequisite: CULN 2214

Provides students with advanced instruction and practice relating to food and beverage service and front-of-the-house restaurant operations. Students will run a full-service restaurant open to the public, including managing guest relations, reservations, service techniques, and point of sale operations. Advanced instruction in beverage

identification, preparation, and service will be included.

Theory Hours: 15
Lab Hours: 90

CULN 2232 - Advanced Baking and Pastry

4 credit hour(s)
Prerequisite: CULN 1130 + CULN 1132

Introduces students to advanced level baking and pastry skills, including continued development of skills from earlier coursework with an emphasis on classical and contemporary pastry arts. Topics include specialty advanced cakes, decorating techniques, various confections, macarons, and tempered chocolates.

Theory Hours: 15
Lab Hours: 135

CULN 2234 - Retail & Restaurant Bakery Operations

4 credit hour(s)
Prerequisite: CULN 1130 + CULN 1132

This course will explore a wide variety of advanced baked goods and pastries geared for retail bakeries as well as restaurant establishments. Topics covered will include a variety of small pastries and baked goods, advanced bread techniques, and a variety of plated dessert techniques.

Theory Hours: 15
Lab Hours: 135

CULN 2692 - Entrepreneurial Food Operations Lab

1 credit hour(s)
Pre- or corequisite: CULN 2020

Introduces students to culinary and management skills required to create menu items as an entrepreneur. Working with the information presented in CULN 2020, students will further develop their business concepts in this lab. Students will be able to fully develop and test their menu items and learn how to make viable food products ready for retail sale.

N**ote(s):**

- This lab is now part of CULN 2020.

Lab Hours: 45

CULN 2798 - Internship

1 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 45 hours in a new job experience in a culinary environment. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously CULN 2198

Internship Hours: 45

CULN 2898 - Internship

2 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 90 hours in a new job experience in a culinary environment. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously CULN 2298

Internship Hours: 90

CULN 2998 - Internship

3 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 135 hours in a new job experience in a culinary environment. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously CULN 2098

Internship Hours: 135

Dance

DANC 1120 - African Dance I

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

African Dance I introduces the student to the aesthetics of African dance technique and develops knowledge and appreciation of its fundamental movements, music, and culture. Students will gain perspectives of African culture through discussion of how music, rhythm, and dance are used in African societies.

N**ote(s):**

- Previously DANC 1127. Read more.

Theory Hours: 45

DANC 1140 - Flamenco I

3 credit hour(s)

This course introduces the student to the art of flamenco and its cultural features and significance. Students will learn the fundamentals of this art form and introductory techniques and skills, which may include handwork, footwork, postures, and specific dances.

N**ote(s):**

- Previously DANC 1169. Read more.

Theory Hours: 45

DANC 2140 - Flamenco II

3 credit hour(s)

The structure of flamenco through choreographies that represent the basic flamenco dance forms: Fandangos de Huelva, Alegrias, Solea par Bulerias, and Tientos/Tangos. The course will also cover intermediate flamenco technique including footwork, palm as (hand claps), braceo (movement of the arms), and floreo (movement of the hands).

Theory Hours: 45

Dental Assistant

DA 1010 - Dental Science I

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This is an introduction course that will introduce the student to dental assisting and prepare them for the dental assisting program. The focus will be on the history of dentistry, ethics and code of conduct in dentistry, prevention, anatomical basics of the head and neck, and anatomy and physiology of body systems as they relate to dentistry. The laboratory component will include simulation software and in-person observation of dental procedures. Students will receive basic training in HIPAA and Bloodborne Pathogens.

Theory Hours: 30
Lab Hours: 45

DA 1101 - Practical Application of Dental Materials

2 credit hour(s)
Prerequisite: Math Skills 2 Alg + Reading and Writing Skills 2
Pre- or corequisite: DA 1104 + DA 1107 + DA 1119 + DA 1192 + DA 1193 + DA 1292 + HLTH 1001
Recommended: DA 1010

This course introduces students to the study of the physical and chemical properties of dental materials and their relationship to dentistry. Includes topics such as the handling and safety of dental materials, bonding techniques, preventive and bleaching materials, dental hand instruments, dental handpieces, composites, amalgam, abrasion and polishing, dental cements, impression materials, intraoral scanning, gypsum products and dental waxes.

Theory Hours: 30

DA 1104 - Tooth Morphology Histology and Recordings

3 credit hour(s)
Pre- or corequisite: DA 1101 + DA 1107 + DA 1119 + DA 1192 + DA 1193 + DA 1292 + HLTH 1001
Recommended: DA 1010

Presents dental terminology as it relates to tooth morphology, oral embryology and histology, oral disease, general anatomy and physiology, landmarks of the face and oral cavity, head and neck anatomy, tooth numbering systems, cavity classifications, oral diagnosis and treatment planning, and charting.

Theory Hours: 45

DA 1107 - Principles and Techniques of Dental Radiology I

2 credit hour(s)
Pre- or corequisite: DA 1101 + DA 1104 + DA 1119 + DA 1192 + DA 1193 + DA 1292 + HLTH 1001

Provides an introduction to the study of the science of x-radiation as it pertains to dentistry. Includes topics such as radiation protection, infection control, image characteristics, dental image production, dental x-radiation equipment, radiation physics and radiation biology.

N**ote(s):**

- Students must be 18 years of age prior to entering due to federal radiation guidelines.

Theory Hours: 30

DA 1119 - Fundamentals of Chairside Assisting I

2 credit hour(s)
Pre- or corequisite: DA 1101 + DA 1104 + DA 1107 + DA 1192 + DA 1193 + DA 1292 + HLTH 1001
Recommended: DA 1010

Introduction to the study of dental assisting procedures and preparation of the student for clinical assisting. Included topics: ergonomics, patient records, vital signs, delivery of dental care, disease transmission, infection control, principles and techniques of disinfection and sterilization, dental unit water lines, regulatory and advisory agencies, instrumentation, and pain management.

Theory Hours: 30

DA 1192 - Practical Application of Dental Materials Lab

1 credit hour(s)
Pre- or corequisite: DA 1101 + DA 1104 + DA 1107 + DA 1119 + DA 1193 + DA 1292 + HLTH 1001
Recommended: DA 1010

This course applies hands-on instruction for materials including preventive and bleaching materials, composites, amalgam, abrasion and polishing, dental cements, impression materials, intraoral scanning, gypsum products and dental waxes. Also includes dental bonding techniques, handpiece usage, and hand instrument identification.

Lab Hours: 45

DA 1193 - Principles and Techniques of Dental Radiology I Lab

1 credit hour(s)
Pre- or corequisite: DA 1101 + DA 1104 + DA 1107 + DA 1119 + DA 1192 + DA 1292 + HLTH 1001
Recommended: DA 1010

This course provides the application of hands-on instruction in radiation protection techniques for the operator and patient, infection control, image characteristics, dental image placement and exposure, processing and mounting, operation and care of digital x-ray equipment.

Lab Hours: 45

DA 1292 - Fundamentals of Chairside Assisting I Lab

1 credit hour(s)
Pre- or corequisite: DA 1101 + DA 1104 + DA 1107 + DA 1119 + DA 1192 + DA 1193 + HLTH 1001
Recommended: DA 1010

This course provides the clinical application of hands-on instruction in the use and sterilization of all dental instruments and basic fundamentals of chairside assisting. Subject areas are arranged in a clinical competency program, which is a method of study that

helps the student master each skill before advancing to the next level.

Lab Hours: 45

DA 1512 - Dental Science II

3 credit hour(s)
Prerequisite: DA 1517 + DA 1519 + DA 1590 + DA 1592 + DA 1593 + DA 2513 + DA 2593
Pre- or corequisite: DA 2090 + DA 2508 + DA 2510 + (ENGL 1110 + ENGL 1110P)

This course presents microbiology, as it relates to infection control and disease in the dental environment and teaches oral pathology, oral cancer, nutrition, and pharmacology as they relate to dentistry. Also included are applied ethics and jurisprudence as they relate to the dental profession.

Theory Hours: 45

DA 1517 - Principles and Techniques of Dental Radiology II

2 credit hour(s)
Prerequisite: DA 1101 + DA 1104 + DA 1107 + DA 1119 + DA 1192 + DA 1193 + DA 1292 + HLTH 1001
Pre- or corequisite: DA 1519 + DA 1590 + DA 1592 + DA 1593 + DA 2513 + DA 2593

This course builds on the comparison and contrast between the bisecting and paralleling techniques used for exposing intra-oral radiographic images. Topics include bisecting technique, quality assurance procedures, patient relations and communication, occlusal and localization techniques, digital radiography, extraoral imaging (panoramic and CBCT), normal anatomy, and radiographic image interpretation.

Theory Hours: 30

DA 1519 - Fundamentals of Chairside Assisting II

2 credit hour(s)
Prerequisite: HLTH 1001
Pre- or corequisite: DA 1517 + DA 1590 + DA 1592 + DA 1593 + DA 2513 + DA 2593

Topics to be discussed include communication in the dental office and communication through technology including phone skills, business letters, and marketing; also, cultural diversity, oral health and prevention of dental disease, general dentistry, moisture control, matrix systems, restorative procedures, provisional coverage, coronal polishing, dental sealants, removable prosthodontics, and fixed prosthodontics.

Theory Hours: 30

DA 1590 - Clinical Experience I

3 credit hour(s)
Prerequisite: HLTH 1001
Pre- or corequisite: DA 1517 + DA 1519 + DA 1592 + DA 1593 + DA 2513 + DA 2593

Introduces clinical practice through student preceptorships in external dental facilities utilizing four-handed dental assisting techniques, and expanded functions allowable by the New Mexico Dental Practice Act (coronal polishing, topical fluoride application, and placement of dental sealants) along with seminars to discuss the student's clinical experience.

Clinical Intensive Hours: 180

DA 1592 - Fundamentals of Chairside Assisting II Lab

1 credit hour(s)
Prerequisite: HLTH 1001
Pre- or corequisite: DA 1517 + DA 1519 + DA 1590 + DA 1593 + DA 2513 + DA 2593

This course provides the application of principles with hands on instruction in chair-side instrumentation, techniques and patient management. Includes laboratory practice of provisional coverage, coronal polishing, fluoride application and pit and fissure sealant application.

Lab Hours: 45

DA 1593 - Principles and Techniques of Dental Radiology II Lab

1 credit hour(s)
Prerequisite: HLTH 1001
Pre- or corequisite: DA 1517 + DA 1519 + DA 1590 + DA 1592 + DA 2513 + DA 2593

This course provides the application of principles with hands-on instruction in bisecting and paralleling techniques used during exposure of intraoral radiographic images. Instruction will include occlusal and localization techniques, digital radiography, cone beam computerized tomography (CBCT) with extraoral imaging, identification of anatomical landmarks, and identification of restorative dental materials in a radiograph. Students will demonstrate competency in exposing diagnostic radiographs prior to taking them on human subjects.

Lab Hours: 45

DA 2090 - Clinical Experience II

3 credit hour(s)
Pre- or corequisite: DA 1512 + DA 2508 + DA 2510 +(ENGL 1110 + ENGL 1110P)

Provides students with the clinical practice in external dental facilities to utilize four-handed dental assisting techniques and expanded functions allowed by the New Mexico Dental Practice Act, with seminars to discuss the student's clinical experience. This course further prepares the student to take the Dental Assistant National Board (DANB) Certified Dental Assistant (CDA) Exam, and the New Mexico State Dental Assistant Jurisprudence exam.

Clinical Intensive Hours: 180

DA 2096-2996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

DA 2508 - Practice Management and Oral Health Promotion

2 credit hour(s)
Pre- or corequisite: DA 1512 + DA 2090 + DA

2510 + (ENGL 1110 + ENGL 1110P)

This course provides basic skills and background in various aspects of dental reception functions and office management procedures. There is a focus on public health and oral health promotion with an emphasis on community engagement and outreach. Topics to be discussed are telecommunications, appointment management systems, inventory systems and supply ordering, insurance, bookkeeping, and planning and managing a career path. Course activities include the design of students' professional resumes and job interviews.

Theory Hours: 30

DA 2510 - DANB Preparation

2 credit hour(s)
Pre- or corequisite: DA 1512 + DA 2090 + DA 2508 + (ENGL 1110 + ENGL 1110P)

This course is designed to help students review for their DANB CDA Examination and is intended for students nearing completion of a Dental Assisting program. Students will utilize their textbook and online resources to successfully complete this course. Additional preparation includes a HESI Assessment to simulate the DANB.

Theory Hours: 30

DA 2513 - Introduction to Dental Specialties

2 credit hour(s)
Prerequisite: HLTH 1001
Pre- or corequisite: DA 1517 + DA 1519 + DA 1590 + DA 1592 + DA 1593 + DA 2593

This course introduces the field of dental specialties and discusses tasks that can be legally performed by a dental assistant while providing supportive treatment in a dental specialty office. Topics include endodontics, oral surgery, periodontics, pediatric dentistry, dental implants, orthodontics, special needs and medically compromised patients. Medical emergencies in a dental facility are also included in this course.

Theory Hours: 30

DA 2593 - Introduction to Dental Specialties Lab

1 credit hour(s)
Prerequisite: HLTH 1001
Pre- or corequisite: DA 1517 + DA 1519 + DA 1590 + DA 1592 + DA 1593 + DA 2513

This course provides the application of principles with hands-on instruction of selective dental assisting tasks that can be legally performed while providing supportive treatment in dental specialty offices.

Lab Hours: 45

Diagnostic Medical Sonography

DMS 1096-1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

DMS 1115 - Sonographic Cross Sectional Anatomy

2 credit hour(s)
Prerequisite: (BIOL 2161 or BIOL 2225) + COMM 2120 + (MATH 1220 or MATH 1220P or MATH 1240 or MATH 1350 or MATH 1430) + (PHYS 1115 or PHYS 1230) + PHIL 2120 + department approval
Pre- or corequisite: HLTH 1001 or HLTH 1003
Corequisite: DMS 1120 + DMS 1125 + DMS 1130 + DMS 1193

A study of sectional anatomy of the transverse, longitudinal, and coronal planes are included with an emphasis on the organs of sonographic interest. Correlation with other imaging procedures will be emphasized.

Theory Hours: 30

DMS 1120 - Abdominal Sonography

3 credit hour(s)
Corequisite: DMS 1115 + DMS 1125 + DMS 1130 + DMS 1193

Emphasis is placed on recognizing the anatomy, physiology and pathology of the peritoneal organs, preverterbral vessels and abdominal wall. Laboratory tests, signs and symptoms of disease of the peritoneal abdominal organs will be discussed. Scanning techniques and protocols will be included.

Theory Hours: 45

DMS 1125 - Gynecological Sonography

2 credit hour(s)
Corequisite: DMS 1115 + DMS 1120 + DMS 1130 + DMS 1193

Emphasis is placed on recognizing gynecological anatomy, physiology and pathology. Laboratory tests, signs and symptoms of gynecologic disease will be discussed. Scanning techniques and protocols will be included.

Theory Hours: 30

DMS 1130 - Sonographic Physics I

2 credit hour(s)
Pre- or corequisite: DMS 1115 or CVS 1215

Introduces the basic principles of acoustical physics including sound production, propagation, interactive properties of ultrasound with human tissues, basic ultrasound instrument operation, quality assurance testing, bioeffects and acoustic artifacts.

Theory Hours: 30

DMS 1193 - Sonographics Concepts Lab I

2 credit hour(s)
Corequisite: DMS 1115 + DMS 1120 + DMS 1125 + DMS 1130

Basic general and vascular sonographic concepts and anatomy lab. Laboratory sessions will introduce students to basic scanning techniques, sonographic anatomy and imaging protocols.

Lab Hours: 90

DMS 1520 - Abdominal Sonography II

2 credit hour(s)

Prerequisite: DMS 1115 + DMS 1120 + DMS 1125 + DMS 1130 + DMS 1193
Corequisite: DMS 1525 + DMS 1530 + DMS 1590 + DMS 1593

The emphasis of this course is on recognizing the anatomy, physiology and pathology of the following as they relate to sonographic imaging: breast, musculoskeletal system, gastrointestinal system, non-cardiac chest, superficial and retroperitoneal structures, abdominal wall, cavities and vasculature. The sonographer's role in ultrasound-guided procedures as well as pre- and post-organ transplant imaging will also be presented. Laboratory tests, signs and symptoms of disease will be discussed. Scanning techniques and protocols will be included.

Theory Hours: 30

DMS 1525 - Obstetrical Sonography

2 credit hour(s)
Corequisite: DMS 1520 + DMS 1530 + DMS 1590 + DMS 1593

Emphasis is placed on recognizing obstetrical anatomy, physiology and pathology. Laboratory tests, signs and symptoms of obstetrical and fetal disease will be discussed. Scanning techniques and protocols will be included.

Theory Hours: 30

DMS 1530 - Sonographic Physics II

2 credit hour(s)
Pre- or corequisite: DMS 1520 or CVS 2120

This course presents concepts of transducer parameters and functions, detail resolution, imaging instrumentation design and function, bio-effects, and emerging technologies in sonographic imaging.

Theory Hours: 30

DMS 1590 - Clinical Sonography I

5 credit hour(s)
Prerequisite: DMS 1115 + DMS 1120 + DMS 1125 + DMS 1130 + DMS 1193
Corequisite: DMS 1520 + DMS 1525 + DMS 1530 + DMS 1593

Supervised clinical experience in area hospitals and health care facilities to develop the student's general ultrasonic skills in a diagnostic environment.

Clinical Intensive Hours: 300

DMS 1593 - Sonographic Concepts Lab II

2 credit hour(s)
Prerequisite: DMS 1115 + DMS 1120 + DMS 1125 + DMS 1130 + DMS 1193
Corequisite: DMS 1520 + DMS 1525 + DMS 1530 + DMS 1590

This course covers intermediate general and vascular sonographic concepts and lab skills. Laboratory sessions will build upon students' clinical experience of scanning techniques, sonographic anatomy and imaging protocols. Students will be assessed on their performance of intermediate proficiency levels in image acquisition, and implementation of technical quality and imaging protocols.

Lab Hours: 90

DMS 2020 - Fetal Echo, Neonatal and Pediatric Sonography

2 credit hour(s)
Prerequisite: DMS 1520 + DMS 1525 + DMS 1530 + DMS 1590 + DMS 1593
Corequisite: DMS 2030 + DMS 2093 + DMS 2090 + DMS 2110

This course will discuss congenital heart disease with emphasis on diagnosis during the fetal stage, neonatal neurosonography, and application of sonography specific to the pediatric population. Topics will include, but are not limited to, embryology, anomalous development and sonographic appearances of normal and pathological conditions of the fetal heart, fetal brain, neonatal brain, spine, congenital hip dysplasia, and pyloric stenosis.

Theory Hours: 30

DMS 2030 - Sonographic Physics III

1 credit hour(s)
Prerequisite: DMS 1520 + DMS 1525 + DMS 1530 + DMS 1590 + DMS 1593
Corequisite: DMS 2020 + DMS 2090 + DMS 2093 + DMS 2110

Presents concepts of advanced physics, principles of Doppler techniques, hemodynamics, flow analysis, quality control procedures and research statistics and design. This course also includes a review of all Sonographic Physics concepts in preparation for the Sonographic Principles and Instrumentation board exam.

Theory Hours: 15

DMS 2090 - Clinical Sonography II

5 credit hour(s)
Prerequisite: DMS 1520 + DMS 1525 + DMS 1530 + DMS 1590 + DMS 1593
Corequisite: DMS 2020 + DMS 2030 + DMS 2093 + DMS 2110

Supervised clinical experience in area hospitals and health care facilities to develop the student's general ultrasonic skills in a diagnostic environment.

Clinical Intensive Hours: 300

DMS 2093 - Sonographics Concepts Lab III

2 credit hour(s)
Prerequisite: DMS 1520 + DMS 1525 + DMS 1530 + DMS 1590 + DMS 1593
Corequisite: DMS 2020 + DMS 2030 + DMS 2090 + DMS 2110

Advanced general, and introductory vascular, sonographic concepts lab. Laboratory sessions will build upon students' clinical experience of scanning techniques, sonographic anatomy and imaging protocols. Students will develop proficiency in image acquisition, implementing technical quality, imaging protocols, interpretation and case analysis. B-Mode imaging, color flow image interpretation, and spectral Doppler waveform analysis will be practiced.

Lab Hours: 90

DMS 2110 - Vascular Sonography

2 credit hour(s)
Corequisite: DMS 2020 + DMS 2030 + DMS 2090 + DMS 2093

This course will present an introduction to vascular sonography. Topics include vascular anatomy, vascular imaging protocols, basic scanning techniques and transducer manipulation. B-Mode imaging, color flow data interpretation, and spectral Doppler waveform analysis will be discussed. Vascular disease and its effect on blood flow will also be covered.

Theory Hours: 30

DMS 2290 - Clinical Sonography III

5 credit hour(s)
Prerequisite: DMS 2020 + DMS 2030 + DMS 2090 + DMS 2093 + DMS 2110
Corequisite: DMS 2999

Supervised clinical experience in area hospitals and health care facilities to develop the student's ultrasonic skills in a diagnostic environment. May include vascular sonography opportunities.

Clinical Intensive Hours: 300

DMS 2999 - Registry Review

2 credit hour(s)
Prerequisite: DMS 2020 + DMS 2030 + DMS 2090 + DMS 2093 + DMS 2110
Corequisite: DMS 2290

This course will prepare the student for selected ARDMS registry exams.

Theory Hours: 30

Diesel Equipment Technology

DETC 1110 - Introduction to Diesel Equipment

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Provides theory and practical instruction on basic service procedures for heavy equipment / heavy duty truck power-train and chassis systems. Discusses orientation to working safely on and around heavy equipment and tool use. Includes general industry orientation, shop/vehicle safety, tool identification and repair information retrieval.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

DETC 1120 - Medium/Heavy Duty Brake Systems

4 credit hour(s)
Pre- or corequisite: DETC 1110

Introduces the principles of hydraulic and air brake mechanical, pneumatic and electronic operation. Provides practical instruction and develops skills in the diagnosis, service and repair of modern medium/heavy duty brake systems.

Theory Hours: 30
Lab Hours: 90

DETC 1130 - Medium/Heavy Duty Suspension and Steering

3 credit hour(s)
Pre- or corequisite: DETC 1110

Presents theory of operation on a variety of medium/heavy duty suspension and steering systems. Includes manual and power steering systems, wheel end location, air suspension systems, steering and axle alignment. Provides practical instruction and develops skills in the diagnosis, service and repair of modern medium/heavy duty mechanical suspension and stability control systems.

Theory Hours: 30
Lab Hours: 45

DETC 1150 - Diesel Equipment Electrical Systems

4 credit hour(s)
Pre- or corequisite: DETC 1110

Presents the theory of electrical systems. Applies electrical theory to pt 1710battery, charging, engine cranking and vehicle lighting systems. Introduces electrical diagnostic processes and reading/interpreting electrical schematic diagrams. Provides practical instruction and develops skills in the diagnosis and repair of diesel equipment electrical systems. Includes DVOM usage, voltage drop testing, wiring schematic interpretation and electrical troubleshooting procedures.

Theory Hours: 30
Lab Hours: 90

DETC 1160 - Fixed Power Systems

2 credit hour(s)
Prerequisite: DETC 1150

Presents the theory of operation and unique safety concerns relating to fixed power installations that utilize diesel engines as a power source. Includes discussions on generators sets and a variety of off-highway equipment. Provides practical instruction and develops skills in safely working around and on diesel powered fixed power equipment.

Theory Hours: 15
Lab Hours: 45

DETC 1210 - Medium/Heavy Duty Engine Repair

4 credit hour(s)
Pre- or corequisite: DETC 1110

Presents internal combustion engine theory with emphasis on engine components and designs, engine overhaul procedures and precision measurement. Provides practical instruction and develops skills in diesel engine mechanical diagnosis and overhaul. Includes engine/component testing and identification of needed repairs.

Theory Hours: 30
Lab Hours: 90

DETC 1220 - Heavy Duty Automatic Transmission and Hydraulics

4 credit hour(s)
Pre- or corequisite: DETC 1110 + DETC 1150

Presents the principles of operation of medium/heavy-duty automatic transmissions and hydraulic systems. Develops skills in the service, diagnosis and repair of automatic transmissions, hydraulic pumps, valves, actuators and controls.

Theory Hours: 30
Lab Hours: 90

DETC 1230 - Medium/Heavy Duty Heating, Ventilation and Air Conditioning

2 credit hour(s)
Pre- or corequisite: DETC 1110 + DETC 1150

Presents testing, evacuating and charging of air conditioning systems while maintaining an awareness of potential environmental concerns caused by medium/heavy equipment refrigerants. Addresses theory, cooling and heating diagnosis, climate control troubleshooting and component repair.

Theory Hours: 15
Lab Hours: 45

DETC 1240 - Medium/Heavy Duty Electronic Systems

3 credit hour(s)
Prerequisite: DETC 1110 + DETC 1150

Builds on skills developed in DETC 1150. Materials include testing and diagnostic procedures in more complex diesel equipment systems. Includes lighting circuits, body computers and sensors, electronic control modules, use of lab scopes and scan tools.

Theory Hours: 30
Lab Hours: 45

DETC 2096-2996 - Special Topics

1-7 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

DETC 2097 - Independent Study

1-7 credit hour(s)
Prerequisite: Department approval

Allows the student and instructor to define a specific problem in the area of the student's interest and directly related to the program. Then student develops and executes a solution using analytical techniques appropriate to the problem. An oral presentation may be required.

DETC 2110 - Preventive Maintenance

4 credit hour(s)
Prerequisite: DETC 1150

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.

Theory Hours: 15
Lab Hours: 135

DETC 2120 - Diesel Engine Performance

4 credit hour(s)
Prerequisite: DETC 1240

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.

Theory Hours: 30
Lab Hours: 90

DETC 2135 - Manual Transmissions & Automated Manual Transmissions

4 credit hour(s)
Prerequisite: DETC 1110 + DETC 1240

Presents the principles of operation and design of automated manual shift transmissions used in on-highway tractors. Includes two and three pedal systems. Presents manual and automated clutches. Provides practical instruction and develops skills in the maintenance, service, repair and overhaul of automated manual transmissions.

Theory Hours: 30
Lab Hours: 90

DETC 2197 - Independent Study

1-7 credit hour(s)
Prerequisite: Department approval

Focuses on a specific problem while working with an instructor.

DETC 2198 - Diesel Equipment Internship

1 credit hour(s)
Pre- or corequisite: DETC 2135 or department approval

Students will prepare for a career in the diesel equipment industry. Topics will include resume preparation, interview skills, toolbox inventory, industry ethics and discussions with industry partners. Present the principles of operation and design of automated manual shift transmissions used in on-highway tractors, including two and three pedal systems. Presents manual and automated clutches.

Lab Hours: 45
Internship Hours: 45

DETC 2297 - Independent Study

1-7 credit hour(s)
Prerequisite: Department approval

Focuses on a specific problem while working with an instructor.

Digital Studies

DGST 1110 - Introduction to Digital Studies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Introduces an interdisciplinary approach to the interactions between the digital and material worlds. Includes the analysis of digital cultures and history, development of digital identity, and creative work with digital tools.

Theory Hours: 45

DGST 1120 - Introduction to Digital Humanities

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course introduces students to the methods and

inquiries of the humanities fields generally, but with special attention to the use of digital tools to analyze traditional texts and traditional methods analyzing digital texts. Also uses digital tools in the production and demonstration of knowledge in the course.

Theory Hours: 45

Early Childhood Education

ECED 1110 - Child Growth, Development and Learning

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

This basic course in the growth, development, and learning of young children, prenatal through age eight, provides students with the theoretical foundation for becoming competent early childhood professionals. The course includes knowledge of how young children grow, develop and learn. Major theories of child development are integrated with all domains of development, including biological-physical, social, cultural, emotional, cognitive and language. The adult's role in supporting each child's growth, development and learning is emphasized.

N**ote(s):**

- Previously ECME 1104. Read more.

Theory Hours: 45

ECED 1135 - 45 Hour Early Entrance Level Course

3 credit hour(s)

The 45-Hour early Entrance Level Course is designed to give the student an introduction to the field of early care, education, and family support. Developmentally appropriate expectation and practices and the New Mexico Competencies provide the foundation for this course.

Note(s):

- Does not require a high school diploma or GED
- Previously CDV 1020. Read more.

Theory Hours: 45

ECED 2096 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously CDV 2096-2996

ECED 2115 - Introduction to Language, Literacy and Reading

3 credit hour(s)
Prerequisite: ECED 1110

This course is designed to prepare early childhood professionals for promoting children's emergent literacy and reading development. Through a developmental approach, the course addresses ways in which early childhood professionals can foster young children's oral language development, phonemic awareness, and literacy problem solving skills, fluency, vocabulary, and comprehension. . This course provides the foundation for early childhood professionals to become knowledgeable about literacy development in young children. Instructional approaches and theory-based and research based strategies to support the emergent literacy and reading skills of native speakers and English language learners will be presented.

N**ote(s):**

- Previously ECME 2201. Read more.

Theory Hours: 45

ECED 2140 - Effective Program Development for Diverse Learners and their Families

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: ECED 1110
Corequisite: ECED 2141

This course addresses the role of a director/ administrator in the implementation of family-centered programming that includes individually appropriate and culturally responsive curriculum in a healthy and safe learning environment for all children and their families.

Note(s):

- Previously ECME 2222. Read more.

Theory Hours: 45

ECED 2141 - Effective Program Development for Diverse Learners and their Families Practicum

2 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Corequisite: ECED 2140

Provides opportunities for students to apply knowledge gained from Curriculum for Diverse Learners and their Families in a practicum setting.

Note(s):

- Previously ECME 2490. Read more.

Theory Hours: 15
Practicum Hours: 45

ECED 2281 - Professional Relationships Practicum

2 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Corequisite: ECED 2280

Practical experience in the development of staff relationship that will foster professional relationships with families, communities and boards. Issues of staff recruitment, retention, support and supervision will lay a foundation for positive personnel management. Consent of instructor required. Restricted to ECED majors.

Note(s):

- Previously ECME 2590. Read more.

Theory Hours: 15
Practicum Hours: 45

ECED 2860 - Emergent Literacy: Foundations for PreK-Grade 3 Literacy Instruction

3 credit hour(s)
Prerequisite: EDUC 2250 or SPED 2250

Applies theoretical knowledge needed to guide the literacy development of young children. Explores the developmental influences on early learning, examines the role of language in supporting literacy and numeracy development students and identifies methods that support early literacy development. Uses research-based early literacy principles to develop curriculum that builds phonemic and phonological awareness, print concepts, phonics, vocabulary development, and foundations for fluency and comprehension.

Theory Hours: 45

ECED 2862 - Developmentally Appropriate Observation, Assessment, and Learning Environments

3 credit hour(s)
Prerequisite: EDUC 2250 or SPED 2250

Examines developmentally appropriate practice for PreK-3rd grade classrooms with a specific focus on observational assessment and learning environments. Investigates formal and informal methods of evaluating student growth and learning including observational techniques and content area assessments. Introduces the design of learning environments in all content areas including literacy, social studies, mathematics, science, and the arts. A focus on the importance of play and social interaction will inform this course.

Theory Hours: 45

ECED 2864 - Child Guidance and Supporting Positive Behavior: Child, Family, Community and Culture

3 credit hour(s)
Prerequisite: EDUC 2250 or SPED 2250

Applies developmental theory and positive behavior support practices to facilitate child guidance in a classroom setting. Examines developmentally appropriate methods for supporting each child academically, emotionally, and socially. Includes involvement of families from diverse cultural and linguistic backgrounds and working with children with special needs. Identifying and addressing challenging behaviors through IFSP/IEP support are integrated into all aspects of this course.

Theory Hours: 45

Early Childhood Multicultural Education

ECED 1115 - Health, Safety and Nutrition

2 credit hour(s)
Pre- or corequisite: ECED 1110

This course provides information related to standards and practices that promote children's physical and mental well-being sound nutritional practices, and maintenance of safe learning environments. It includes information for developing sound health and safety management procedures for indoor and outdoor learning environments for young children. The course examines the many scheduling factors that are important for children's total development, healthy nutrition, physical activity, and rest.

N**ote(s):**

- Previously ECME 1108. Read more.

Theory Hours: 30

ECED 1120 - Guiding Young Children

3 credit hour(s)
Pre- or corequisite: ECED 1110

This course explores various theories of child guidance and the practical applications of each. It provides developmentally appropriate methods for guiding children and effective strategies and suggestions for facilitating positive social interactions. Strategies for preventing challenging behaviors through the use of environment, routines and schedule will be presented. Emphasis is placed on helping children become self- responsible, competent, independent, and cooperative learners and including families as part of the guidance approach.

N**ote(s):**

- Previously ECME 2214. Read more.

Theory Hours: 45

ECED 1125 - Assessment of Children and Evaluation of Programs

3 credit hour(s)
Pre- or corequisite: ECED 1110

This basic course familiarizes students with a variety of culturally appropriate assessment methods and instruments, including systematic observation of typically and non-typically developing children. The course addresses the development and use of formative and summative assessment and evaluation instruments to ensure comprehensive quality of the total environment for children, families, and the community. Students will develop skills for evaluating the assessment process and involving other teachers, professionals and families in the process.

N**ote(s):**

- Previously ECME 2204. Read more.

Theory Hours: 45

ECED 1130 - Family and Community Collaboration

3 credit hour(s)
Pre- or corequisite: ECED 1110

This beginning course examines the involvement of families and communities from diverse cultural and linguistic backgrounds in early childhood programs. Ways to establish collaborative relationships with families in early childhood settings is discussed. Families' goals and desires for their children will be supported through culturally responsive strategies.

N**ote(s):**

- Previously ECME 2206. Read more.

Theory Hours: 45

ECED 2110 - Professionalism

2 credit hour(s)
Prerequisite: ECED 1110

This course provides a broad-based orientation to the field of early care and education. Early childhood history, philosophy, ethics and advocacy are introduced. Basic principles of early childhood systems are explored. Multiple perspectives on early care and education are introduced. Professional responsibilities such as cultural

responsiveness and reflective practice are examined.

N**ote(s):**

- Previously ECME 1102. Read more.

Theory Hours: 30

ECED 2120 - Curriculum Development through Play Birth through Age 4 (PreK)

3 credit hour(s)
Prerequisite: ECED 1115 + ECED 1120 + ECED 1125 + ECED 1130
Pre- or corequisite: ECED 2110
Corequisite: ECED 2121

The beginning curriculum course places play at the center of curriculum in developmentally appropriate early childhood programs. It addresses content that is relevant for children birth through age four in developmentally and culturally sensitive ways of integrating content into teaching and learning experiences. Information on adapting content areas to meet the needs of children with special needs and the development of IFSPs is included. Curriculum development in all areas, including literacy, numeracy, the arts, health, science, social skills, and adaptive learning for children, birth through age four, is emphasized.

N**ote(s):**

- Previously ECME 2109. Read more.

Theory Hours: 45

ECED 2121 - Curriculum Development through Play Birth through Age 4 (PreK) Practicum

2 credit hour(s)
Corequisite: ECED 2120

The beginning practicum course is a co-requisite with the course Curriculum Development through Play – Birth through Age 4. The field based component of this course will provide experiences that address curriculum content that is relevant for children birth through age four in developmentally and culturally sensitive ways of integrating content into teaching and learning experiences. Information on adapting content areas to meet the needs of children with special needs and the development of IFSPs is included. Curriculum development in all areas, including literacy, numeracy, the arts, health, science, social skills, and adaptive learning for children, birth through age four, is emphasized.

N**ote(s):**

- Previously ECME 2190. Read more.

Theory Hours: 15
Practicum Hours: 45

ECED 2130 - Curriculum Development and Implementation Age 3 (PreK) through Grade 3

3 credit hour(s)
Prerequisite: ECED 2120 + ECED 2121
Pre- or corequisite: ECED 2115
Corequisite: ECED 2131

The curriculum course focuses on developmentally appropriate curriculum content in early childhood programs, age 3 through third grade. Development and implementation of curriculum in all content areas, including literacy, numeracy, the arts, health and emotional wellness, science, motor and social skills, is emphasized. Information on adapting content areas to meet the needs of children with special needs and the development of IEPs is included.

N**ote(s):**

- Previously ECME 2212. Read more.
- Students may request override permission from an advisor to take ECED 2130 and ECED 2131 before ECED 2120 and ECED 2121.

Theory Hours: 45

ECED 2131 - Curriculum Development and Implementation Age 3 (PreK) through Grade 3 Practicum

2 credit hour(s)
Corequisite: ECED 2130

The beginning practicum course is a co-requisite with the course Curriculum Development and Implementation: Age 3 through Grade 3. The field based component of this course will provide experiences that address developmentally appropriate curriculum content in early childhood programs, age 3 through third grade. Development and implementation of curriculum in all content areas, including literacy, numeracy, the arts, health and emotional wellness, science, motor and social skills is emphasized. Information on adapting content areas to meet the needs of children with special needs and the development of IEPs is included.

N**ote(s):**

- Students must pass a background check to successfully complete the course requirements.
- Typically offered in Fall and Spring Terms
- Previously ECME 2290. Read more.
- Students may request override permission from an advisor to take ECED 2130 and ECED 2131 before ECED 2120 and ECED 2121.

Theory Hours: 15
Practicum Hours: 45

ECED 2215 - Program Management

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + ECED 1110

This course emphasizes the technical knowledge necessary to develop and maintain an effective early care and education program. It focuses on sound financial management and vision, the laws and legal issues that affect programs, and state and national standards such as accreditation.

N**ote(s):**

- Previously ECME 2220. Read more.

Theory Hours: 45

ECED 2280 - Professional Relationships

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: ECED 1110
Corequisite: ECED 2281

This course addresses staff relations that will foster diverse professional relationships with families, communities and boards. Topics of staff recruitment, retention, support and supervision will lay the

foundation for positive personnel, family and community relationships.

N**ote(s):**

- Previously ECME 2224. Read more.

Theory Hours: 45

Economics

ECON 1110 - Survey of Economics

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course will develop students' economics literacy and teaches students how economics relates to the everyday life of individuals, businesses and society in general. The course will also introduce students to the roles different levels of governments play in influencing the economy. At the conclusion of the course, students will be able to identify economic causes for various political and social problems at national and international levels, and have a better understanding of everyday economic issues that are reported in media and public forums.

N**ote(s):**

- Previously ECON 1101. Read more.

Theory Hours: 45

ECON 2110 - Macroeconomic Principles

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 + Math Skills 3 Econ

Macroeconomics is the study of national and global economies. Topics include output, unemployment and inflation; and how they are affected by financial systems, fiscal and monetary policies.

N**ote(s):**

- Previously ECON 2200. Read more.

Theory Hours: 45

ECON 2120 - Microeconomic Principles

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 + Math Skills 3 Econ

This course will provide a broad overview of microeconomics. Microeconomics is the study of issues specific to households, firms, or industries with an emphasis on the role of markets. Topics discussed will include household and firm behavior, demand and supply, government intervention, market structures, and the efficient allocation of resources.

N**ote(s):**

- Previously ECON 2201. Read more.

Theory Hours: 45

ECON 2996 - Special Topics

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously ECON 2096-2996. Read more.

Education

EDUC 1120 - Introduction to Education

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Corequisite: EDUC 1190

Introduction to the historical, philosophical, sociological foundations of education, current trends, and issues in education; especially as it relates to a multicultural environment. Students will use those foundations to develop effective strategies related to problems, issues and responsibilities in the field of education.

N**ote(s):**

- Typically offered in Fall and Spring Terms
- Previously EDUC 1102. Read more.

Theory Hours: 45

EDUC 1190 - Introduction to Education Practicum

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Corequisite: EDUC 1120

Applies understanding of the field of teacher education in a field-based 45-hour practicum in a K-12 school based setting in general or special education. Students will observe and apply understanding of educational theory to classroom practice. Students must successfully pass a background check to complete the course requirements.

N**ote(s):**

- Typically offered Fall & Spring
- Students must pass a background check to successfully complete the course requirements.

Practicum Hours: 45

EDUC 2097 - Independent Study

1-5 credit hour(s)
Prerequisite: Department approval

Studies a specific problem while working with assigned instructor.

EDUC 2190 - Supervised Field Experience

3 credit hour(s)
Prerequisite: Department approval

Applies learning theory and practices from all previous coursework in an advanced supervised fieldwork experience. Course competencies are built upon national and state standards and focus on planning, developing and implementing curriculum for diverse learners. Students are required to meet competencies as defined by the NM Public Education Department through a minimum of 180 contact hours in an approved education setting.

N**ote(s):**

- Enrollment in this course requires and application process.
- Typically offered Fall and Spring term only.

Field Experience Hours: 180

EDUC 2222 - Literacy/Language Instruction for ESL Learners

3 credit hour(s)
Prerequisite: EDUC 2250 or SPED 2250

Provides an understanding of second language acquisition and develops a strong basis for instruction of literacy/language to English as a Second Language learners in K-12 classrooms.

Theory Hours: 45

EDUC 2224 - ESL Across the Content Areas

3 credit hour(s)
Prerequisite: EDUC 2250 or SPED 2250

Provides an understanding of the goals, strategies and teaching techniques for effectively teaching content to ESL students in K-12 classrooms.

Theory Hours: 45

EDUC 2225 - Theories and Principles of Bilingual Education

3 credit hour(s)
Prerequisite: Department approval

Focuses on the foundations of Bilingual Education/ESL in U.S. schooling with an emphasis on program models and issues in schooling for bilingual learners. This class is taught primarily in Spanish.

Theory Hours: 45

EDUC 2226 - Instructional Methods and Strategies for the Bilingual Classroom

3 credit hour(s)
Prerequisite: Department Approval

Develops knowledge of and use of theories, approaches, methods, and strategies for teaching literacy, biliteracy and other academic skills in English and the native language for elementary classrooms.

N**ote(s):**

- This class is taught primarily in Spanish.

Theory Hours: 45

EDUC 2230 - Introduction to Gifted Education

3 credit hour(s)
Prerequisite: Department approval

Introductory course in the education of gifted students. Provides overview of current and historical issues in the field. Introduces intellectual, social, emotional, developmental, and educational characteristics of gifted students. Appropriate educational opportunities and programming are discussed. Designed for those students currently working in education.

Theory Hours: 45

EDUC 2231 - Curriculum for Gifted Learners

3 credit hour(s)
Prerequisite: EDUC 2230

Focuses on curriculum content, process, and product-evaluation modifications for gifted learners. Students will gain an understanding of various curriculum models to include the enrichment triad, multiple menu, autonomous learner, parallel curriculum, and integrated curriculum models. Students will develop curriculum and lesson plans to meet the needs of gifted education learners. Designed for those students currently working in education.

Theory Hours: 45

EDUC 2232 - Strategies for Teaching Gifted Learners

3 credit hour(s)

Prerequisite: EDUC 2230

Presents differentiated instructional strategies for teaching gifted learners, including modifications in content, process, products and environment. Designed for those students currently working in education.

Theory Hours: 45

EDUC 2243 - Children's Literature

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Focuses on the building familiarity with high quality, culturally responsive, and authentic children's literature with the purpose of supporting literacy instruction in K-8 classrooms. Students will be introduced to a range of literature and strategies for incorporating this literature into their instruction.

Theory Hours: 45

EDUC 2250 - Foundations of Education

3 credit hour(s)

Prerequisite: Acceptance into the Alternative Teacher Licensure Program

Examines the historical, philosophical and social paradigms that define the modern teaching profession. Course competencies are built upon national, state, and professional standards and include understanding the need to develop and refine beliefs, goals, and strategies for effective teaching practice, the value of diversity in education, and the ethics of professional practice.

Theory Hours: 45

EDUC 2260 - Emergent Literacy for Diverse Learners

3 credit hour(s)
Pre- or corequisite: EDUC 2285

Examines the fundamentals of literacy development for emergent readers and writers. Course competencies are built upon national and state standards for literacy and focus on the development and assessment of oral language, print awareness, letter knowledge, phonological and phonemic awareness, phonics, sight words, fluency, spelling, vocabulary, comprehension, and writing. The course utilizes theoretical frameworks aligned with Structured Literacy principles and practices. Students will learn evidence-based methods focusing on diverse learners, including students with disabilities and multilingual learners, and develop skills in assessment, differentiation, and intervention strategies.

Theory Hours: 45

EDUC 2262 - Intermediate Literacy for Diverse Learners

3 credit hour(s)

Prerequisite: EDUC 2260

Examines the essential components of intermediate literacy instruction for students. Course competencies are built upon national and state standards for elementary and middle school reading and writing and focus on the development and assessment of student vocabulary, academic language, background knowledge, reading comprehension, fluency, student analysis of narrative and expository texts, and writing. Demonstrates evidence-based methods, materials, and strategies for diverse learners, including differentiation and interventions for struggling readers, students with disabilities, and multilingual learners.

Theory Hours: 45

EDUC 2264 - Reading and Writing in Secondary Education for Diverse Learners

3 credit hour(s)

Pre- or corequisite: EDUC 2285

Examines the essential components of content area literacy instruction for students in grades 6-12. Course competencies are built upon national and state standards for secondary literacy instruction and content area and focus on the design and integration of explicit reading and writing instruction using differentiated materials and evidence-based strategies. Students will learn about evidence-based methods, materials, and strategies for a diverse student population, including struggling readers, students with disabilities, and multilingual learners.

Theory Hours: 45

EDUC 2284 - Classroom Management and Effective Teaching Strategies

3 credit hour(s)

Prerequisite: EDUC 2250

Examines the cognitive, interactive, and student-centered principles and structures of best practice teaching across the curriculum and among students of diverse languages, abilities, backgrounds and learning styles. Investigates effective methods and strategies for increasing K-12 student learning and motivation. Course competencies include best practices for classroom setup and climate, classroom management, student/teacher responsibility and communication, activities and assignments, teacher attitude and outlook. Requires field experience as part of the course.

Theory Hours: 45

EDUC 2285 - Curriculum Development Assessment and Evaluation I

3 credit hour(s)

Pre- or corequisite: EDUC 2250 or SPED 2250

Applies the curricular and assessment principles and tools of Understanding by Design in the development of Common Core State Standard-aligned curriculum, assessment and evaluation. Course competencies are built upon national and state standards and focus on 1) applying the principles of curriculum design for student learning, 2) designing standards-based curricula, 3) developing summative performance tasks using assessment principles, and 4) evaluating data and student work to inform instruction.

Theory Hours: 45

EDUC 2286 - Curriculum Development Assessment and Evaluation II

3 credit hour(s)

Prerequisite: EDUC 2285

Applies the curricular and assessment principles and tools learned in EDUC 2285 Curriculum Development Assessment and Evaluation I to lesson planning for the day-to-day and week-to-week classroom. Course competencies are built upon national and state standards and focus on 1) clearly identifying student learning goals, 2) developing formative assessments for learning, 3) engaging students in their own learning, and 4) differentiating for individual and diverse student needs.

Theory Hours: 45

EDUC 2315 - Educating Linguistically and Culturally Diverse Students

3 credit hour(s)

Prerequisite: Reading and Writing Skills 2

Familiarizes students with history, theory, practice, culture and politics of second language pedagogy and culturally relevant teaching. Examines theoretical and practical issues related to diversity of culture, race, gender, language, socioeconomic, and ability level in the classroom. Students will be introduced to effective teaching methods for linguistically and culturally diverse learners, including critical teaching behaviors and essential best practices for diverse students.

Theory Hours: 45

EDUC 2375 - Technology Integration in the Classroom

3 credit hour(s)

Prerequisite: Reading and Writing Skills 2

Recommended: BCIS 1110*

Students apply knowledge of learning theory to explore how to incorporate educational technology as a classroom tool in the K-12 learning environment. Students will use classroom technology to enhance curriculum development and application to the classroom. Examines the impact of technology on the changing role of the teacher.

N**ote(s):**

- Previously EDUC 2265. Read more.

Theory Hours: 45

Electric Vehicle Technology

EVTC 1110 - Introduction to Electric Vehicles

3 credit hour(s)

Prerequisite: Reading and Writing Skills 1

Introduction to Electric vehicles, focuses on the safety related issues involving electric vehicles (EV). Course introduces different EV drive systems, high voltage battery function and design, battery converter systems and high voltage battery accessory components.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

EVTC 1120 - Electric Vehicle Batteries and Components

4 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: EVTC 1110

This course will introduce students to electric vehicle battery components, and their operation, use of service manuals, proper tools, specific electric vehicle batteries in individual vehicles. Students will remove, inspect, and reinstall these components with the proper safety and initialization procedures. Specifically designed to provide the student the necessary skill and knowledge to function effectively in a modern automotive service department performing electric vehicle repair.

Theory Hours: 30
Lab Hours: 90

EVTC 1130 - Electric Vehicle Design, Construction and Diagnostics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: EVTC 1110

This course will introduce students to electric vehicle design and drive types. Students will plan and build an electric car from plans in a lab environment. Students will test and diagnose common electric vehicle issues.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

EVTC 1140 - Electric Vehicle Electrical Systems

4 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Presents critical skills necessary for identifying and correcting problems found in electric vehicle electrical/electronic systems. Includes DVOM and analog meter use, voltage drop testing, wiring schematic interpretation and electrical troubleshooting procedures.

Theory Hours: 30
Lab Hours: 90

EVTC 1210 - Electric Vehicle Advanced Control Systems

4 credit hour(s)
Prerequisite: EVTC 1110 + EVTC 1120 + EVTC 1130 + EVTC 1140

Students will be introduced to theory and operation of the low voltage and high voltage systems within the electric vehicles. Inspection, removal, disassembly, and installation of converters, inverters and other high voltage components.

Theory Hours: 30
Lab Hours: 90

EVTC 1220 - Electric Vehicle Advanced Electronic and Drivability

4 credit hour(s)
Prerequisite: EVTC 1110 + EVTC 1120 + EVTC 1130 + EVTC 1140

Students will be introduced to electric vehicle drivability problems associated with these vehicles. Students will test, diagnose, and service components of the internal combustion engine (ICE) drive motors and transmissions, and perform scan-tool diagnostics with a vehicle being driven on a dynamometer.

Theory Hours: 30
Lab Hours: 90

EVTC 1230 - Electric Vehicle Heating, Ventilation and Air Conditioning

3 credit hour(s)
Prerequisite: EVTC 1110 + EVTC 1120 + EVTC 1130 + EVTC 1140

Students will focus on electric vehicle heating, air conditioning, and ventilation systems as they apply to the automotive electric vehicles, including high-voltage air conditioning compressor systems and PTC heater systems. Using test equipment, students will learn to safely diagnose, evacuate, recover and recharge air conditioning systems.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

EVTC 1240 - Electronic Systems

3 credit hour(s)
Prerequisite: EVTC 1110 + EVTC 1120 + EVTC 1130 + EVTC 1140

Covers testing and diagnostic procedures in more complex automotive electronic systems. Includes lighting circuits, body computers and sensors, use of lab scopes and scan tools.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

Electrical Trades

ELTR 1015 - Electrical Math I

4 credit hour(s)
Prerequisite: Reading and Writing Skills 1

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.

N**ote(s):**

- Previously ELTR 1010

Theory Hours: 60

ELTR 1096-1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

ELTR 1120 - Electrical Theory I

4 credit hour(s)
Pre- or corequisite: ELTR 1015

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.

N**ote(s):**

- Previously ELTR 1005. Read more.

Theory Hours: 60

ELTR 1125 - Electrical AC/DC/L

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: ELTR 1120 + ELTR 1015 or department approval
Corequisite: ELTR 1145 or department approval

Emphasis is placed on safety. Covers electrical circuitry, meters, power sources, conductors, insulators, reactive circuits and application of the National Electrical Code.

N**ote(s):**

- Previously ELTR 1020. Read more.

Theory Hours: 15
Lab Hours: 90

ELTR 1145 - AC Circ Motors Gen

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: ELTR 1120 + ELTR 1015 or department approval
Corequisite: ELTR 1125 or department 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.

N**ote(s):**

- Previously ELTR 1030. Read more.

Theory Hours: 15
Lab Hours: 90

ELTR 1210 - Electrical Theory II

4 credit hour(s)
Prerequisite: ELTR 1120 + ELTR 1015 + ELTR 1125 + ELTR 1145 or department 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.

Theory Hours: 60

ELTR 1215 - Blueprint Reading I

4 credit hour(s)
Prerequisite: ELTR 1120 + ELTR 1015 + ELTR 1125 + ELTR 1145 or department approval

Provides instruction in reading and interpreting blueprints and specifications. Emphasizes terminology, symbols, notations, scaling, dimensioning and basic blueprint drawing techniques.

Theory Hours: 60

ELTR 1220 - Introduction to Wiring Lab

3 credit hour(s)
Pre- or corequisite: ELTR 1215 + ELTR 1210 or department approval
Corequisite: ELTR 1230 or department 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. Analyze Blueprint applications as it applies to electrical installations. NEC requirements for light commercial applications.

N**ote(s):**

- Previously ELTR 1292

Theory Hours: 15
Lab Hours: 90

ELTR 1230 - Residential Wiring II

3 credit hour(s)
Pre- or corequisite: ELTR 1215 + ELTR 1210 or department approval
Corequisite: ELTR 1220 or department approval

Introduction to electrical raceways and fittings; electrical conductors and cables; basic electrical construction drawings, residential electrical services, and electrical test equipment.

N**ote(s):**

- Previously ELTR 1392

Theory Hours: 15
Lab Hours: 90

ELTR 2020 - Ind Motor Control L

3 credit hour(s)
Pre- or corequisite: ELTR 2110 + ELTR 2115 or department approval
Corequisite: ELTR 2130 or department 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.

N**ote(s):**

- Previously ELTR 2092

Theory Hours: 15
Lab Hours: 90

ELTR 2096-2996 - Special Topics

1-7 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

ELTR 2110 - Electrical Theory III

4 credit hour(s)
Prerequisite: ELTR 1215 + ELTR 1210 + ELTR 1220 + ELTR 1230 or department approval

Introduces commercial/industrial aspects of electrical safety, tools, materials, power distribution systems, services, hazardous locations and blueprint reading in accordance with the National Electrical Code.

N**ote(s):**

- Previously ELTR 2005. Read more.

Theory Hours: 60

ELTR 2115 - Elec Motor Control Theory

4 credit hour(s)
Prerequisite: ELTR 1215 + ELTR 1210 + ELTR 1220 + ELTR 1230 or department approval

Introduces students to the symbology and method of interpreting and drawing electromechanical motor control circuitry. NEMA standards are studied in detail.

N**ote(s):**

- Previously ELTR 2015. Read more.

Theory Hours: 60

ELTR 2130 - Indust Power Dist

3 credit hour(s)
Pre- or corequisite: ELTR 2110 + ELTR 2115 or department approval
Corequisite: ELTR 2020

Covers safety, use of mechanical and hydraulic benders, use of power threaders, knock-out punches, hammer drills and power actuated fasteners, cable installation, wire pulling and the application of the NEC.

N**ote(s):**

- Previously ELTR 2030. Read more.

Theory Hours: 15
Lab Hours: 90

ELTR 2205 - Industrial Electrical Circuitry Safety

3 credit hour(s)
Prerequisite: ELTR 2115 + ELTR 2020 + ELTR 2130 or department approval

Emphasizes safety principles and standards used in the electrical field and techniques for electrical troubleshooting.

Theory Hours: 45

ELTR 2210 - Programmable Logic Controller T

4 credit hour(s)
Pre- or corequisite: ELTR 2020 or department approval

Introduces the principles of operation of a programmable controller, the numbering systems used by controllers, logic fundamentals and basics of programming.

Theory Hours: 60

ELTR 2220 - PLC Install & Oper

3 credit hour(s)
Pre- or corequisite: ELTR 2210 + ELTR 2020
Corequisite: ELTR 2230 or department approval

Covers installation and programming of programmable logic controllers in accordance with manufacturer's specifications and NEC requirements. Covers stimulating fundamental industrial control processes with various input and output devices.

Theory Hours: 15
Lab Hours: 90

ELTR 2230 - PLC Sys Oper/Trbl

3 credit hour(s)
Pre- or corequisite: ELTR 2210 + ELTR 2020 or department approval
Corequisite: ELTR 2220 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.

Theory Hours: 15
Lab Hours: 90

ELTR 2605 - Photovoltaic Fund/Applications

4 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Photovoltaic (PV) is electrical energy from the sun. This course is an introduction to the fundamentals associated with Photovoltaic systems. Topics cover PV market analysis, the solar resource, electrical PV principles, solar module fundamentals, system components, types of systems, site assessment, system applications, energy production analysis, and best practice code compliant practices including mounting, wiring, and interconnecting systems to the utility. Anyone interested in knowing more about the solar industry or anyone working in fields associated with solar energy will benefit from this course.

Note(s):
Previously ELTR 2620. Read more.

Theory Hours: 60

ELTR 2610 - Photovoltaic Installation Safety

2 credit hour(s)
Pre- or corequisite: ELTR 1230 or department approval

Safety aspects of electrical installations for photovoltaic worksites covering: Use of electrical meters, GFCI protection, LOTO, OSHA requirements, PPE, lifesaving equipment, fall protection, ladders, scaffolds, stairways, hazard communication, MSDS, and material handling.

Theory Hours: 30

ELTR 2615 - PV Code Compliant Systems

2 credit hour(s)
Pre- or corequisite: ELTR 2605

PV Code Compliant Systems is a comprehensive course on the electrical and structural code requirements for photovoltaic system installations with and without battery systems. Topics include the major sections of the National Electric Code (NEC) that relate to PV installations including General Requirements, Wiring and Protection, Wiring Methods and Equipment Use, PV Equipment Special Conditions, and Utility Interconnection Special Conditions. Integrity and compliance of structural mounting for roof top and ground mount systems are also discussed.

Theory Hours: 30

ELTR 2630 - Advanced PV

4 credit hour(s)
Pre- or corequisite: ELTR 2605 + ELTR 2692

Photovoltaic installation topics and aspects of: Safety, electrical lock out tag out, maximum system voltage, disconnects, series fusing, service panel connections, inverters, layout and mounting, grounding and ground fault/surge protection, system sizing, NEC considerations, commissioning and production analysis, maintenance and troubleshooting are covered in this course.

Theory Hours: 30
Lab Hours: 90

ELTR 2645 - Large-Scale Solar

4 credit hour(s)
Pre- or corequisite: (ELTR 2605 + ELTR 2692) or department approval

Focuses on ground mounted photovoltaic plant design and code compliant, best practice installation; Site selection and prep; Safety; DC voltage and current calculations; Single axis tracking and control system; Module handling, mounting, and wiring; Combiner, disconnect, and inverter installation and wiring; Testing, commissioning operation, and maintenance.

Theory Hours: 30
Lab Hours: 90

ELTR 2692 - PV Install Lab

3 credit hour(s)
Corequisite: ELTR 2605 + ELTR 2630

Photovoltaic installation practices and safety are emphasized covering lockout tag out, testing high voltage, hazards, safety equipment, site safety, first aid, PV panel layout, pitch roof mounting systems, flat roof mounting systems, pole mount systems, disconnect installation, wiring sizing and installation, inverter installation, commissioning checklist.

Lab Hours: 135

ELTR 2997 - Independent Study

1-7 credit hour(s)
Prerequisite: Department approval

Focuses on a specific problem while working with an instructor.

Electroneurodiagnostic Technology

ENDT 1010 - Introduction to Neurodiagnostic Technology

2 credit hour(s)
Prerequisite: Mathematics Requirement + Communications Requirement + Humanities Requirement + BCIS 1110 + BIOL 2210
Pre- or corequisite: HLTH 1001 + HLTH 1010 + BIOL 2225
Corequisite: ENDT 1020 + ENDT 1040 + ENDT 1092

Provides an introduction and overview of the basic concepts and foundational theory of Neurodiagnostic Technology. Topics include scope of practice, standards of care, testing procedures, recording techniques, and an introduction to medical and EEG terminology. Information on career fields in ENDT is also covered, including duties and responsibilities, possible work settings and available certifications.

N**ote(s):**

- *CNM awards Credit for Prior Learning (CPL) if criteria are met

Theory Hours: 30

ENDT 1020 - EEG I

2 credit hour(s)
Pre- or corequisite: BIOL 2225
Corequisite: ENDT 1010 + ENDT 1040 + ENDT 1092

This course provides instruction on the process of accurately measuring and applying electrodes according to the International 10-20 System. Topics include the history and development of the EEG field, electrode composition and care and the proper steps for the best practice in EEG methodology. An emphasis is placed on professional competence in patient interactions, patient care, patient safety, privacy standards and taking history.

Theory Hours: 30

ENDT 1040 - Neuroanatomy & Neurophysiology

2 credit hour(s)
Corequisite: ENDT 1010 + ENDT 1020 + ENDT 1092

This course provides instruction on the basic anatomical structures and functional correlates of the human nervous system. Emphasis will be placed on neuronal function, action potentials, cranial nerves, major cerebral blood supply, and an introduction to neurobiological disorders. Localization of EEG electrodes over specific neuroanatomical structures will be addressed.

Theory Hours: 30

ENDT 1090 - Neurodiagnostic Clinical I

3 credit hour(s)
Corequisite: ENDT 1510 + ENDT 1520 + ENDT 1530 + ENDT 1550 + ENDT 1592

This clinical course provides practical EEG experience in the outpatient setting. With supervision, students will assist and, skills-permitting, perform routine electroencephalographic recordings with all appropriate modifications, activations, and recording notations. Emphasis will be placed on active application of theoretical knowledge, exceptional patient care, collaborative interaction with other healthcare professionals, and EEG pattern recognition. Attendance and participation in weekly Neurology Department Grand Rounds and departmental EEG Seminars will be required.

Clinical Intensive Hours: 180

ENDT 1092 - Neurodiagnostic Technology Skills Lab I

2 credit hour(s)
Corequisite: ENDT 1010 + ENDT 1020 + ENDT 1040

This lab provides practical hands-on experience in the process of accurately measuring, applying, and removing electrodes according to the International 10-20 System. The focus of this lab will be on symmetrical and accurate measurement, routine electrode application, and the fundamentals of patient care in EEG. Practice will include mannequin or volunteer heads with an introduction of basic application modifications, as well as electrode removal and disinfection. Students will receive a departmental orientation to the clinical site with emphasis on hospital guidelines, policies, and procedures. All practical opportunities will be supervised and graded by lab-approved preceptors.

Lab Hours: 90

ENDT 1510 - EEG IT Essentials

2 credit hour(s)
Prerequisite: ENDT 1010 + ENDT 1020 + ENDT 1040 + ENDT 1092 + HLTH 1001 + HLTH 1010
Corequisite: ENDT 1090 + ENDT 1520 + ENDT 1530 + ENDT 1550 + ENDT 1592

This course provides a comprehensive overview of software and hardware components of the EEG System. The course will cover PC hardware, networking and troubleshooting hardware and network connectivity issues. The basics of EEG software technologies are introduced with common features and functionality of known operating systems, system management and file management.

Theory Hours: 30

ENDT 1520 - EEG II

2 credit hour(s)
Prerequisite: ENDT 1010 + ENDT 1020 + ENDT 1040 + ENDT 1092 + HLTH 1001 + HLTH 1010
Corequisite: ENDT 1090 + ENDT 1510 + ENDT 1530 + ENDT 1550 + ENDT 1592

This course provides a comprehensive overview of the normal routine adult EEG recording in wake and sleep. Instruction will cover the entire routine EEG recording from start to finish, including all appropriate technologist notations, activation procedures, and normal waveform variants. Emphasis will be on accurate EEG description using proper terminology, normal pattern recognition, and the integration of patient history in EEG analysis. Basic electrocardiogram (EKG) will be addressed.

Note(s):

- *CNM awards Credit for Prior Learning (CPL) if criteria are met

Theory Hours: 30

ENDT 1530 - Electrical Concepts in Neurodiagnostic Technology I

2 credit hour(s)
Corequisite: ENDT 1090 + ENDT 1510 + ENDT 1520 + ENDT 1550 + ENDT 1592

This course provides the foundation of electrical concepts related to Neurodiagnostic Technology and instrumentation. These concepts include electrical safety, grounding, analog to digital conversion, and physiological data collection and analysis. Digital measurement and modifications to the EEG recording will be addressed in depth, with particular attention to impedance, calibration, filters, sensitivity, montage, and differential amplifiers.

Theory Hours: 30

ENDT 1540 - Neurological Disorders

2 credit hour(s)
Corequisite: ENDT 2020 + ENDT 2030 + ENDT 2040 + ENDT 2090 + ENDT 2092

This course provides a comprehensive overview of abnormal adult EEGs associated with neurological disorders. Emphasis will be placed on the etiology, evolution, and electroencephalographic correlates of cerebral disorders. The relationship between the underlying nature of disorders and their clinical manifestations will be addressed, with particular emphasis on the recognition of resultant EEG patterns. Diagnosis, prevention, and treatment options will be included.

Theory Hours: 30

ENDT 1550 - Introduction to Long Term Monitoring

2 credit hour(s)
Corequisite: ENDT 1090 + ENDT 1510 + ENDT 1520 + ENDT 1530 + ENDT 1592

This course provides an overview of theories, concepts, and practice of long-term EEG monitoring. Emphasis will be placed on conditions requiring long-term monitoring, technical aspects of applying and maintaining long-term studies, and the basics of trending and qualitative monitoring. Topics in Persyst software will be addressed with an introduction to record review.

Theory Hours: 30

ENDT 1592 - Neurodiagnostic Technology Skills Lab II

2 credit hour(s)
Corequisite: ENDT 1090 + ENDT 1510 + ENDT 1520 + ENDT 1530 + ENDT 1550

This lab provides a continuation of practical hands-on experience in skills required for higher-complexity EEGs. Skill work will continue in EEG application with emphasis on the use of collodion glue and EC2 adherent paste for long-term video EEG recordings. Instruction will also be provided in electrode removal with acetone or collodion remover in EEG long-term recording discontinuation. All practical opportunities will be supervised and graded by lab-approved preceptors.

Lab Hours: 90

ENDT 2010 - Advanced Topics in Neurodiagnostic Technology

3 credit hour(s)
Corequisite: ENDT 2080 + ENDT 2120 + ENDT 2190 + ENDT 2999

This course provides an introduction to additional procedures within the Neurodiagnostic profession including Visual Evoked Potentials (VEP), Somatosensory Evoked Potentials (SSEP), Nerve Conduction Studies (NCS), Magnetoencephalography (MEG), Polysomnography (PSG), and Intraoperative Monitoring (IONM). An overview will be provided of varying modalities and a range of instrumentation. Diagnosis, treatment, and the role of the technologist will be addressed.

Theory Hours: 45

ENDT 2020 - EEG III

2 credit hour(s)
Prerequisite: ENDT 1090 + ENDT 1510 + ENDT 1520 + ENDT 1530 + ENDT 1550 + ENDT 1592
Corequisite: ENDT 1540 + ENDT 2030 + ENDT 2040 + ENDT 2090 + ENDT 2092

This course provides a comprehensive overview of abnormal adult EEG recordings associated with seizures and epilepsy. Emphasis will be placed on the etiology, evolution, and electroencephalographic correlates of seizure disorders. The relationship between the

underlying nature of disorders and their clinical manifestations will be addressed, with particular emphasis on the recognition of resultant EEG patterns. Diagnosis, prevention, and treatment options will be discussed.

Theory Hours: 30

ENDT 2030 - Electrical Concepts in Neurodiagnostic Technology II

2 credit hour(s)
Corequisite: ENDT 1540 + ENDT 2020 + ENDT 2040 + ENDT 2090 + ENDT 2092

This course further explores topics of instrumentation, waveform analysis, parameter adjustment for optimal recording quality, and activation procedures. Particular emphasis is placed on electrical polarity and localization of waveforms. Electrocerebral inactivity (ECI) recordings are addressed.

Theory Hours: 30

ENDT 2040 - Evoked Potentials

2 credit hour(s)
Corequisite: ENDT 1540 + ENDT 2020 + ENDT 2030 + ENDT 2090 + ENDT 2092

Introduction to evoked potential recording techniques. Emphasis on equipment, principles of operation, associated waves related to normal and abnormal waveforms, placement and calibration, obtaining clearly resolved and replicated obligated waveforms of brainstem auditory, visual, and somatosensory evoked potentials in adults and pediatric subjects.

Theory Hours: 15
Lab Hours: 45

ENDT 2080 - Pediatric and Neonatal Neurodiagnostic Technology

2 credit hour(s)
Corequisite: ENDT 2120 + ENDT 2150 + ENDT 2190 + ENDT 2250 + ENDT 2999

This course provides an overview of the application and recording of routine and long-term EEGs in pediatric and neonatal patient populations. Particular focus will be placed on development and associated EEG waveforms, pediatric-specific neurological conditions and EEG correlates, and both normal and abnormal pattern recognition. Modified neonate electrode application, specific terminology, and additional monitors will be addressed in greater depth.

Theory Hours: 30

ENDT 2090 - Neurodiagnostic Clinical II

3 credit hour(s)
Corequisite: ENDT 1540 + ENDT 2020 + ENDT 2030 + ENDT 2040 + ENDT 2092

This clinical course provides practical EEG experience in the inpatient and intensive care setting. With supervision, students will assist and, skills-permitting, perform intermediate EEG recordings with all appropriate modifications, activations, and recording notations. Emphasis will be placed on active application of theoretical knowledge, exceptional patient care, infection control procedures, and collaborative interaction with other healthcare professionals. Students will assist in record review with preceptors and attendings for ongoing pattern recognition experience. Attendance and participation in weekly Neurology Department Grand Rounds and departmental EEG Seminars will be required.

Clinical Intensive Hours: 180

ENDT 2092 - Neurodiagnostic Technology Skills Lab III

1 credit hour(s)
Corequisite: ENDT 1540 + ENDT 2020 + ENDT 2030 + ENDT 2040 + ENDT 2090

This lab provides an overview of practical hands-on experience in skills required for EEGs in pediatric and neonate populations. Emphasis will be placed on special issues in patient care, strong interpersonal and communication skills with family members, and age-appropriate language. Additionally, students will learn the process of video file clipping and archiving. All practical opportunities will be supervised and graded by lab-approved preceptors.

Lab Hours: 45

ENDT 2120 - EEG IV

2 credit hour(s)
Prerequisite: ENDT 1540 + ENDT 2020 + ENDT 2030 + ENDT 2040 + ENDT 2090 + ENDT 2092
Corequisite: ENDT 2080 + ENDT 2150 + ENDT 2190 + ENDT 2250 + ENDT 2999

This course provides instruction in the nature of chemical operations in the brain and the role of pharmaceutical interventions in the prevention and treatment of neurological and seizure disorders. Emphasis will be on the mechanism of action of anti-seizure and anti-epileptic medications, contraindications to medications and treatments, and medication effects on EEG waveforms and analysis. A comprehensive overview of EEG artifact and troubleshooting methods will also be provided.

Theory Hours: 30

ENDT 2150 - Nerve Conduction & PSG

2 credit hour(s)
Corequisite: ENDT 2080 + ENDT 2120 + ENDT 2190 + ENDT 2250 + ENDT 2999

Introduction to nerve conduction studies and polysomnography. Emphasis on equipment, placement of stimulation sites, troubleshooting, electronics, pathology and waveform identification.

Theory Hours: 30

ENDT 2190 - Neurodiagnostic Clinical III

3 credit hour(s)
Corequisite: ENDT 2080 + ENDT 2120 + ENDT 2150 + ENDT 2250 + ENDT 2999

This clinical course provides advanced practical EEG experience in outpatient and inpatient settings. With minimal supervision, students will perform routine and long-term electroencephalographic recordings on all patient populations. Students will participate in a rotation schedule to observe and assist in available NDT testing modalities (as scheduling permits), including Ambulatory, MEG, IONM, PCS, EP, NCS, Moberg combined studies, and EEG during WADA and before PET scans. Students will assist in record review with preceptors and attendings

for ongoing pattern recognition experience. Attendance and participation in weekly Neurology Department Grand Rounds and departmental EEG Seminars is required.

Clinical Intensive Hours: 180

ENDT 2250 - Intraoperative Neuromonitoring (IONM)

2 credit hour(s)
Corequisite: ENDT 2080 + ENDT 2120 + ENDT 2150 + ENDT 2190 + ENDT 2999

Introduction to intraoperative monitoring of CNS (brain, brainstem, spinal cord) function during surgical procedures. Types of recordings, the technologist's role, recording parameters, reason for surgical monitoring, variables affecting monitoring, and outcome of surgery.

Theory Hours: 15
Lab Hours: 45

ENDT 2999 - Neurodiagnostic Technology Capstone

1 credit hour(s)
Corequisite: ENDT 2080 + ENDT 2120 + ENDT 2150 + ENDT 2190 + ENDT 2250

This course provides students with an opportunity to demonstrate mastery of the skills and concepts covered in this degree program. Students will develop a focused project on a topic of interest within the NDT field to be presented at an EEG Seminar at the end of term. This course will also provide board preparation and review for the American Board of Registration of Electroencephalographic and Evoked Potential Technologists (ABRET) credentialing exam.

Theory Hours: 15

Electronic Health Record

EHR 1010 - Introduction to Electronic Health Record

3 credit hour(s)
Prerequisite: HIT 1020 + HIT 1030 + BCIS 1110

This course is an introductory level course in the processes and systems that make up the electronic health record. Emphasis is on the content, format, storage and retrieval of electronic medical records and the different major software packages currently in use of electronic health records

Theory Hours: 45

EHR 1090 - Electronic Health Record Practicum

2 credit hour(s)
Prerequisite: EHR 1010
Pre- or corequisite: CIST 1610 + HIT 1070 + HIT 2040

Provides a clinical learning experience in a health care facility. Emphasis is on management of the electronic health record and the technology used to maintain the electronic health record. This is an unpaid work experience.

Practicum Hours: 90

EHR 2210 - Health Information Exchange and Mobile-Health

4 credit hour(s)
Prerequisite: HIT 2040 + EHR 1010 + EHR 1090

Building on previous knowledge, this course introduces students to advanced concepts in the management of Electronic Health Records.

Theory Hours: 60

EHR 2290 - Electronic Health Records Practicum II

2 credit hour(s)
Pre- or corequisite: EHR 2210 + EHR 2292

Provides a clinical learning experience in a health care facility. Emphasis is on advanced topics in the management of the electronic health record and the technology used to maintain the electronic health record. This is an unpaid work experience.

Practicum Hours: 90

EHR 2292 - Health Information Exchange and Mobile-Health Lab

1 credit hour(s)
Prerequisite: EHR 1010 + EHR 1090
Pre- or corequisite: EHR 2210

Provided the opportunity for students to practice navigation of the electronic health record in a laboratory environment.

Lab Hours: 45

Emergency Medical Technician

EMS 1001 - EMS First Responder Theory

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: HLTH 1001
Corequisite: EMS 1091

Provides the level of classroom instruction needed to assist in patient emergencies in the workplace and non-transport settings. Some fire services allow First Responder certification as a minimum requirement for employment; most prehospital EMS services require EMT-Basic licensure. Includes instruction on preparatory topics, airway management, patient assessment, medical emergencies, trauma emergencies, pediatric care and EMS operations. Meets or exceeds the cognitive objectives of the National EMS Education Standards and incorporates the NM First Responder Scope of Practice.

N**ote(s):**

- This course is NOT a pre- or corequisite for any other level of EMS training at CNM

Theory Hours: 30

EMS 1053 - EMT Basic Theory

6 credit hour(s)
Prerequisite: (Reading and Writing Skills 2 or appropriate placement scores) + Math Skills 2 Alg
Pre- or corequisite: (HLTH 1001 or HLTH 1003)+ (ENGL 1110 or ENGL 1110P)
Corequisite: EMS 1093 + EMS 1190

Provides the level of classroom instruction needed to begin a career in emergency medical services. Includes

instruction on preparatory topics, airway management, patient assessment, medical emergencies, trauma emergencies, pediatric care and EMS operations. Meets or exceeds the cognitive objectives of the National EMS Education Standards and incorporates the NM EMT-Basic Scope of Practice.

Theory Hours: 90

EMS 1091 - EMS First Responder Lab

1 credit hour(s)
Corequisite: EMS 1001

Students will be introduced to a variety of First Responder emergency skills and patient assessment strategies.

N**ote(s):**

- This course is NOT a pre- or corequisite for any other level of EMS training at CNM

Lab Hours: 45

EMS 1092 - EMS Basic Supplemental Skills Lab (CR/NC)

1 credit hour(s)
Pre- or corequisite: EMS 1093

Provides EMT-Basic students the opportunity for additional supervised learning and practice of EMS skills and patient assessment strategies in the campus laboratory. Reinforces topics in preparation for state licensure and national certification EMS exams.

Lab Hours: 45

EMS 1093 - EMT Basic Lab

2 credit hour(s)
Corequisite: EMS 1053 + EMS 1190

Students will practice simulated patient care exercises focused on splinting and bandaging, airway management, medication administration and patient assessment. Meets or exceeds the psychomotor objectives of the National EMS Education Standards and incorporates the NM EMT-Basic Scope of Practice. At the completion of the EMT-Basic theory and lab courses, students are eligible to take the State of New Mexico EMT-Basic licensure examination.

Lab Hours: 90

EMS 1096-1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

EMS 1190 - EMT Basic Clinical

1 credit hour(s)
Corequisite: EMS 1053 + EMS 1093

Provides practice of basic skills in a clinical setting. At the completion of the basic course series students are eligible to take certification examination.Current proof of healthcare provider CPR certification and proof of health insurance is required for this course. Program fee required.

Clinical Hours: 45

EMS 1412 - Advanced EMT (EMT-I) Theory

6 credit hour(s)
Prerequisite: EMS 1053 + EMS 1093 + EMS 1190 + (ENGL 1110 or ENGL 1110P) + department approval*
Pre- or corequisite: Mathematics Requirement
Corequisite: EMS 1493

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 instruction on the theory of IV fluid resuscitation. Meets or exceeds the cognitive objectives of the National EMS Education Standards and incorporates the NM EMT- Intermediate Scope of Practice.

N**ote(s):**

- To be eligible to enroll in the AEMT Program, the student must provide proof of EMT Basic Licensure to the EMS Program Director. Please see EMS Program webpage for screening information.
- Will accept (Math 1111-1114 Series or higher) as a pre or co-requisite for students who already completed when previously offered.

Theory Hours: 90

EMS 1493 - Advanced EMT (EMT-I) Lab

2 credit hour(s)
Corequisite: EMS 1412

Prepares students to participate in the clinical experience. Students will practice simulated patient care exercises focused on IV fluid therapy, medication administration and advanced patient assessment skills. Meets or exceeds the psychomotor objectives of the National EMS Education Standards and incorporates the NM EMT-Intermediate Scope of Practice.

Lab Hours: 90

EMS 1890 - Advanced EMT (EMT-I) Clinical

2 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P
Pre- or corequisite: Mathematics Requirement
Corequisite: EMS 1412 + EMS 1493 + department approval

Provides practice of intermediate skills in a clinical setting. At the completion of the advanced EMT course series, students are eligible to take certification examination. Current EMT-B New Mexico State license and current proof of professional CPR and proof of health insurance are required. Program fee required.

N**ote(s):**

- Will accept (Math 1111-1114 Series or higher) as a pre or co-requisite for students who already completed when previously offered.

Clinical Hours: 90

EMS 2015 - EMS Combo BLS/ILS/ALS Refresher

2 credit hour(s)

This is a combination refresher course for licensed EMT Basic, EMT Intermediate /AEMT and EMT-Paramedic

Providers. This includes online work, quizzes as well as in class homework. This is on online course with 2 days of in class lab instruction. Total contact time is 60 hours. This refresher meets the NREMT and NM EMS Bureau requirements.

N**ote(s):**

- Requires either a New Mexico EMS license or national registry certification.

Theory Hours: 15
Lab Hours: 45

EMS 2092 - EMS Advanced Supplemental Skills Lab (CR/NC)

1 credit hour(s)
Prerequisite: EMS 1093

Provides EMT-Intermediate and Paramedic students opportunity for additional learning and practice of advanced EMS skills and patient assessment strategies in the campus laboratory before going into the clinical setting. Additional IV skills practice may be required. Reinforces topics in preparation for state licensure and national certification EMS exams. Current EMT-B (or higher) New Mexico State License or NREMT certification required.

Lab Hours: 45

EMS 2103 - Human Systems Pathophysiology and Development

3 credit hour(s)
Corequisite: EMS 2105 + EMS 2192 + EMS 2207

This course focuses on how common traumatic and medical emergencies affect normal anatomy and physiology for patients of all ages. This course complements other required EMS courses to show how both physical and drug intervention attempt to return a diseased or injured body to a normal physiologic state. Meets or exceeds the cognitive objectives of the National EMS Education Standards and incorporates the NM EMT-Paramedic Scope of Practice.

Theory Hours: 45

EMS 2105 - EMS Program Success Course

3 credit hour(s)
Pre- or corequisite: EMS 2103 + EMS 2192 + EMS 2207

This course contains a review EMT Basic Foundational knowledge, techniques for time management, learning strategies, test preparation, decision making, critical thinking, work/life balance, study habits in paramedic school, professional behavior expectations, EMS chart writing , clinical data entry and tracking and EMS Medical Terminology.

Theory Hours: 45

EMS 2192 - Drug Calculations Lab

2 credit hour(s)
Prerequisite: (BIOL 1130 or BIOL 1140 or BIOL 2110 or CHEM 1120 or CHEM 1215 or CHEM 1225 or NUTR 1010 or PHYS 1115) + (EMS 1190 or EMS 1890) + (ENGL 1110 or ENGL 1110P) + Department Approval
Pre- or corequisite: Mathematics Requirement
Corequisite: EMS 2103 + EMS 2105 + EMS 2207

This course presents dosage calculation methods for enteral and parenteral medications, including intravenous therapy and pediatric dosages in the EMS environment. This course is a hands on approach to calculations used in an emergency situation in the prehospital setting. This course integrates patient assessment for the Term 1 paramedic student. This course also provides instruction needed to provide advanced care for patients in a clinical setting. Meets or exceeds the cognitive objectives of the National EMS Education Standards and incorporates the NM EMT-Paramedic Scope of Practice.

Lab Hours: 90

EMS 2207 - Legal Issues and Report Writing

2 credit hour(s)
Corequisite: EMS 2103 + EMS 2105 + EMS 2192

Presents legal and ethical dilemmas for paramedic providers. The course will also review the aspects of documentation that can reduce the risk of legal litigation. Meets or exceeds the cognitive objectives of the EMT-Paramedic National Standard Curriculum and incorporates the NM EMT- Paramedic Scope of Practice.

Theory Hours: 30

EMS 2213 - Endocrine and GI/GU Theory

1 credit hour(s)
Pre- or corequisite: Social and Behavioral Science Requirement
Corequisite: EMS 2217 + EMS 2223 + EMS 2291 + EMS 2313

Provides the level of classroom instruction needed to provide advanced care for patients with endocrine and GI/GU emergencies. Meets or exceeds the cognitive objectives of the EMT-Paramedic National Standard Curriculum and incorporates the NM EMT-Paramedic Scope of Practice.

Theory Hours: 15

EMS 2217 - Pharmacology Theory

3 credit hour(s)
Prerequisite: EMS 2103 + EMS 2105 + EMS 2192 + EMS 2207
Corequisite: EMS 2213 + EMS 2223 + EMS 2291 + EMS 2313

Provides understanding of how chemical agents act upon the body and the theoretical base for administering medications in the emergency setting. Includes pharmacokinetics, pharmacodynamics, therapeutic uses, adverse reactions, precautions and contraindications of medications used in the prehospital setting. Meets or exceeds the cognitive objectives of the National EMS Education Standards and incorporates the NM EMT-Paramedic Scope of Practice.

Theory Hours: 45

EMS 2223 - Advanced Trauma Theory

3 credit hour(s)
Corequisite: EMS 2213 + EMS 2217 + EMS 2291 + EMS 2313

Provides the level of classroom instruction needed to provide advanced care for trauma patients. Includes instruction on the theory of advanced airway

management and IV fluid resuscitation. Meets or exceeds the cognitive objectives of the National EMS Education Standards, Prehospital Trauma Life Support and incorporates the NM EMT-Paramedic Scope of Practice.

Theory Hours: 45

EMS 2291 - Paramedic Lab I

2 credit hour(s)
Corequisite: EMS 2213 + EMS 2217 + EMS 2223 + EMS 2313

Provides the level of classroom instruction needed to provide advanced care for patients in a clinical setting. Includes instruction on advanced airway management, medication administration, IV fluid resuscitation, and patient assessment. Meets or exceeds the cognitive objectives of the National EMS Education Standards, Prehospital Trauma Life Support and incorporates the NM EMT-Paramedic Scope of Practice. (90 Lab Hours)

Note(s):

- Formerly Introduction to Paramedic Lab

Lab Hours: 90

EMS 2303 - Cardiovascular Theory

3 credit hour(s)
Prerequisite: EMS 2213 + EMS 2217 + EMS 2223 + EMS 2291 + EMS 2313
Pre- or corequisite: EMS 2390 + EMS 2393 + EMS 2513

Provides the level of classroom instruction needed to provide advanced care for cardiac patients. Includes instruction on the theory of 12-lead ECG interpretation. Meets or exceeds the cognitive objectives of the National EMS Education Standards, Basic Life Support (BLS), Advanced Cardiac Life Support (ACLS) and incorporates the NM EMT-Paramedic Scope of Practice.

Theory Hours: 45

EMS 2307 - Respiratory Theory

2 credit hour(s)
Pre- or corequisite: EMS 2303 + EMS 2390 + EMS 2393 + EMS 2513

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.

Theory Hours: 30

EMS 2313 - Neurological Theory

2 credit hour(s)
Pre- or corequisite: EMS 2213 + EMS 2217 + EMS 2223 + EMS 2291

Provides the level of classroom instruction needed to provide advanced care for neurological patients. Meets or exceeds the cognitive objectives of the National EMS Education Standards and incorporates the NM EMT-Paramedic Scope of Practice.

Theory Hours: 30

EMS 2390 - Hospital Clinical I

2 credit hour(s)
Pre- or corequisite: EMS 2303 + EMS 2307 + EMS 2393 + EMS 2513

This course provides students with clinical time in local hospitals to administer medications, perform airway skills, perform venous access and assess patients of all age groups with various medical or traumatic conditions. This clinical will have an adult focus.

Clinical Intensive Hours: 120

EMS 2393 - Paramedic Lab II

3 credit hour(s)
Pre- or corequisite: EMS 2303 + EMS 2307 + EMS 2390 + EMS 2513

Students will practice simulated patient care related to second and third semester paramedic courses. Students will develop treatment strategies to manage various medical, trauma and behavioral emergencies. Meets or exceeds the psychomotor objectives of the National EMS Education Standards, Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS).

N**ote(s):**

- Formerly Paramedic Lab I

Lab Hours: 135

EMS 2503 - Pediatric and Gynecology Theory

3 credit hour(s)
Prerequisite: EMS 2303 + EMS 2307 + EMS 2313 + EMS 2390 + EMS 2393
Pre- or corequisite: EMS 2507 + EMS 2590 + EMS 2593 + EMS 2790

Provides the level of classroom instruction needed to provide advanced care for pediatric and obstetric patients. Meets or exceeds the cognitive objectives of the National EMS Education Standards, Basic Life Support (BLS), Pediatric Advanced Life Support (PALS), Pediatric Emergencies for Prehospital Providers (PEPP) and incorporates the NM EMT-Paramedic Scope of Practice.

Theory Hours: 45

EMS 2507 - Environmental Theory

3 credit hour(s)
Pre- or corequisite: EMS 2503 + EMS 2590 + EMS 2593 + EMS 2790

Provides the level of classroom instruction needed to provide advanced care for patients experiencing environmental emergencies. Includes instruction on toxicology, hazardous materials and weapons of mass destruction. Meets or exceeds the cognitive objectives of the National EMS Education Standards.

Theory Hours: 45

EMS 2513 - Behavioral Emergencies and Communication

1 credit hour(s)
Pre- or corequisite: EMS 2303 + EMS 2390 + EMS 2393 + Humanities Requirement

Provides the level of classroom instruction needed to provide advanced care for patients experiencing behavioral emergencies. Includes instruction on effective communication with patients, coworkers and other healthcare professionals. Meets or exceeds the cognitive objectives of the EMT-Paramedic National Standard Curriculum and incorporates the National EMS Education

Standards.

Theory Hours: 15

EMS 2590 - Hospital Clinical II

1 credit hour(s)
Pre- or corequisite: EMS 2503 + EMS 2507 + EMS 2593 + EMS 2790

This course provides students with clinical time in local hospitals to administer medications, perform airway skills, performs venous access, and assess patients of all age groups with various medical or traumatic conditions. This clinical will have a pediatric focus.

Clinical Intensive Hours: 60

EMS 2593 - Paramedic Lab III

2 credit hour(s)
Pre- or corequisite: EMS 2503 + EMS 2507 + EMS 2590 + EMS 2790

Students will practice simulated patient care related to second, third, and fourth term semester paramedic courses. Students will develop treatment strategies to manage various medical and trauma emergencies. Meets or exceeds the psychomotor objectives of the National EMS Education Standards, and Pediatric Advanced Life Support (PALS) and Pediatric Emergencies for Prehospital Providers (PEPP).

N**ote(s):**

- Formerly Paramedic Lab II

Lab Hours: 90

EMS 2790 - Paramedic Field Experience

5 credit hour(s)
Pre- or corequisite: EMS 2503 + EMS 2507 + EMS 2590 + EMS 2593

This course is the summative evaluation of paramedic training. Paramedic students will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for patients with common complaints. Students will show competency as a team lead and team member. This meets the National EMS Education Standards and CoAEMSP requirements. Under the direction of a field preceptor, the student will learn to safely manage a prehospital emergency.

Clinical Intensive Hours: 300

EMS 2993 - Paramedic Capstone

1 credit hour(s)
Pre- or corequisite: EMS 2503 + EMS 2507 + EMS 2590 + EMS 2593+ EMS 2790

This course is the summative evaluation of paramedic training. This is the final lab course for the paramedic student to prepare for the 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.

Lab Hours: 45

ENGR 1101 - Survey of Engineering Fields

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + (MATH 1215 or MATH 1215P or appropriate placement scores)

This course is an introduction to engineering for students to establish a foundation for their studies in any of the engineering disciplines. Group-orientated design projects are used to provide a multidisciplinary view of engineering systems and to present the engineering method. Computing skills are developed for engineering analysis, synthesis, and technical communication.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously ENGR 1010

Theory Hours: 45

ENGR 2088 - Engineering Specialty

1-16 credit hour(s)

This course is used to transfer approved courses from other colleges and universities to fulfill requirements for the AS Engineering degree. Please contact the School of Math, Science & Engineering for a list of approved courses.

ENGR 2150 - Explosives Technology & Safety

3 credit hour(s)
Prerequisite: CHEM 1215 + CHEM 1215L + Department Approval

This course introduces students to energetic materials, what makes them explode, and the results of rapid energy release. The course covers safety procedures and the use of explosives in research, development, testing, and evaluation activities. Topics on explosives include basic properties; required safety testing; and how to handle and use explosives safely in day-to-day operations. Instructors will stress safety throughout the course.

Theory Hours: 45

ENGR 2710 - Thermodynamics

3 credit hour(s)
Prerequisite: CHEM 1215 /CHEM 1215L + MATH 1520 + PHYS 1320

First and second laws of thermodynamics and their applications to engineering systems. Thermodynamic equilibrium, thermodynamic properties, availability and irreversibility.

Theory Hours: 45

ENGR 2810 - Engineering Statics

3 credit hour(s)
Prerequisite: PHYS 1310 + MATH 1520

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.

Theory Hours: 45

ENGR 2815 - Engineering Dynamics

3 credit hour(s)
Prerequisite: ENGR 2810
Pre- or corequisite: MATH 2530

Kinematics and kinetics of particles, systems of particles and solid bodies. Force/acceleration, work/energy and impulse/momentum principles. Graphical analysis, mechanisms and vibrations.

Theory Hours: 45

ENGR 2910 - Circuit Analysis I

3 credit hour(s)
Prerequisite: CSCI 1230 or CSCI 1260 or CSCI 1153
Pre- or corequisite: PHYS 1320

This course introduces the following concepts: basic elements and sources, energy and power, Ohm's Law and Kirchhoff's Law resistive networks, node and loop analysis, Thevenin's and Norton's theorems, sinusoidal sources and complex representations and three phase circuits.

Theory Hours: 45

ENGR 2915 - Circuit Analysis II

3 credit hour(s)
Prerequisite: ENGR 2910

This course focuses on the following: differential equation modeling and analysis of linear circuits with sinusoidal inputs (phasors, impedances, admittances, power); comprehensive treatment of circuit analysis in the frequency domain (Laplace transforms, frequency response, Bode plots, Fourier analysis).

Theory Hours: 45

ENGR 2996 - Special Topics

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously ENGR 2096-2996. Read more.

Engineering Technology

ENGT 1996A - Methods in Engineering Tech I

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 + Math Skills 3 Alg + CHEM 1215 + CHEM 1215L

Learners will explore the processes and tools used to manufacture nano-materials, structures and components. Learners will gain the foundational understanding and hands-on experience in Materials Basics, Essential Technologies, EM Spectrum, Electron Beams, Characterization Tools/Methods

Theory Hours: 30
Lab Hours: 45

ENGT 1996E - Special Topics

4-5 credit hour(s)

Varies

ENGT 2996A - Methods in Engineering Tech II

3 credit hour(s)
Prerequisite: ENGT 1996A or ENGT 1996

This course is a continuation from Methods in Engineering Tech I. It will continue to explore the processes and tools used to create nano-materials and structures and focus more closely on fabrication as well as testing and packaging.

Theory Hours: 30
Lab Hours: 45

ENGT 2996B - Methods in Engineering Tech III

3 credit hour(s)
Prerequisite: ENGT 1996A

This course explores electronic materials applications. Learners will be exposed to materials processing safety, hands on experience in clean room fabrication environments, visit local manufacturing facilities, and participate in workshops hosted by guest speakers.

Theory Hours: 30
Lab Hours: 45

English

ENGL 1110 - Composition I

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

In this course, students will read, write, and think about a variety of issues and texts. They will develop reading and writing skills that will help with the writing required in their fields of study and other personal and professional contexts. Students will learn to analyze rhetorical situations in terms of audience, contexts, purpose, mediums, and technologies and apply this knowledge to their reading and writing. They will also gain an understanding of how writing and other modes of communication work together for rhetorical purposes. Students will learn to analyze the rhetorical context of any writing task and compose with purpose, audience, and genre in mind. Students will reflect on their own writing processes, learn to workshop drafts with other writers, and practice techniques for writing, revising, and editing.

N**ote(s):**

- Previously ENG 1101. Read more.

Theory Hours: 45

ENGL 1110P - Composition I Plus

4 credit hour(s)
Prerequisite: Appropriate placement score

In this course, students will read, write, and think about a variety of issues and texts. They will develop reading and writing skills that will help with the writing required in their fields of study and other personal and professional contexts. Students will learn to analyze rhetorical situations in terms of audience, contexts, purpose, mediums, and technologies and apply this knowledge to their reading and writing. They will also gain an understanding of how writing and other modes of communication work together for rhetorical purposes. Students will learn to analyze the rhetorical context of any writing task and compose with purpose, audience, and genre in mind. Students will reflect on their own

writing processes, learn to workshop drafts with other writers, and practice techniques for writing, revising, and editing.

Extended Course Description: Welcome to College Writing Plus at CNM. College Writing Plus is an expository writing course with readings designed to provide topics for discussion and writing and to improve students' accurate uses of language. College Writing Plus is different from English 1110 because this course gives students more time and support to complete the English 1110 Learning Outcomes.

N**ote(s):**

- Recommended for students traditionally placed in Developmental English to start in a college-level English course. English 1110 Plus provides for more time and support for these students to meet the outcomes for the College Writing course.
- Combined reading and writing placement score: 151-175
- Previously ENG 1101P. Read more.

Theory Hours: 60

ENGL 1120 - Composition II

3 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

In this course, students will explore argument in multiple genres. Research and writing practices emphasize summary, analysis, evaluation, and integration of secondary sources. Students will analyze rhetorical situations in terms of audience, contexts, purpose, mediums, and technologies and apply this knowledge to their reading, writing, and research. Students will sharpen their understanding of how writing and other modes of communication work together for rhetorical purposes. The emphasis of this course will be on research methods.

Note(s):

- Previously ENG 1102. Read more.

Theory Hours: 45

ENGL 1160 - Introduction to Digital Storytelling

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Provides a comprehensive overview of the genre of digital storytelling. Digital stories are narratives that combine elements such as text, audio, photography, film, and graphics.

Note(s):

- Previously ENG 1160. Read more.

Theory Hours: 45

ENGL 1210 - Technical Communications

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This is an introductory study of written and verbal communications used in the technical professions with emphasis in the planning, execution, and editing of professional and technical documents and other communication media.

N**ote(s):**

- This course is not a substitute for ENGL 2210 and generally applies to particular associate degree programs or as an elective credit. Students are encouraged to speak with an advisor about the applicability of this course.
- Previously ENG 1119. Read more.

Theory Hours: 45

ENGL 1310 - Introduction to Journalism

3 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

This course is intended as an introduction to print and online journalism. The student is introduced to the journalistic style of writing, terms used in journalistic work, editing copy, as well as layout and design. Emphasis is also placed on examining complexities surrounding the media, particularly media ethics.

N**ote(s):**

- Previously JOUR 1171. Read more.

Theory Hours: 45

ENGL 1410 - Introduction to Literature

3 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

In this course, students will examine a variety of literary genres, including fiction, poetry, and drama. Students will identify common literary elements in each genre, understanding how specific elements influence meaning.

N**ote(s):**

- Previously ENG 1150. Read more.

Theory Hours: 45

ENGL 2088 - English Specialty

1-12 credit hour(s)

This course is used to transfer approved courses from other colleges and universities.

ENGL 2120 - Intermediate Composition

3 credit hour(s)
Prerequisite: ENGL 1120

This course builds upon and refines the writing skills acquired in previous writing courses, with a focus on non-fiction prose. Research, composition, exposition and presentation abilities will be practiced and developed. Through analysis and revision, students will develop strategies to improve the versatility and impact of their writing. Course topics and emphases may vary by section.

N**ote(s):**

- Previously ENG 2220. Read more.

Theory Hours: 45

ENGL 2210 - Professional and Technical Communication

3 credit hour(s)
Prerequisite: ENGL 1120

Professional and Technical Communication will introduce students to the different types of documents and

correspondence that they will create in their professional careers. This course emphasizes the importance of audience, document design, and the use of technology in designing, developing, and delivering documents. This course will provide students with experience in professional correspondence and communicating technical information to a non-technical audience.

N**ote(s):**

- Previously ENG 2219. Read more.

Theory Hours: 45

ENGL 2260 - Digital Storytelling Creation I

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Provides an aesthetic understanding of the elements of linear digital storytelling and provides mentorship and hands-on experience in creating a linear digital story.

N**ote(s):**

- Previously ENG 2260. Read more.

Theory Hours: 45

ENGL 2261 - Digital Storytelling Creation II

3 credit hour(s)
Prerequisite: ENGL 2260

Provides an aesthetic understanding of the elements of interactive digital storytelling and provides mentorship and hands-on experience in creating interactive digital stories.

N**ote(s):**

- Previously ENG 2261. Read more.

Theory Hours: 45

ENGL 2271 - Writing for the Media II

3 credit hour(s)
Prerequisite: ENGL 1310 or department approval

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.

N**ote(s):**

- Previously JOUR 2271. Read more.

Theory Hours: 45

ENGL 2290 - Journalistic Practice

3 credit hour(s)
Prerequisite: ENGL 1310 + department approval

Journalism 2290 is an internship designed to engage students in a professional media workplace as a means of gaining educational experience, on-the-job training, and marketable skills for careers in professional writing and/or mass media.

N**ote(s):**

- Previously JOUR 2290. Read more.

Theory Hours: 45

ENGL 2310 - Introduction to Creative Writing

3 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

This course will introduce students to the basic elements of creative writing, including short fiction, poetry, and creative nonfiction. Students will read and study published works as models, but the focus of this "workshop" course is on students revising and reflecting on their own writing. Throughout this course, students will be expected to read poetry, fiction, and non-fiction closely, and analyze the craft features employed. They will be expected to write frequently in each of these genres.

Theory Hours: 45

ENGL 2320 - Introduction to Fiction Writing

3 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

This course will introduce students to the basic elements of fiction writing. This course is a reading and "workshop" introduction to the fundamental working modes of fiction. Throughout this course,students will be expected to read classic and contemporary fiction closely and analyze the craft features employed. They will be expected to write frequently in various fiction genres throughout the course.

N**ote(s):**

- Previously ENG 2221. Read more.

Theory Hours: 45

ENGL 2330 - Introduction to Poetry Writing

3 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

This course will introduce students to the basic elements of poetry. This course is a reading and workshop introduction to the fundamental working modes of poetry. Students will be expected to read classic and contemporary poetry and analyze the craft features employed. In this course, students will read, write, and respond to poetry and develop their understanding of poetic conventions.

N**ote(s):**

- Previously ENG 2222. Read more.

Theory Hours: 45

ENGL 2510 - Analysis of Literature

3 credit hour(s)
Prerequisite: ENGL 1120

This course is an introduction to literary analysis and writing applied to literary techniques, conventions, and themes. Students will learn how to write focused literary analyses, demonstrating their understanding of biographical, critical, cultural, and historical contexts of various writers and genres. Students will also learn proper documentation, as well as other skills, such as quoting, paraphrasing, and integrating sources, both primary and secondary.

N**ote(s):**

- Previously ENG 2250. Read more.

Theory Hours: 45

ENGL 2520 - Film as Literature

3 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

The purpose of this course is to teach students how to analyze film as a visual text. Students will learn to analyze films, film techniques, eras,and genres. Students will also identify significant trends and developments in film-making, examining the ways in which film reflects and creates cultural trends and values.

N**ote(s):**

- Previously ENG 2210. Read more.

Theory Hours: 45

ENGL 2570 - Modern Latin American Literature

3 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

Students survey this important world literature, which began to emerge in the early 19th century as new world nations strove to achieve independence from Spain and, later, Portugal. The nature of the historical evolution of these nations had an immediate and powerful effect on the developing literature and other cultural forms, and the history of the region has continued to shape the cultural production of all Latin American countries. We will study and discuss, in the light of the region's particular history, the major literary forms: poetry, drama, essays, short stories, and novels. We will place special emphasis on the importance of the literature as the embodiment of a tradition of emergent, multicultural voices speaking through history.

N**ote(s):**

- Previously ENG 2282. Read more.

Theory Hours: 45

ENGL 2610 - American Literature I

3 credit hour(s)
Prerequisite: ENGL 1120 or department approval

This course surveys American literature from the colonial period to the mid-nineteenth century. This course provides students with the contexts and documents necessary to understand the origins of American Literature and the aesthetic, cultural, and ideological debates central to early American culture.

N**ote(s):**

- Previously ENG 2287. Read more.

Theory Hours: 45

ENGL 2620 - American Literature II

3 credit hour(s)
Prerequisite: ENGL 1120

This course surveys American literature from the mid-nineteenth-century to the contemporary period. This course provides students with the contexts and documents necessary to understand American Literature and the aesthetic, cultural,and ideological debates central to American culture.

N**ote(s):**

- Typically offered Fall term only.
- Previously ENG 2288. Read more.

Theory Hours: 45

ENGL 2630 - British Literature I

3 credit hour(s)
Prerequisite: ENGL 1120

This course offers a study of British literature from its origins in Old English to the 18th century. This survey covers specific literary works — essays, short stories, novels, poems, and plays — as well as the social, cultural, and intellectual currents that influenced the literature.

N**ote(s):**

- Typically offered Fall term only.
- Previously ENG 2284. Read more.

Theory Hours: 45

ENGL 2640 - British Literature II

3 credit hour(s)
Prerequisite: ENGL 1120

This course offers a study of British literature from the 18th century to the present. This survey covers specific literary works — short stories, novels, poems, and plays — as well as the social, cultural, and intellectual currents that influenced the literature.

Note(s):

- Typically offered Spring term only.
- Previously ENG 2285. Read more.

Theory Hours: 45

ENGL 2650 - World Literature I

3 credit hour(s)
Prerequisite: ENGL 1120

In this course, students will read representative world masterpieces from ancient, medieval, and Renaissance literature. Students will broaden their understanding of literature and their knowledge of other cultures through exploration of how literature represents individuals, ideas and customs of world cultures. The course focuses strongly on examining the ways literature and culture intersect and define each other.

N**ote(s):**

- Previously ENG 2262. Read more.

Theory Hours: 45

ENGL 2660 - World Literature II

3 credit hour(s)
Prerequisite: ENGL 1120

In this course, students will read representative world masterpieces from the 1600s to the present. Students will broaden their understanding of literature and their knowledge of other cultures through exploration of how literature represents individuals, ideas and customs of world cultures. The course focuses strongly on examining the ways literature and culture intersect and define each other.

Note(s):

- Typically offered Spring term only.
- Previously ENG 2263. Read more.

Theory Hours: 45

ENGL 2996 - Topics in English

3 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously ENG 2096-2996. Read more.

ENGL 2998 - Internship in English
1-3 credit hour(s)

This course requires students work 45, 90, or 135 hours, depending on the internship placement. The internship will serve as an applied learning experience by observing, analyzing and participating in a related workplace.

N**ote(s):**

- Previously ENG 2298.

English as a Second Language

ESL 0101 - High Beginning 1
0 credit hour(s)

ESL 0101 covers identifying names, numbers, and countries of origin. Students will also use greetings, exchange personal information and describe location.

N**ote(s):**

- Students are placed into each class based on their TABE test scores.

ESL 0102 - High Beginning 2
0 credit hour(s)

ESL 0102 covers describing actions and talking about family members. Students will also describe health problems and suggest remedies and express sympathy.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0103 - High Beginning 3
0 credit hour(s)

ESL 0103 covers describing location, giving directions, asking for directions and confirming by repetition. Students will also describe habitual activities, ask for and give information about dates and time.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0104 - High Beginning 4
0 credit hour(s)

ESL 0104 covers asking and quantity, reading prices, and asking for the location of things. Students will also identify past and present jobs and describe skills.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0105 - High Beginning 5
0 credit hour(s)

ESL 0105 covers describing past actions, discussing chores, and expressing appreciation. Students will also describe future actions and discuss plans.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0106 - High Beginning 6
0 credit hour(s)

ESL 0106 focuses on a review of grammar in the context of college and career readiness. Students will review simple present, simple past, and the present continuous tenses, subject and object pronouns, prepositions, and Wh-questions.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0201 - Low Intermediate 1
0 credit hour(s)

ESL 0201 covers describing people, clothing, habitual actions, and actions in the present. Students will also offer advice and describe wants and future plans.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0202 - Low Intermediate 2
0 credit hour(s)

ESL 0202 covers describing past actions and daily activities. Students will also identify appropriate action after an accident, ask for and give advice, express necessity and show understanding.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0203 - Low Intermediate 3
0 credit hour(s)

ESL 0203 covers identifying methods of transportation, describing number of times and length of time. Students will also describe major events from the past and inquire about life events.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0204 - Low Intermediate 4
0 credit hour(s)

ESL 0204 covers comparing prices and quality, comparing two things, and comparing three or more things. Students will also identify job duties and describe their work history.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0205 - Low Intermediate 5
0 credit hour(s)

ESL 0205 covers asking for recommendations, requesting help politely, agreeing to a request and refusing a request

politely. Students will also make offers politely and respond to offers politely.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0206 - Low Intermediate 6
0 credit hour(s)

ESL 0206 focuses on a review of grammar in the context of college and career readiness. Students will review simple present and past tenses, question formation, time phrases, superlatives and comparatives, and modals.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 250 - ESL Literacy
0 credit hour(s)

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 0301 - High Intermediate 1
0 credit hour(s)

ESL 0301 covers describing and comparing likes, interests, and personality types. Students will also discuss learning strategies, offer advice, and inquire about people's experiences.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0302 - High Intermediate 2
0 credit hour(s)

ESL 0302 covers offering help, agreeing and disagreeing, giving reasons, and making a complaint. Student will also discuss healthy habits and describe events in recent past.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0303 - High Intermediate 3
0 credit hour(s)

ESL 0303 covers discussing future plans, describing actions based on expectations, and describe community events. Students will also prioritize tasks, discuss how to manage time, and give advice.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0304 - High Intermediate 4
0 credit hour(s)

ESL 0304 covers making suggestions, asking for advice, discussing financial concerns, and comparing banking services. Students will also discuss work-related goals, discuss ways to find a job, and identify procedures involved in a job interview.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0305 - High Intermediate 5
0 credit hour(s)

ESL 0305 covers describing past activities and past events. Students will also describe future possibility and describe a sequence of events in the future.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0306 - High Intermediate 6
0 credit hour(s)

ESL 0306 focuses on a review of grammar in the context of college and career readiness. Students will review present perfect, comparisons, verbs with infinitives and gerunds, continuous tenses, and conditionals.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0401 - Low Advanced 1
0 credit hour(s)

ESL 0401 covers describing personal strengths, expressing opinions, and expressing agreement and disagreement. Students will also inquire about educational opportunities, describe educational goals. and describe successful people.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0402 - Low Advanced 2
0 credit hour(s)

ESL 0402 covers discussing inappropriate behaviors at home and school and using polite forms of language. Students will also discuss stress, express necessity, and lack of necessity, make suggestions, and express past regrets.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0403 - Low Advanced 3
0 credit hour(s)

ESL 0403 covers describing volunteer responsibilities, describing a sequence of events, and describing repeated actions in the past and present. Students will also express agreement and disagreement and will give opinions and reasons.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0404 - Low Advanced 4

0 credit hour(s)

ESL 0404 covers explaining problems with a purchase, discussing preferences, explaining mistakes, and asking for information about store policies. Students will also give advice, make suggestions, explain job responsibilities, and describe the duration of an activity.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0405 - Low Advanced 5

0 credit hour(s)

ESL 0405 covers describing environmental issues and concerns, giving advice, making suggestions, describing actions one can take. Students will also describe future possibility, describe actions based on experience, express hopes and wishes, and compare customs and celebrations.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 0406 - Low Advanced 6

0 credit hour(s)

ESL 0406 focuses on a review of grammar in the context of college and career readiness. Students will review passive voice, indirect questions, reported speech, modals, adjective clauses, perfect continuous tenses, and contrasting conditionals.

N**ote(s):**

- Students are placed into the class based on their TABE test scores.

ESL 500 - Integrated ESL

0 credit hour(s)

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 505 - ESL Learning Center

0 credit hour(s)

Includes individualized study and tutoring in English language skills with access to computer, video and audio programs as well as other instructional materials in the Adult Education Learning Center at Main Campus or Montoya Campus.

ESL 600 - Citizenship

0 credit hour(s)

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.

English for Speakers of Other Languages

ESOL 0196-0996 - Special Topics

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

ESOL 1001 - Academic and Workplace Communication for Specific Purposes

3 credit hour(s)

Prerequisite: Reading and Writing Skills 1
This course provides non-native English speakers with opportunities to develop listening and speaking skills in the context of a specific industry and/or for academic success. Students use industry or academic field-specific terminology to practice pronunciation, intonation and public speaking skills. Short lectures from native speakers in the specific industry or academic field provide the cultural context for the course.

Theory Hours: 45

ESOL 1010 - Reading and Vocabulary for Specific Purposes

3 credit hour(s)

Prerequisite: Reading and Writing Skills 1
This course for nonnative English speakers focuses on the development and application of a variety of reading strategies to comprehend advanced authentic texts, documents, and materials relevant to students' academic and/or professional needs. Students learn and practice critical reading and thinking skills and focus on building academic and/or industry-specific vocabulary to expand their lexical repertoires.

Theory Hours: 45

ESOL 1020 - English Composition and Grammar for Specific Purposes

4 credit hour(s)

Prerequisite: Reading and Writing Skills 1

This course provides nonnative English speakers with an opportunity to practice grammar in the context of industry-specific writing tasks. Students analyze the grammatical components of advanced texts while generating writing of their own based on occupational performance requirements and industry standards.

Theory Hours: 60

ESOL 1030 - U.S. Culture and Contemporary Issues for Specific Purposes

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

This course for nonnative English speakers focuses on U.S. cultural norms, behaviors, and expectations as they relate to professional and interpersonal communication. Students develop their English language skills to communicate more effectively in multi-cultural environments. Emphasis is placed on contemporary issues as the context for improving English fluency and confidence.

Theory Hours: 45

ESOL 1096-1996 - Special Topics

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

ESOL 1110 - Composition I for English Learners

3 credit hour(s)
Prerequisite: TABE Clas-E forms C/D Reading Test Score of 488 (ESL 6)

This course is designed for non-native English speakers and provides targeted support to help students develop college-level reading and writing skills. Students will read, write, and think critically about a variety of issues and texts, with a focus on strengthening their English proficiency alongside their academic writing. The course emphasizes the analysis of rhetorical situations, including audience, purpose, and context, and the application of this knowledge to reading and writing. Students will also practice integrating writing with other modes of communication for rhetorical purposes. Through personalized support and instruction, students will learn to reflect on their writing processes, workshop drafts, and apply effective techniques for writing, revising, and editing.

Theory Hours: 45

ESOL 1120 - Composition II for English Learners

3 credit hour(s)
Prerequisite: ESOL 1110 or ENGL 1110 or ENGL 1110P

This course is designed for non-native English speakers who have completed ESOL 1110 or equivalent coursework. It provides advanced instruction in academic research and writing, focusing on developing argumentation skills across multiple genres. Students will enhance their reading, writing, and research practices by analyzing rhetorical situations, including audience, purpose, and context, with targeted language support to meet the needs of English learners. Emphasis will be placed on integrating secondary sources into written arguments, evaluating the credibility and relevance of sources, and applying ethical research practices. The course offers personalized guidance to strengthen students' ability to engage in effective research and communicate their findings in an academic context.

Theory Hours: 45

ESOL 1210 - Vocabulary and Discourse in Creative and Fine Arts

1 credit hour(s)
Prerequisite: TABE Clas-E forms C/D Reading Test Score of 488 (ESL 6)
Pre- or corequisite: Creative and Fine Arts Requirement

This course provides non-native English speakers with targeted support in vocabulary and discourse related to the Creative and Fine Arts. The course focuses on discipline-specific language, terminology, and concepts to help students develop competency in analyzing artistic representation. Students will enhance their English proficiency through discussions, readings, and projects that reinforce key artistic ideas, terminology, and modes of expression. Emphasis is placed on improving communication skills in a creative academic context.

Lab Hours: 45

ESOL 1220 - Vocabulary and Discourse in Humanities

1 credit hour(s)
Prerequisite: TABE Clas-E forms C/D Reading Test Score of 488 (ESL 6)
Pre- or corequisite: Humanities Requirement

This course provides non-native English speakers with targeted support in vocabulary and discourse related to the Humanities. The course focuses on discipline-specific language, terminology, and concepts to help students develop competency in understanding and interpreting human culture and thought. Students will enhance their English proficiency through discussions, readings, and projects that reinforce key ideas, terminology, and modes of critical thinking in the Humanities. Emphasis is placed on improving communication skills in a humanities-focused academic context.

Lab Hours: 45

ESOL 1230 - Vocabulary and Discourse in Mathematics

1 credit hour(s)
Prerequisite: TABE Clas-E forms C/D Reading Test Score of 488 (ESL 6)
Pre- or corequisite: Mathematics Requirement

This course provides non-native English speakers with targeted support in vocabulary and discourse related to Mathematics. The course focuses on discipline-specific language, terminology, and concepts to help students develop competency in mathematical reasoning and communication. Students will enhance their English proficiency through problem-solving, discussions, and projects that reinforce key mathematical ideas, terminology, and processes. Emphasis is placed on improving communication skills in a mathematical academic context.

Lab Hours: 45

ESOL 1240 - Vocabulary and Discourse in Communications

1 credit hour(s)
Prerequisite: TABE Clas-E forms C/D Reading Test Score of 488 (ESL 6)
Pre- or corequisite: Communications Requirement

This course provides non-native English speakers with targeted support in vocabulary and discourse related to Communications. The course focuses on discipline-specific language, terminology, and concepts to help students develop competency in communication strategies and theory. Students will enhance their English proficiency through discussions, presentations, and projects that reinforce key communication concepts, terminology, and methods of interaction. Emphasis is placed on improving communication skills in both interpersonal and public communication contexts.

Lab Hours: 45

ESOL 1250 - Vocabulary and Discourse in Laboratory Science

1 credit hour(s)
Prerequisite: TABE Clas-E forms C/D Reading Test Score of 488 (ESL 6)
Pre- or corequisite: Laboratory Science Requirement

This course provides non-native English speakers with targeted support in vocabulary and discourse related to Laboratory Science. The course focuses on discipline-specific language, terminology, and concepts to help students develop competency in scientific inquiry and laboratory procedures. Students will enhance their English proficiency through discussions, lab exercises, and projects that reinforce key scientific ideas, terminology, and methods. Emphasis is placed on improving communication skills in a scientific academic context.

Lab Hours: 45

ESOL 1260 - Vocabulary and Discourse in Social and Behavioral Science

1 credit hour(s)
Prerequisite: TABE Clas-E forms C/D Reading Test Score of 488 (ESL 6)
Pre- or corequisite: Social and Behavioral Science Requirement

This course provides non-native English speakers with targeted support in vocabulary and discourse related to Social and Behavioral Science. The course focuses on discipline-specific language, terminology, and concepts to help students develop competency in analyzing social phenomena and behavioral patterns. Students will enhance their English proficiency through discussions, readings, and projects that reinforce key ideas, terminology, and methods in the Social and Behavioral Sciences. Emphasis is placed on improving communication skills in a social science academic context.

Lab Hours: 45

ESOL 2096-2996 - Special Topics

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

Entrepreneurship

ENTR 1110 - Entrepreneurship

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Introduces students to the concept of entrepreneurship and to the process of business startups.

N**ote(s):**

- Previously BA 1105. Read more.

Theory Hours: 45

ENTR 2110 - Small Business Management

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course is designed to acquaint the student with the opportunities encountered in the management and operations of a small business enterprise.

Note(s):

- Previously BA 2105. Read more.

Theory Hours: 45

Environmental Science

ENVS 1110 - Environmental Science I

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 4

Introduction to environmental science as related to the protection, remediation, and sustainability of land, air, water, and food resources. Emphasis on the use of the scientific method and critical thinking skills in understanding environmental issues.

Theory Hours: 45

ENVS 1110L - Environmental Science I Lab

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 4
Pre- or corequisite: ENVS 1110

Covers general principles and theory related to environmental science and management. Focal areas for the course include: water management, climate, pollution, and waste management. Students taking this course will come away with a basic understanding of the main issues faced by technicians and managers of environmental science departments.

Lab Hours: 45

ENVS 1210 - Field Methods in Environmental Science

4 credit hour(s)
Prerequisite: ENVS 1110 + ENVS 1110L

An applied course in the methodologies commonly employed by environmental managers for sampling, mitigation evaluation, and planning. Students will come away with a solid foundation in applied management techniques for air, water, solid waste, climate, and mineralogical/geological resources management.

Theory Hours: 60

Exercise Science

EXSC 1160 - IM Group Exercise

2 credit hour(s)
Prerequisite: Math Skills 2 Alg + Reading and Writing Skills 2

This course covers the theoretical bases underlying physical fitness and instruction techniques for fitness development in group classes. Emphasis is on hands-on learning of methods for leading a group exercise class, including visual and auditory cues, dance routines and patterns. Students learn to design and teach fitness classes in bench step, aerobics, kickboxing, resistance training and core strengthening. This class also covers adherence and motivation to exercise. Current trends in exercise class modes and formats are examined. Safety and injury prevention are emphasized.

Note(s):

- Previously FITT 1210. Read more.

Theory Hours: 15
Lab Hours: 45

EXSC 1180 - IM Training Techniques Review

2 credit hour(s)
Prerequisite: EXSC 1160

This course reviews essential personal training and group fitness techniques relevant to national personal training certification exams and practical application. Topics include postural alignment, biomechanics, proper spotting techniques, and exercise recommendations/modification.

Note(s):

- Previously FITT 2410. Read more.

Theory Hours: 15
Lab Hours: 45

EXSC 2110 - Exercise Physiology

3 credit hour(s)
Pre- or corequisite: BIOL 1130 + BIOL 1130L

A survey of scientific principles, methodologies, and research as applied to exercise and physical fitness. The emphasis is on physiological responses and adaptations to exercise. Basic elements of anatomy and physiology are also included.

Note(s):

- Previously FITT 1010. Read more.

Theory Hours: 30
Lab Hours: 45

EXSC 2120 - Structural Kinesiology

3 credit hour(s)
Pre- or corequisite: EXSC 2110

Students learn about anatomy, kinesiology and biomechanics as they relate to sport and exercise. Special attention is focused on the practical implications of human movement and how they relate to developing scientifically based exercise programs.

Note(s):

- Previously FITT 1072. Read more.

Theory Hours: 30
Lab Hours: 45

EXSC 2150 - Prevention and Care Exercise Injury

3 credit hour(s)
Prerequisite: EXSC 2110 + EXSC 2120

Methods for the injury-prevention design of exercise settings and exercise programs. Students explore the use of physical conditioning techniques to prevent injury and discuss current exercise fads and myths that promote injury. The course presents methods for injury recognition and evaluation, the on-site care of exercise injuries, and emergency procedures. May be taken twice for degree or certificate credit. Must have certifications in CPR and first aid.

Note(s):

- Previously FITT 2610. Read more.

Theory Hours: 45

EXSC 2160 - Fitness & Exercise Testing

3 credit hour(s)
Prerequisite: Math Skills 2 Alg

Techniques for conducting safe and sound physical fitness assessments. Tests for assessing cardiorespiratory fitness, muscular strength, power and endurance, flexibility, body composition, functional fitness and pulmonary capacity are included. Metabolic calculations and conversations are explained, as well as safety guidelines and equipment use and maintenance.

Note(s):

- Previously FITT 1572. Read more.

Theory Hours: 30
Lab Hours: 45

EXSC 2990 - Practicum

3 credit hour(s)
Prerequisite: EXSC 2160

Varies.

Note(s):

- Previously FITT 2190. Read more.

Practicum Hours: 135

Film

FDMA 1525 - Introduction to Filmmaking

2 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

An introduction to the study and practice of filmmaking. Students will study the formal elements of film through close-reading of significant short films and relevant excerpts from feature-length films. Introductory study is enriched through the applied practice of hands-on filmmaking exercises.

Note(s):

- Previously FILM 1002. Read more.

Theory Hours: 15
Lab Hours: 45

FDMA 1150 - Introduction to Film Technology

3 credit hour(s)

Pre- or corequisite: FDMA 2120 + FDMA 1650 + FDMA 1620

Introduction to film technology trades.

Note(s):

- Previously FILM 1003. Read more.

Theory Hours: 30
Lab Hours: 45

FDMA 1280 - Shooting Your Story

3 credit hour(s)

This three-credit online class covers basic filmmaking shot composition and story development for different movie genres. Using straightforward technologies, students will explore the essential movie-making elements: lighting, sound, and set decoration, that support the camera department as they develop their own visual story.

Note(s):

- Previously FILM 1004. Read more.

Theory Hours: 30
Lab Hours: 45

FDMA 1650 - Short Film Production

4 credit hour(s)
Pre- or corequisite: FDMA 2120 + FDMA 1150 + FDMA 1620

Short Film Production is a comprehensive course in short film production. Students will prepare for preproduction, write, cast, rehearse, shoot, and edit their own short film throughout the course. Students will demonstrate their understanding of short film production.

Note(s):

- Previously FILM 1015. Read more.

Theory Hours: 45
Lab Hours: 45

FILM 1096-1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

FDMA 1620 - Location Shooting

4 credit hour(s)
Pre- or corequisite: FDMA 2120 + FDMA 1150 + FDMA 1650

Issues of coverage and composition for short-form independent location filmmaking with special attention to considerations of post-production. Basic camera usage on location; basic storytelling; assessing/utilizing locations for set, light and sound sources; basic editing and DVD authoring.

Note(s):

- Previously FILM 1110. Read more.

Theory Hours: 45
Lab Hours: 45

FDMA 2860 - Business of Film

3 credit hour(s)

A study of the business of filmmaking focusing on how to produce an independent film. Students explore budgeting and script breakdown, setting up a Limited Liability Corporation (LLC), taxes, roll-out plans, union and non-union productions, contracts, deal memos and general entertainment law. This course also covers filming permits, production insurance and production agreements.

Note(s):

- Previously FILM 1210. Read more.

Theory Hours: 30
Lab Hours: 45

FDMA 2144 - Pre-Production Management

4 credit hour(s)
Pre- or corequisite: FDMA 2135 + FDMA 2140

Pre-production planning paperwork breakdowns, budgeting, and scheduling; taking a project from start to finish from a producer's standpoint.

Note(s):

- Previously FILM 1220. Read more.

Theory Hours: 45
Lab Hours: 45

FDMA 2135 - Film Crew IV

4 credit hour(s)
Pre- or corequisite: FDMA 2144 + FDMA 2140

The first of two courses that span a full academic year. In FILM CREW IV students who have been accepted will produce and direct their film and/or media project Students will work with instructors during this process and have access to equipment, technology and student crew members to complete their production. Students must have completed their pre-production for their project and have followed the submission guidelines published by the college before taking this class.

Note(s):

- Previously FILM 1230. Read more.

Theory Hours: 45
Lab Hours: 45

FDMA 2140 - Film Crew V

3 credit hour(s)
Pre- or corequisite: FDMA 2144 + FDMA 2135

The second of two courses that span a full academic year. In FILM CREW V students who have been accepted will complete the post-production process for their film and/or media project. Students will work with mentors during this process and have access to equipment, technology and student crew members to complete their production. Students will have a deadline for completion set by the instructors. Upon completion all students must participate in the college's end of the year screening program as well as submit to four film festivals statewide.

Note(s):

- Previously FILM 1240. Read more.

Theory Hours: 30
Lab Hours: 45

FDMA 2381 - Storyboarding

2 credit hour(s)
Prerequisite: FDMA 1620
Pre- or corequisite: FDMA 2215 + FDMA 1550 + FDMA 1410 + FDMA 1994

Examines effective writing principles to create storyboards that communicate the overall picture of a project, timing, scene complexity, emotion and resource requirements. Further, the purpose of this course is to introduce students to the principles of visual storytelling—in film--through the use of the storyboard. In other words, to show how storyboards are a critical "architectural component" of the filmmaking process,

used as a blueprint (or guide) to communicate the complex elements of a film story.

Note(s):

- Previously FILM 1315. Read more.

Theory Hours: 15
Studio Hours: 30

FDMA 2215 - Digital Cinematography II

2 credit hour(s)
Pre- or corequisite: FDMA 2120 + FDMA 1150 + FDMA 1650 + FDMA 1620

Teaches professional skills for digital video motion photography. Students use professional camera, lighting, and grip equipment; develop digital acquisition workflow for post-production; work in small film crews; and apply professional cinema techniques to image acquisition.

Note(s):

- Previously FILM 1325. Read more.

Theory Hours: 15
Lab Hours: 45

FDMA 1550 - Introduction to Post-production Editing

3 credit hour(s)
Prerequisite: FDMA 2120

A comprehensive introduction to the basics of editing short films, documentaries and commercials. This is the second course of a comprehensive 2 Year Certificate in Film and Television Production.

Note(s):

- This course offers a Work Embedded Learning experience.
- Previously FILM 1335. Read more.

Theory Hours: 30
Lab Hours: 45

FDMA 1410 - Audio Production I

2 credit hour(s)
Prerequisite: FDMA 2120

Students will learn about and apply essential tools and techniques in analog and digital audio production. Topics include acoustic science, microphones, recording and mixing techniques, analog and digital audio hardware and software, including multi-track, computer-based recording and editing systems.

Note(s):

- Previously FILM 1345. Read more.

Theory Hours: 15
Lab Hours: 45

FDMA 1994 - Professional Portfolio

2 credit hour(s)
Pre- or corequisite: FDMA 2381 + FDMA 2215 + FDMA 1550 + FDMA 1410

A capstone course in which students will prepare a professional portfolio of their work and submit to critique by industry professionals. Basic skills related to networking, resume preparation, entrepreneurship and project management will also be stressed.

Note(s):

- Previously FILM 1390. Read more.

Theory Hours: 30

FDMA 2113 - Fabrication for Film

3 credit hour(s)
Prerequisite: FDMA 2120

Students will gain construction and fabrication skills utilized by film art departments including design, light construction, sculpture and prototyping, and will contribute to the design and fabrication of sets and costumes for student film projects.

Note(s):

- Previously FILM 2001. Read more.

Theory Hours: 30
Lab Hours: 45

FDMA 2610 - Directing I

3 credit hour(s)
Prerequisite: FDMA 2120 + FDMA 1150 + FDMA 1650 + FDMA 1620

Introduction to the creative process of a film director. Students will participate in hands-on workshops and develop stories for motion media, create screenplays and work with actors in short scenes using current technologies in film, television and web-based media production.

Note(s):

- Previously FILM 2002. Read more.

Theory Hours: 30
Lab Hours: 45

FDMA 2340 - Editing II

3 credit hour(s)
Pre- or corequisite: FDMA 1550 + FDMA 2120

A second level class in non-linear video editing. Training includes various non-linear software tools expanding on concepts learned in Editing I. Students will complete individual short editing projects. Students will provide their own removable hard drive.

Note(s):

- Previously FILM 2005. Read more.

Theory Hours: 30
Lab Hours: 45

FILM 2096-2996 - Special Topics

3 credit hour(s)
Prerequisite: Department approval

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

FDMA 2997 - Independent Study

1-12 credit hour(s)
Prerequisite: Department approval

Individual studies directed by consenting faculty with prior approval of department head.

Note(s):

- Previously FILM 2097. Read more.

FDMA 2165 - Film Crew Internship

1-12 credit hour(s)
Prerequisite: Department approval

Internship students work on various film projects from Hollywood films to independent feature to public service announcements. Student must complete 150 internship hours in the course of one semester. All students participating in the internship program must have a B or better in Film Crew Training I and complete a Production Assistant Workshop.

Note(s):

- Previously FILM 2098. Read more.Film and Digital Media Arts

FDMA 1110 - Film History

3 credit hour(s)
Pre- or corequisite: ENGL 1110 or ENGL 1110P

This course surveys the history of cinema - investigating the process by which the original "cinema of attractions" evolved into a globally dominant form of visual storytelling. We will explore the development of cinema both as an art form and as an industry, and consider the technological, economic, cultural factors, and key international movements that shape it.

N**ote(s):**

- Previously FILM 2010. Read more.

Theory Hours: 45

FDMA 1120 - Desktop Publishing I

3 credit hour(s)
Prerequisite: FDMA 1515

This course is designed to teach introductory skills for designing and creating publications and presentations with layout software. The course will focus on graphics and typographic design, fonts and other skills for print and web publishing.

N**ote(s):**

- Course taught in a computer lab
- Previously CIS 2310. Read more.

Theory Hours: 45
Lab Hours: 15

FDMA 1220 - Introduction to Digital Video Editing

3 credit hour(s)
Prerequisite: FDMA 1260
Recommended: FILM 1002

In this course, students learn the basics of the post-production process for non-linear video editing. Students work with multiple video formats and create short movies for multiple distribution platforms. Skills include media management and professional terminology.

N**ote(s):**

- Course taught in a computer lab
- Previously CIS 2360. Read more.

Theory Hours: 45
Lab Hours: 15

FDMA 1260 - Introduction to Digital Media

3 credit hour(s)
Pre- or corequisite: BCIS 1110 *

Explores concepts of how text, graphics, sound, images and video come together in a digital media program and researching new trends and current issues related to media applications and design. Students will be involved in teamwork, communication and workplace interaction simulation.

N**ote(s):**

- Course taught in a computer lab
- Previously CIS 1310. Read more.
- * Students should have basic computer knowledge and skills, including Windows operating systems, keyboarding, and file management.

Theory Hours: 45

FDMA 1515 - Introduction to Digital Image Editing-Photoshop

3 credit hour(s)
Prerequisite: BCIS 1110 *

In this course, students will learn how to use the tools in Adobe Photoshop to create new images and edit existing images. Tools used will include selections, layers, and adjustments, among other pixel editing tools. Basic composition and output will be emphasized in all projects.

N**ote(s):**

- Course taught in a computer lab
- Previously CIS 1330. Read more.
- * Students should have basic computer knowledge and skills, including Windows operating systems, keyboarding, and file management.

Theory Hours: 45
Lab Hours: 15

FDMA 1535 - Introduction to Illustrator

3 credit hour(s)
Recommended: BCIS 1110* + FDMA 1515

Students receive instruction on vector graphics creation using vector illustration software. The students will create professional-quality artwork for print publishing and multimedia graphics. Instruction includes creating and manipulating basic shapes, drawing with the pen tool, using various brushes, working with type and preparing graphics for web, print, and digital publication.

* Students should have basic computer knowledge and skills, including Windows operating systems, keyboarding and file management.

N**ote(s):**

- Course taught in a computer lab
- Previously CIS 2355. Read more.

Theory Hours: 45
Lab Hours: 15

FDMA 1540 - Introduction to Motion Graphics

3 credit hour(s)
Prerequisite: FDMA 1260

This course introduces students to digital animation using

Adobe After Effects. Students will use After Effects to create layers, compositions, typefaces, visual effects and rendering. Students will also design short animations of their own and will work through lessons and tutorials.

N**ote(s):**

- Course taught in a computer lab
- Previously CIS 2336. Read more.

Theory Hours: 45
Lab Hours: 15

FDMA 1630 - Principles of Design

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: BCIS 1110*

This course will explore how we see and use visuals to communicate information. Students will develop critical thinking skills in applying concepts of basic design principles. Students will apply the concepts with hands-on and analysis assignments. These concepts will then be applied to design for advertising, print, digital media and web design. The business of design will also be covered with emphasis on client relations and networking.

*Students should have basic computer knowledge and skills, including Windows operating systems, keyboarding and file management.

N**ote(s):**

- Course taught in computer lab
- Previously CIS 1325. Read more.

Theory Hours: 45

FDMA 1716 - 2D Animation and Sound

3 credit hour(s)
Recommended: BCIS 1110 *

Students will learn sound editing theory and practice including audio effects and restoration. Students will also learn 2D Animation basics including drawing, tracing and moving assets. Animating characters and text with motion tweening and masks.

N**ote(s):**

- Course taught in a computer lab
- Previously FDMA 1522. Read more.
- * Students should have basic computer knowledge and skills, including Windows operating systems, keyboarding, and file management.

Theory Hours: 45
Lab Hours: 15

FDMA 1996 - Topics

1-6 credit hour(s)

Specific titles to be announced in the Schedule of Classes.

Note(s):

- All courses ending in 96 are special topics. (See Schedule of Classes.)
- Previously FILM 1996. Read more.

FDMA 2120 - Film Crew I/ Introduction to Film and Media Workflow

3 credit hour(s)

An introduction to the film industry. This class teaches film production processes, film crew hierarchy, film production set-safety and etiquette and provides hands-on training in industry standard film production equipment. Students complete the semester by participating as a below-the-line crew member on a short film.

N**ote(s):**

- Previously FILM 1001. Read more.

Theory Hours: 45

FDMA 2287 - Digital Design Studio

3 credit hour(s)
Prerequisite: FDMA 1515 + FDMA 1535

A design studio environment in which students obtain real-world experience while providing service to college and non-profit associations with faculty supervision using a variety of media. Can be used with permission to fulfill cooperative requirement.

N**ote(s):**

- Course taught in a computer lab
- Previously CIS 2375. Read more.

Theory Hours: 45
Lab Hours: 15

FDMA 2325 - Advanced Photoshop

3 credit hour(s)
Prerequisite: FDMA 1515

This course expands on the Photoshop skill set to develop proficiency with selections, masking, channels, filters, color correction, painting tools, vector integration, video, special effects and compositing techniques. The focus is on the core image-editing tools of Photoshop that can be universally applied to photography, print, film or the web. The material is covered in production-oriented projects and students develop work suitable for portfolios.

N**ote(s):**

- Course taught in a computer lab
- Previously CIS 2381. Read more.

Theory Hours: 45
Lab Hours: 15

FDMA 2855 - Social Media Marketing Tools

3 credit hour(s)
Recommended: BCIS 1110

In today's rapidly-evolving media landscape, social media has not only become a fundamental tool for communication, but a must-have skill in a multitude of industries. With the right amount of practice and social media education, students and professionals are empowered with a competitive edge in their studies, careers and communications.

N**ote(s):**

- Course taught in a computer lab
- Previously CIS 2341. Read more.

Theory Hours: 45

FDMA 2996 - Special Topics

3 credit hour(s)
Prerequisite: Department approval

Specific topics to be announced in the Schedule of Classes.

Note(s):

- All courses ending in 96 are special topics. (See Schedule of Classes.)
- Previously FILM 2996. Read more.

FDMA 2997 - Independent Study

1-6 credit hour(s)
Prerequisite: Department approval

Independent Study

FDMA 2998 - Internship

1-4 credit hour(s)
Prerequisite: Department approval

In cooperation with local industry, the student works in an appropriate, definied, training program.

Fire Science

FS 1010 - Principles of Emergency Services

3 credit hour(s)

Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg
This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; life safety initiatives. This course meets the requirements set forth by the Fire and Emergency Services Higher Education (FESHE) Initiative.

Theory Hours: 45

FS 1015 - Physical Fitness for Firefighters

2 credit hour(s)

This course will provide firefighter cadets with the knowledge and practical skills necessary to become physically fit in preparation for becoming a firefighter. The class will include classroom curriculum which will be reinforced by practical exercise skills specific to firefighting. There is a focus on the essential components of public safety fitness to include, aerobics, muscular strength & endurance, core strength and stability and flexibility. In addition, students will learn about public safety wellness including basic nutritional needs, hydration and rest.

Lab Hours: 90

FS 1096-1996 - Special Topics

1-6 credit hour(s)
Prerequisite: Department approval

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

FS 1504 - Wildland Firefighting

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

Students will gain knowledge in wildland fire standards, techniques and suppression methods associated with various fuel types, weather and topography. In addition, students will also gain knowledge in fire line references and explore the techniques associated with wildland structural defense. Students will gain a working knowledge of fire behavior and fire control techniques needed to carry out assigned wildland fire tasks. Students successfully completing the course will receive S-130, S-190, I-100, and L-180 certificates recognized by the National Wildfire Coordination Group (NWCG).

Theory Hours: 45

FS 1512 - Building Construction for Fire Prevention

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. This course meets the requirements set forth by the Fire and Emergency Services Higher Education (FESHE) Initiative.

Theory Hours: 45

FS 1544 - Fire Service Instructor I

3 credit hour(s)

This 45 hour course is designed to train the student as outlined in NFPA 1041 Fire service Professional Qualifications. Course includes the opportunity to test for IFSAC Certification, It will teach instructors and trainers how to organize and teach a course effectively using existing lesson plans. Upon successful completion of this course, the student will be able to make an effective classroom presentation based on appropriate lesson plans.

Theory Hours: 45

FS 1610 - Principles of Fire and Emergency Services Safety and Survival

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services. This course meets the requirements set forth by the Fire and Emergency Services Higher Education (FESHE) Initiative.

Theory Hours: 45

FS 1817 - National Incident Management System

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course will provide students with an introduction to incident command system functions, and responsibilities. The course will include I-200, IS-700 and IS-800. I-200 will provide students with knowledge in incident management, organization development, incident facilities and common responsibilities. In addition, students will also complete the federally required IS-700 and IS-800 courses. This course is also considered "all - risk" training. A total of three nationally recognized certificates will be issued to students successfully meeting the requirements of the course. Students successfully completing the course will receive I-200, IS-700 and IS-800 certificates recognized by both the National Wildfire Coordination Group (NWCG) and the Federal Emergency Management Agency (FEMA).

Theory Hours: 45

FS 1820 - Hazardous Materials Awareness and Operations

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course is designed to train the student to the Hazardous Materials Awareness and Operations Level as outlined in:

NFPA 472 Standard for Competence of Responders to hazardous materials/Weapons of Mass destruction Incidents. NFPA 1072 Standard for Personnel Professional Qualification, and OSHA 29 CFR 1910.120. Course includes the opportunity to test for IFSAC Certification.

Theory Hours: 45

FS 2001 - Fire Protection Systems

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers. This course meets the requirements set forth by the Fire and Emergency Services Higher Education (FESHE) Initiative.

Theory Hours: 45

FS 2008 - Fire Protection Hydraulics and Water Supply

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course 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. This course meets the requirements set forth by the Fire and Emergency Services Higher Education (FESHE) Initiative.

Theory Hours: 45

FS 2096-2996 - Special Topics

1-6 credit hour(s)
Prerequisite: Department approval

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

FS 2215 - Firefighter I & II Theory

4 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg + department approval
Corequisite: FS 2292

This is the 60-hour theory portion of the Firefighter I & II course. The 90-hour lab portion is a required co-requisite. The combination of the two courses are designed to train the student as outlined in the National Fire Protection Association (NFPA) 1001, Standard Fire Fighter Professional Qualifications. These courses do include the state-mandated written and practical exams. Upon successful completion of both exams the student will be awarded a nationally recognized IFSAC & Proboard certificate.

N**ote(s):**

- To obtain department approval the student must provide proof of IFSAC Hazardous Materials Awareness and Operations Certification, and Current American Heart Association BLS CPR and First Aid, or Current NM EMS Licensure.

Theory Hours: 60

FS 2240 - Wildland Fire Ignition Operations

2 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg
Pre- or corequisite: FS 2815

This course introduces common firing devices and general firing operations and techniques. The course provides students with important information concerning general tasks required to be successful in firing operations. Finally, the course will prepare students with the skills necessary to participate in firing or prescribed fire operations. National Wildfire Coordination Group Certificates: S-234 Ignition Operations (if the student meets NWCG minimum requirements).

Theory Hours: 30

FS 2292 - Firefighter I & II Lab

2 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg + department approval
Corequisite: FS 2215

This is the 90-hour lab portion of the Firefighter I & II course. The 60-hour theory portion is a required co-requisite. The combination of the two courses are designed to train the student as outlined in the National Fire Protection Association (NFPA) 1001, Standard Fire Fighter Professional Qualifications. These courses do include the state-mandated written and practical exams. Upon successful completion of both exams the student will be awarded a nationally recognized IFSAC & Proboard certificate.

N**ote(s):**

- To obtain department approval the student must

provide proof of IFSAC Hazardous Materials Awareness and Operations Certification, and Current American Heart Association BLS CPR and First Aid, or Current NM EMS Licensure.

Lab Hours: 90

FS 2419 - Strategy and Tactics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course provides the principles of fire ground control through utilization of personnel, equipment, and extinguishing agents. This course meets the requirements set forth by the Fire and Emergency Services Higher Education (FESHE) Initiative.

Theory Hours: 45

FS 2422 - Fire Behavior and Combustion

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course explores the theories and fundamentals of how and why fires start, spread, and are controlled. This course meets the requirements set forth by the Fire and Emergency Services Higher Education (FESHE) Initiative.

Theory Hours: 45

FS 2530 - Fire Officer 1

3 credit hour(s)
Prerequisite: Department Approval

The objective of this course is to provide entry-level training in company operations and administration at the first-line supervisory level. Upon successful completion of this course the student will be able to find ways to effectively manage human resources; community public relations budgets, reports and planning.

N**ote(s):**

- In order to be eligible to sit for the Fire Officer I IFSAC examination, the student must provide proof of IFSAC Firefighter II and Fire Instructor I Certification.

Theory Hours: 45

FS 2625 - Fire Officer 2

3 credit hour(s)
Prerequisite: FS 2530 + department approval

Students must have a Fire Officer 1 ProBoard or IFSAC certificate in order to take Fire Officer 2
This course is structured for the fire officer who is ready to assume a leadership role by moving into the middle management level. This course gives the officer more knowledge of management and supervision so that he/she can make basic evaluations of employee relations and assume a proactive role in their department. This course expands on the knowledge base attained in Fire Officer I.

Theory Hours: 45

FS 2640 - Legal Aspects of Emergency Services

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course will address the Federal, State, and local laws that regulate emergency services and include a review of national standards, regulations, and consensus standards. This course meets the requirements set forth by the Fire and Emergency Services Higher Education (FESHE) Initiative.

Theory Hours: 45

FS 2814 - Fire Prevention

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course provides fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; fire and life safety education; and fire investigation. This course meets the requirements set forth by the Fire and Emergency Services Higher Education (FESHE) Initiative.

Theory Hours: 45

FS 2815 - Intermediate Wildland Fire Behavior

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg + FS 1504

This course is intended to develop the student's knowledge in wildland fire behavior. This course is based on skills designed to prepare the prospective fire line supervisor to undertake safe and effective fire management operations. Students successfully completing the course will receive one National Wildfire Coordination Group (NWCG) certificate: S-290 Intermediate Wildland Fire Behavior.

Theory Hours: 45

FS 2820 - Wildland Leadership

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg + FS 1504

This course will provide students with the tools necessary to gain skill to be an effective leader on the fireline. The course will also improve awareness of human performance issues on the fireline so that individual firefighters can integrate more effectively into teams/crews.

N**ote(s):**

- This course meets the general training needs of all positions for which an understanding of interagency incident business management is required. The Interagency Incident Business Management Handbook (PMS 902) is used as the primary job aid to supplement this course. It provides basic policy and direction for incident business management.
- Students must successfully pass the L-280 & S-260 exams with an 70% or better to receive NWCG recognized certificates.

Theory Hours: 45

FS 2825 - Wildland Fire Advanced Firefighter Development

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg + FS 1504

This course will prepare students with the skills and knowledge necessary to function as an entry level supervisor on the fire line. Students will gain detailed information pertaining to air operations, use of portable pumps, hose lays and will become proficient in the use of fire line reference materials. To successfully pass this course, students must participate in several competency based evaluations, exercises and Tactical Decision Games using Sand Table Exercises. Lab fees required for personal protective equipment. Students successfully completing the course will receive three National Wildfire Coordination Group (NWCG) certificates: S-270 Basic Air Operations, S-211 Water and Pumps and S-131 Advanced Firefighter.

Theory Hours: 45

FS 2830 - Wildland Urban Interface Awareness and Strategies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg + FS 1504

This course will provide students with the skills necessary to triage and safely engage wildland fires in the wildland urban interface. Students will learn the tools necessary to evaluate, protect, and assess unique hazards. This course will be taught as a hybrid course. In addition, students will meet several times during a semester to participate in Tactical Decision Games/Sand Table Exercises. National Wildfire Coordination Group Certification Standards: Students must be qualified as a Firefighter Type 1 to receive a certificate for this course.

Theory Hours: 45

FS 2997 - Independent Study

1-6 credit hour(s)
Prerequisite: Department approval

Focuses on a specific problem working with an instructor.

FS 2999 - Fire Science Capstone Course

1 credit hour(s)
Prerequisite: Department approval

Preparation of a professional portfolio that demonstrates student's mastery of technical and core competencies. (Taken during student's last term)

Theory Hours: 15

First-year Experience

CSE 2096-2996 - Special Topics

1-3 credit hour(s)

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

FYEX 1110 - First-Year Seminar

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

This course is designed to help students achieve greater success in college and in life. Students will learn many proven strategies for creating greater academic, professional, and personal success. Topics may include career exploration, time management, study and test-taking strategies to adapt to different learning environments, interpersonal relationships, wellness management, financial literacy, and campus and community resources.

Note(s):

- Previously CSE 1101. Read more.

Theory Hours: 45

Food Science and Technology

FSTE 2110 - Food Science I

4 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

The scientific study of the principles involved in the preparation and evaluation of foods.

Theory Hours: 45
Lab Hours: 45

French

FREN 1110 - French I

4 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or FYEX 1110

Intended for students with no previous exposure to French, this course develops basic listening, speaking, reading, and writings skills aiming toward the ACTFL novice-high level. This is an introductory course designed to teach the student to communicate in French in everyday situations and to develop an understanding of French and Francophone cultures through the identification of cultural products and practices, of cultural perspectives, and the ability to function at a survival level in an authentic cultural content. This course will also develop the student's sense of personal and social responsibility through the identification of social issues.

Note(s):

- Previously FREN 1101. Read more.

Theory Hours: 60

FREN 1120 - French II

4 credit hour(s)
Prerequisite: FREN 1110 or department approval

A continuation of French I, students will develop a broader foundation in skills gained during the first semester, including understanding, speaking, reading, and writing French aiming towards the ACTFL intermediate-low level. This course is designed to increase student fluency in French and Francophone products, practices, and perspectives, identifying common cultural patterns, describing basic cultural viewpoints, and further developing their sense of personal and social responsibility through the investigation of cultural issues.

Note(s):

- Previously FREN 1102. Read more.

Theory Hours: 60

FREN 1130 - French Conversation
3 credit hour(s)
Prerequisite: FREN 1120

Provides students with practice in speaking French at a beginning level. It is designed to give students basic conversational skills while reviewing previously studied structures and vocabulary. The main focus is to provide students with the confidence and language necessary to get along in French-speaking environment, as well as expose them, in a more in-depth way, to various aspects of Francophone culture.

N**ote(s):**

- Previously FREN 1103. Read more.

Theory Hours: 45

FREN 2110 - French III
4 credit hour(s)
Prerequisite: FREN 1120 or department approval

In this third semester course, students will continue to develop a broader foundation in skills gained during the first year, including understanding, speaking, reading and writing French aiming toward the ACTFL intermediate-mid level. This course is designed to teach the student to communicate in a more sustained way in areas of personal interest and in everyday situations. Students will engage in and analyze various French and Francophone products, practices, and perspectives, as well as continue to develop their sense of personal and social responsibility through comparison and contrast of cultural perspectives.

N**ote(s):**

- Previously FREN 2201. Read more.

Theory Hours: 60

FREN 2120 - French IV
4 credit hour(s)
Prerequisite: FREN 2110 or department approval

In this fourth semester course, students will continue to broaden and refine skills gained during previous semesters, including understanding, speaking, reading and writing French aiming at the ACTFL intermediate-high level. This course is designed to teach the student to communicate in a more sustained way in situations that go beyond the everyday. Students will evaluate various French and Francophone products, practices, and create ways to demonstrate their sense of personal and social responsibility through participation in cultural interaction.

Note(s):

- Previously FREN 2202. Read more.

Theory Hours: 60

FREN 2996 - Special Topics
3 credit hour(s)
Prerequisite: Varies

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously FREN 2096-2996. Read more.

Future Studies

FUTR 1110 - Introduction to Futures Studies
3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Introduces an interdisciplinary approach to thinking about and planning for futures. Includes basic concepts and methods for building scenarios of possible futures.

Theory Hours: 45

Gen Ed Computer

GECK 0500 - Computer Keyboarding
0 credit hour(s)

Computer Keyboarding provides instruction in computer skills and prepares students for the computer-based high school equivalency exams. Satisfactory completion is indicated by the ability to type 20 words per minute, send electronic messages, compose, edit and print within a word processing program, and operate within the Windows environment.

Gen Ed Language

GELA 0500 - Multi-level Language Arts
0 credit hour(s)

This course is for students preparing for the high school equivalency exams. Emphasis is placed on improving reading and writing skills while studying the content areas of social studies, science, literature, and technical/workplace subjects. Informational texts will be used for approximately 75% of this course, with equal time spent on social studies, science, and technical/workplace topics. A minor theme of literature will be included. A multi-level approach to teaching, accommodating students from 4th to 12th grade reading levels, will be taken as needed.

GELA 0550 - Language Arts I
0 credit hour(s)

This is a low intermediate level reading and writing course. It includes reading practice in constructing meaning from both life skills and prose selections, with an emphasis on vocabulary development. Also provides writing practice with a variety of language usage activities including mechanics, sentence formation, and paragraph development.

GELA 0750 - Language Arts II
0 credit hour(s)

Provides reading and writing instruction at the high intermediate level in preparation for the HSE exams. Introduces reading in science, social studies, and literature. Includes practice in comprehension, application, analysis, and synthesis. Writing includes the study of sentence and paragraph structure, usage, language mechanics, and organization. Introduces the HSE essay.

GELA 0950 - Language Arts III
0 credit hour(s)

This course is for students preparing for the high school

equivalency exam. Emphasis is placed on improving reading and writing skills while studying the content areas of social studies, science, literature, and technical/workplace subjects. Informational texts will be used for approximately 75% of this course, with equal time spent on social studies, science, and technical/workplace topics. A minor theme of literature will be included. Students will practice reading at or above the 9--12th grade levels during the term.

Gen Ed Math

GEMA 0450 - Math Fundamentals
0 credit hour(s)

Reviews the language and basic concepts of math as they relate to addition, subtraction, multiplication and division using whole numbers and decimals.

GEMA 0500 - Multi-level Math
0 credit hour(s)

Math review: number theory, word problems, fractions, decimals, percents, proportions, measurement, geometry introduction, algebra introduction, data analysis.

GEMA 0550 - Decimals, Fractions and Measurements
0 credit hour(s)

Covers low intermediate math concepts focusing on decimals, fractions, measurement applications, data analysis, basic geometry and some pre-algebra.

GEMA 0750 - Proportions, Percentages and Data Analysis
0 credit hour(s)

Presents high intermediate math concepts focusing on proportions, percentages, data analysis, basic geometry and algebra. Includes a thorough review of fractions and decimals.

GEMA 0950 - Basic Algebra and Geometry
0 credit hour(s)

This course introduces basic geometry, algebra, and measurement with emphasis on problem solving. Students prepare for the GED math test and for transition into other CNM programs. They also develop personal and job-related mathematical skills.

Gen Ed Science

GESC 0650 - General Education Science
0 credit hour(s)

This course is for students preparing for the science portion of the high school equivalency exam. Emphasis is placed on reasoning and critical thinking skills while studying the content area of science. Understanding and expressing scientific information in textual, graphic, and numeric formats will be emphasized. Students will practice locating, reading, and interpreting scientific information from a variety of sources.

Gen Ed Social Studies

GESS 0650 - General Education Social Studies
0 credit hour(s)

This course is for students preparing for high school equivalency exams. Emphasis is placed on improving reading and writing skills while studying in the content area of social studies. Students will practice reading at approximately 8-10th grade levels during the term.

Gen Educ Multi-Subject

GEMS 0500 - General Education Multi-Subject
0 credit hour(s)
Prerequisite: TABE test reading score 461-800

This is a multi-level, multi-subject course for students preparing for the high school equivalency exam. The course includes:

- Math review (number theory, word problems, fractions, decimals, percentages, proportions, measurement, geometry, algebra, data analysis)
- Communications skills (grammar and punctuation; sentence, paragraph, and writing)
- Reading comprehension (in science, social studies, math, and language arts)

General Education (non-credit)

GESL 0500 - Preparación en artes del lenguaje de equivalencia de escuela secundaria-superior en español
0 horas de crédito credit hour(s)
Prerequisite: Valid TABE or CASAS score

Este curso ayuda a los estudiantes a mejorar las habilidades básicas de artes del lenguaje en preparación para el examen de equivalencia de la escuela secundaria-superior en español. También se incluye un componente de inglés. Se pone énfasis en el razonamiento crítico y en las habilidades de resolución de problemas, y el curso se imparte en español. Las habilidades de lectura se enseñan a través de la literatura, los estudios sociales y las ciencias. Los estudiantes aprenden estrategias para encontrar la idea principal, sacar conclusiones y hacer inferencias. La instrucción de redacción procede desde la estructura de oraciones y párrafos hasta el desarrollo del ensayo. Se integran técnicas de gramática, puntuación y ortografía según sea necesario.

Theory Hours: 45

GESM 0500 - Preparación en matemáticas de HSE en español
0 credit hour(s)
Prerequisite: Valid TABE or CASAS score

Este curso ayuda a los estudiantes a mejorar sus habilidades matemáticas básicas en preparación para el examen de equivalencia de la escuela secundaria-superior en español. Se pone énfasis en el razonamiento crítico y en las habilidades de resolución de problemas, y el curso se imparte en español. Se utilizan problemas matemáticos redactados, así como tareas analíticas de lectura y de redacción que requieren razonamiento lógico. Las habilidades matemáticas se mejoran mediante el trabajo con números enteros, fracciones, decimales, porcentajes, razones y proporciones, álgebra, medidas y geometría.

Theory Hours: 45

IBEC 0550 - ESL for Bilingual ECED 1115 Health, Safety, and Nutrition

0 credit hour(s)
Prerequisite: Valid TABE or CASAS score
Corequisite: ECED 1115

Child Development develops English language skills needed to complete academic requirements and work in professional early childhood education positions. Language instruction is contextualized to the ECED class in which students are co-enrolled, and presented through project-based instruction, group work, short lessons, and individual assistance.

Theory Hours: 30

Geographic Information Systems

GIS 1002 - Fundamentals of Geospatial Technology

3 credit hour(s)

Introduction to the fundamentals of Geospatial Technology, including Geographic Information Systems (GIS), Global Positioning Systems (GPS), cartography, remote sensing, and spatial analysis Course content is based upon the United States Department of Labor's Geospatial Technology Competency Model for entry level geospatial occupations including Geospatial or GIS Technicians and Technologists.

Theory Hours: 30
Lab Hours: 45

GIS 1005 - CAD for Surveying and GIS

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Computer-aided drafting for civil engineering, surveying and land development to create and edit point data, parcel area computations and boundary information.

Theory Hours: 30
Lab Hours: 45

GIS 1008 - Land Information Systems

3 credit hour(s)
Pre- or corequisite: GIS 1118

This course introduces students to cadastral concepts including land surveys, deeds, survey plats and land record research. This course will also introduce students to the use of Geographic Information Systems software to manage and analyze cadastral data.

Theory Hours: 30
Lab Hours: 45

GIS 1096-1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

GIS 1118 - Geographic Information Systems I

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Introduces concepts of Geographic Information Systems including applications, components, mapping, data acquisition and data capture. Laboratory component consists of exercises clearly demonstrating a number of typical uses for Geographic Information Systems software. Emphasis on understanding general concepts and theories that can be carried over to any number of existing Geographic Information Systems software packages. Global positioning system hardware and software also introduced.

N**ote(s):**

- Previously GIS 1001

Theory Hours: 30
Lab Hours: 45

GIS 2008 - GPS Field Mapping

3 credit hour(s)
Pre- or corequisite: GIS 1118

Covers field mapping techniques for developing GIS databases. Concepts include satellite-based hardware and related concepts, data dictionary design and implementation, GPS data compilation and map production. Emphasis on mapping-grade applications.

Theory Hours: 30
Lab Hours: 45

GIS 2011 - Remote Sensing and Image Processing

3 credit hour(s)
Pre- or corequisite: GIS 1118

Introduces students to basic remote sensing concepts and explores the applications of current technology. Topics to be covered will include basic energy theory, photo interpretation, common image analysis techniques and algorithms, and image classification using GIS and remote sensing software.

Theory Hours: 30
Lab Hours: 45

GIS 2020 - Trends in Geospatial Technology

3 credit hour(s)
Pre- or corequisite: GIS 1118

Examines emerging trends in geospatial software applications such as open source, web applications and others. Students will apply technology in lab exercises using real-world data. Topics will vary by semester.

N**ote(s):**

- This course offers a Work Embedded Learning experience.

Theory Hours: 30
Lab Hours: 45

GIS 2030 - GIS Project Design

3 credit hour(s)
Pre- or corequisite: GIS 2228

Applies knowledge gained from previous courses to development and implementation of GIS projects. Project development will encompass the full range of procedural approaches from planning, data acquisition, analysis, output and presentation.

Theory Hours: 30
Lab Hours: 45

GIS 2096-2996 - Special Topics

1-7 credit hour(s)
Prerequisite: Department approval

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

GIS 2097 - Independent Study

1-7 credit hour(s)
Prerequisite: Department approval

Allows the student and instructor to define a specific problem in the area of the student's interest and directly related to the program. Then student develops and executes a solution using analytical techniques appropriate to the problem. An oral presentation may be required.

GIS 2098 - Internship

1-7 credit hour(s)
Prerequisite: Department approval

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 2228 - Geographic Information Systems II

3 credit hour(s)
Pre- or corequisite: GIS 1118

Builds upon concepts in GIS 1118, and introduces vector and raster analysis procedures commonly utilized in Geographic Information Systems.

N**ote(s):**

- Previously GIS 2001

Theory Hours: 30
Lab Hours: 45

GIS 2238 - Advanced Geographic Information Systems Techniques

3 credit hour(s)
Prerequisite: GIS 1118 or department approval

Builds on concepts introduced in GIS 1118 and introduces GIS applications emphasizing 3D visualization, network analysis, scripting and GIS database concepts.

N**ote(s):**

- Previously GIS 2007

Theory Hours: 30
Lab Hours: 45

Geography

GEOG 1110 - Physical Geography

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: GEOG 1110L*

This course introduces the physical elements of world geography through the study of climate and weather, vegetation, soils, plate tectonics, and the various types of landforms as well as the environmental cycles and the distributions of these components and their significance to humans.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- * It is strongly recommended that students take the lab course concurrently with the lecture. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.
- Previously GEOG 1101. Read more.

Theory Hours: 45

GEOG 1110L - Physical Geography Lab

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: GEOG 1110

This laboratory course introduces the physical elements of world geography and the study of climate and weather, vegetation, soils, plate tectonics, various landforms, the environmental cycles and the spatial distributions of these components through the use of maps, aerial photographs, and laboratory specimens. Students explore the earth's biophysical environment and learn to identify and describe the physical geographic patterns that exist across earth's surface and about the processes that help create these patterns.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously GEOG 1192. Read more.

Lab Hours: 45

GEOG 1120 - World Regional Geography

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Overview of the physical geography, natural resources, cultural landscapes, and current problems of the world's major regions. Students will also examine current events at a variety of geographic scales.

Note(s):

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously GEOG 2201. Read more.

Theory Hours: 45

GEOG 1130 - Human Geography

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course serves as an introduction to the study of human geography. Human geography examines the dynamic and often complex relationships that exist between people as members of particular cultural groups and the geographical "spaces" and "places" in which they exist over time and in the world today.

Note(s):

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously GEOG 1102. Read more.

Theory Hours: 45

GEOG 1140 - Human's Role in Changing the Face of the Earth

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course is a survey of social and scientific aspects of environmental issues related to the degradation of land, air, and water resources from global, regional and local perspectives.

Note(s):

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously GEOG 1950. Read more.

Theory Hours: 45

GEOG 1960 - Geography of Food

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course will explore the geographic culture of food and its reflection of societies around the world. We will cover the origins of the food we eat, its geographic role in human history, and its cultural importance in societies, as well as the effects of the environment on food, and the impact of our food on the environment. We will look at the state of our food, its production and availability in the world today, in the U.S. vs. the rest of the world, its relevance to the economy, its impact on the environment, its sustainability, and its effect on nutrition.

Note(s):

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.

Theory Hours: 45

GEOG 1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously GEOG 1096-1996. Read more.

GEOG 2110 - Introduction to Maps and Geospatial Information

3 credit hour(s)
Prerequisite: GEOG 1110 or GEOG 1130

This course covers the basic history of map-making and various projections and introduces basic concepts and techniques for the manipulation, analysis, and graphic representation of spatial information. The course also includes the processing, compilation, and symbolization of spatial data and the application of related statistical techniques.

Note(s):

- Previously GEOG 2275. Read more.

Theory Hours: 45

GEOG 2510 - Meteorology

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

An introduction to the composition of the Atmosphere, energy flows, and large-scale weather systems and climate processes. Radiation and climate, role of the oceans, greenhouse effect, atmospheric dynamics, global circulation, thunderstorms, hurricanes, mid-latitude weather systems, weather and climate forecasting. This course is designed to provide students with a fundamental understanding of basic meteorology, essential background for further studying changes in weather and climate. The topics to be discussed in this course include atmospheric structure, energy transfer, water balance, wind systems, global circulation, air pollution, climate and climate change. Lectures will be supplemented by discussions on live weather conditions and forecasting and severe weather events.

Theory Hours: 45

GEOG 2996 - Special Topics

1-6 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously GEOG 2096-2996. Read more.

Geology

GEOL 1110 - Physical Geology

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: GEOL 1110L*

Physical Geology is an introduction to our dynamic Earth introducing students to the materials that make up Earth (rocks and minerals) and the processes that create and modify the features of our planet. The course will help students learn how mountains are formed, how volcanoes erupt, where earthquakes occur, and how water, wind, and ice can shape the landscape. Students will also develop a basic understanding of the ways humans have altered the planet including our impact on natural resources and global climate change.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- * It is strongly recommended that students take the lab course concurrently with the lecture. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.
- Previously EPS 1101. Read more.

Theory Hours: 45

GEOL 1110L - Physical Geology Laboratory

1 credit hour(s)

Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: GEOL 1110

Physical Geology Lab is the laboratory component of Physical Geology. Students will learn to identify rocks and minerals in hand samples, work with topographic maps, geologic maps, and geologic cross-sections, and apply stratigraphic principles to explore geologic time.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously EPS 1192. Read more.

Lab Hours: 45

GEOL 1130 - Dinosaurs and Their World

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Dinosaurs and Their World is a survey of the fossil record, evolution, paleobiology and extinction of dinosaurs, and the animals with which they shared the Earth.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously EPS 1211. Read more.

Theory Hours: 45

GEOL 1996 - Special Topics

1-6 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously EPS 1096-1996. Read more.

GEOL 2110 - Historical Geology

3 credit hour(s)
Prerequisite: GEOL 1110 + GEOL 1110L
Recommended: GEOL 2110L*

This course reviews the major geological and biological processes and events over the Earth's 4.6-billion-year history. Students will learn about the formation of the Earth and its development through time including changes in the lithosphere, atmosphere, hydrosphere, and biosphere. The interrelationships between the physical aspects of Earth history and biological origins, evolution of species, and causes of extinctions will be explored.

N**ote(s):**

- * It is strongly recommended that students take the lab course concurrently with the lecture. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.
- Previously EPS 2201. Read more.
- Typically offered Spring semester only.

Theory Hours: 45

GEOL 2110L - Historical Geology Laboratory

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: GEOL 2110

Historical Geology Laboratory is the laboratory component of Historical Geology. This course applies geologic principles and techniques to reconstruct the history of Earth. Students will explore key concepts of geologic time and stratigraphy, identify fossils and use fossils to make stratigraphic correlations. Students will employ actualism to determine past depositional environments.

Note(s):

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously EPS 2292. Read more.
- Typically offered Spring semester only.

Lab Hours: 45

GEOL 2140 - Geology of New Mexico

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: GEOL 1110

This course is a tour of the geologic history and natural places of New Mexico. Students will explore the materials (rocks and minerals) that make up New Mexico and the processes that created and continue to shape our state. Students will learn about mountains, rivers and seas that have come and gone, and New Mexico's rich fossil heritage. Students will discover where and why volcanoes erupted, and where natural resources are found and extracted.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously EPS 2250. Read more.

Theory Hours: 45

Health

HLTH 1001 - Clinical Preparation

1 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Designed to prepare the School of Health, Wellness, and Public Safety student for the clinical experience in the health discipline the student has chosen to study. The course provides certification in BLS CPR for Healthcare Providers (valid for 2 years) and training in Bloodborne Pathogens, Infection Control, Hazard Communication, HIPAA, Fire Safety and Cultural Sensitivity (valid for 1 year).

N**ote(s):**

- This class prepares student for clinicals and work in acute care settings. This class does not include First Aid Certification. The majority of this class is completed online with an in person CPR testing requirement.

Theory Hours: 15

HLTH 1003 - CPR, First Aid & Safety

1 credit hour(s)

This 2-week course is designed to prepare students with no or limited medical background experience and serves as the initial introduction and training in the areas of: BLS CPR training for the Health Care Provider, Heartsaver First Aid, Bloodborne Pathogens, Infection Control, Health Information Privacy and Accountability Act (HIPAA), and Fire Safety. This class prepares students for clinicals and work in the community setting. This is a 1 (one) credit hour course and is financial aid eligible.

Theory Hours: 15

HLTH 1010 - Medical Ethics and Law

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course covers legal relationships of healthcare providers and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent, and medical-ethical issues. Emphasis is placed on making sound decisions when faced with ethical or legal dilemmas, legal terms, professional attitudes, and the principles and basic concepts of ethics and laws involved in providing medical services.

Theory Hours: 15

HLTH 1020 - Introduction to Healthcare Careers

3 credit hour(s)

This course is designed to familiarize students with the various careers in the medical field. Students will learn skills necessary for healthcare career pathways including: working with others, communication skills, legal and ethical responsibilities, cultural considerations in the healthcare industry, problem solving, decision making, accepting personal responsibility and self-management. Instructional delivery will engage students in hands-on, real-world activities.

Theory Hours: 45

HLTH 2990 - Health Services Management Practicum

1 credit hour(s)
Prerequisite: (HLTH 1001 or HLTH 1003) + HLTH 1010 + HLTH 1020 + HIT 1070 + BUSA 2220

Provides a simulated or clinical learning experience in a health care facility. The experience focuses on the practice of skills related to the laws and principles of health care, budget and finance in the healthcare setting, application of business and personnel management practices and organizational policies and procedures, technology, data management and reporting, medical record procedures, regulatory compliance, and monitoring of facilities, equipment and/or operational systems. This is an unpaid work experience with a minimum of 45 hours. Students work with the instructor on specific topics related to the program.

Practicum Hours: 45

Health Education

HLED 1130 - Concepts of Health & Wellness

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

Introduces the student to the "Seven Dimensions of Wellness" (physical, emotional, intellectual, interpersonal, spiritual, environmental, and financial). This course addresses topics including fitness, exercise, nutrition, stress management and chronic lifestyle-related diseases.

Note(s):

- Previously FITT 1120. Read more.

Theory Hours: 45

HLED 1160 - Stress Management

3 credit hour(s)
Prerequisite: EXSC 2110 + HLED 1130

Introduces students to the pathophysiology of stress. Emphasis will be placed on the detrimental effects of stress on the body, as well as on the impact of stress-eating on the body. A variety of stress management techniques will be explored to promote enhanced well-being.

Note(s):

- Previously FITT 2510. Read more.

Theory Hours: 45

HLED 1170 - Fitness Concepts for Special Populations

3 credit hour(s)
Pre- or corequisite: EXSC 2160

This course is designed to provide knowledge and skills needed to work with individuals with a variety of disabilities and the effects these disabilities have on their performance in physical education.

Note(s):

- Previously FITT 1575. Read more.

Theory Hours: 30
Lab Hours: 45

HLED 1225 - Weight Management and Exercise

3 credit hour(s)
Prerequisite: EXSC 2160

A class designed to assist in body fat loss through adequate nutrition, physical activity, and behavior modification. Emphasis is placed on developing an exercise routine for weight management using a step counter/pedometer. Healthy ways to increase lean body mass will be explored.

N**ote(s):**

- Previously FITT 2620. Read more.

Theory Hours: 45

Health Information Technology

HIT 1020 - Medical Terminology and Anatomy

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

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.

Theory Hours: 45

HIT 1030 - Health Data Content and Structure

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

Presents an overview of health care delivery and examines the role of various providers and disciplines throughout the continuum of health care services and the information system policies and procedures required by national health information initiatives. Emphasis is 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 divisions.

Theory Hours: 45

HIT 1060 - Health Information Management Systems

3 credit hour(s)
Prerequisite: BCIS 1110 + HIT 1030

Provides an introduction to the use of information technology in the health care delivery system and different computer applications found in health information divisions. Emphasis is placed on the use of tools and techniques for the development of higher-level content in database processing, information and communication technologies, systems analysis and data quality/integrity.

Theory Hours: 30
Lab Hours: 45

HIT 1070 - Legal/Ethical Aspects of Health Information

3 credit hour(s)
Pre- or corequisite: HIT 1030

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.

Theory Hours: 45

HIT 1096-1996 - Special Topics

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

HIT 2040 - Health Information Data Analysis

3 credit hour(s)
Prerequisite: HIT 1030 + HIT 1060 + MATH 1350

This course focuses on healthcare statistics, research and the practical application of health information concepts as they apply to health record systems and the healthcare industry; to include Institutional Review Board policies and processes, collection, retrieval and computation of hospital statistical data, as well as vital statistics and reportable diseases and conditions. This course recommends having basic knowledge of applying formulas, sorting data, formatting cells and managing spreadsheets to analyze and calculate data.

Theory Hours: 45

HIT 2050 - Health Information Supervision

3 credit hour(s)
Prerequisite: HIT 1030
Pre- or corequisite: HIT 1060

Focuses on basic management functions 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.

Theory Hours: 45

HIT 2096-2996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

Heating, Ventilating, Air Conditioning and Refrigeration

HVAC 1105 - Introduction to Fundamentals of Refrigeration

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Demonstrate the ability to perform HVAC/R Technician duties in a safe manner. Accurately perform HVAC/R related calculations and interpret results for the purpose of diagnosis, repair, or installation of HVAC/R equipment and systems. Professionally communicate in oral and written forms. Demonstrate the use of current industry techniques including tools, testing equipment, manufacturers' apps. Determine the appropriate ethical action that should occur in a given circumstance. Work effectively in a team-based environment. Possess a mastery of the refrigeration cycle and its components.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 15

HVAC 1110 - Basic Electricity

3 credit hour(s)
Pre- or corequisite: HVAC 1105 or department approval

Presents principles of electricity, measurements, safety, wiring procedures, schematics, components of basic circuits and principles and practices in electricity.

Theory Hours: 30
Lab Hours: 45

HVAC 1115 - Refrigeration Management

3 credit hour(s)
Pre- or corequisite: HVAC 1110

This course will stress the accepted practices and proper procedures to handle refrigerate materials. The course will educate the student in the proper procedures for safely conducting leak detection, evacuation, recovery and charging systems. Students will prepare for and take the Universal CFC Refrigerant Handlers Certification exam, which is required by the EPA. This certification is required to handle and service all types of refrigeration equipment containing and using refrigerants. Students must pass the exam with a 71% and be able to successfully perform evacuation, recovery, and charging of systems for Type 1, Type 2 and Type 3 procedures.

Theory Hours: 30
Lab Hours: 45

HVAC 1120 - Motors & Controls

3 credit hour(s)
Pre- or corequisite: HVAC 1115

Covers primary and control circuits in various applications, troubleshooting and components. Emphasizes attention to motors and starting devices.

Theory Hours: 30
Lab Hours: 45

HVAC 1130 - Code and Safety I

1 credit hour(s)

Investigates code requirements and safety practices related to refrigeration. Code and safety searches are an integral part of the course.

Theory Hours: 15

HVAC 1235 - AC AND CONTROLS

3 credit hour(s)
Pre- or corequisite: HVAC 1120

Covers installation, service and maintenance of air conditioning and heat pump systems.

Theory Hours: 15
Lab Hours: 90

HVAC 1240 - Air Flow Principles/Duct Design

4 credit hour(s)
Pre- or corequisite: HVAC 1235

Calculate and design duct systems for residential and commercial buildings. Determine indoor air quality and identify correct methods for providing quality air. Learn how to install a complete duct system and gas furnaces, air handlers, etc. Knowledge on different tools used for fabrication ductwork.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

HVAC 1245 - Gas Heating Furnaces

3 credit hour(s)
Pre- or corequisite: HVAC 1240

The study and application of gas furnaces including installation, operation, service, maintenance and controls. The students will learn about natural gas, and electric heating systems used for residential and/or light commercial heating systems including furnace and boiler package systems and alternative heating sources. Highlights electrical and electronic trouble shooting, service, maintenance, repair and replacement of residential and light commercial heating systems. The course will include service, maintenance and troubleshooting.

Theory Hours: 15
Lab Hours: 90

HVAC 1321 - ADV HYDR/CONTRLS I

3 credit hour(s)
Pre- or corequisite: HVAC 1245

Covers the types of hydronic systems, pumps and valves used in the industry; the sizing, selection and internal construction, disassembling, assembling and measurement of mechanical hydronic systems. Stresses pneumatic, electronic and electric control systems with computer interfacing.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

HVAC 1323 - WTR/STM GEN CON II

3 credit hour(s)
Pre- or corequisite: HVAC 1321

Covers types, design, construction of typical systems, sizing and controls of units. Covers advanced building controls using interfaced operating monitor equipment.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 30

HVAC 1325 - Chilled Water Systems

2 credit hour(s)
Pre- or corequisite: HVAC 1323 or department approval

Emphasizes commercial and industrial chilled water systems.

Theory Hours: 15
Lab Hours: 45

HVAC 1330 - Controls III

2 credit hour(s)
Pre- or corequisite: HVAC 1325 or department approval

Covers the operations and configurations of Building Automated Controls (BACs) for Heating, Ventilating, Air Conditioning and Refrigeration (HVAC/R) Energy Management. During the course students will apply theory, knowledge and techniques to actual projects using computer based BACs.

Theory Hours: 15
Lab Hours: 45

HVAC 1335 - CODE AND SAFETY II

1 credit hour(s)
Prerequisite: HVAC 1130 or department approval

Investigates code requirements and safety practices related to refrigeration. Code and safety searches are an integral part of this course.

Theory Hours: 15

HVAC 1405 - REFRIG APPLICATION

2 credit hour(s)
Pre- or corequisite: HVAC 1330 or department

approval

Covers system design, accessories, performance characteristics and problem diagnosis.

Theory Hours: 15
Lab Hours: 45

HVAC 1410 - Commercial Refrigeration Systems

2 credit hour(s)
Pre- or corequisite: HVAC 1405 or department approval

This course covers the installation, service, and maintenance of a wide range of refrigeration equipment, including reach-in and walk-in coolers, ice machines, ice cream machines, as well as mechanical and electrical troubleshooting of refrigeration systems. Encompassing the service and maintenance of commercial refrigeration equipment, which involves procedures for evacuation and charging, understanding electrical diagrams, and handling compressors and related accessories.

Theory Hours: 15
Lab Hours: 45

HVAC 1415 - INDUSTRIAL REFRIG

2 credit hour(s)
Pre- or corequisite: HVAC 1410 or department approval

Coverage of the fundamentals, design, installation, and operation of industrial refrigeration systems. Also examined in depth are: Multistate Systems--Commonly used in low-temperature systems. Compressors, Evaporators, and Condensers--Essential system components. Piping, Vessels, Valves and Refrigerant Controls.

Theory Hours: 15
Lab Hours: 45

HVAC 1420 - EN EFF GREN BLD I

3 credit hour(s)
Pre- or corequisite: HVAC 1415

This section covers the training needed for a standardize set of building performance procedures. During the course, students will apply theory, knowledge, and techniques to actual projects using duct blaster testing warm air equipment.

Theory Hours: 30
Lab Hours: 45

HVAC 1425 - EN EFF GREN BLD II

3 credit hour(s)
Pre- or corequisite: HVAC 1420 or department approval

Weatherization Training with Concentration on Building Performance. This section covers the Training needed for a standardize set of Building Performance Procedures. During the course, students will apply theory, knowledge, and techniques to actual projects using Blower Door testing equipment.

Theory Hours: 30
Lab Hours: 45

HVAC 1430 - EFFIC/GRN BLD CODE

1 credit hour(s)
Prerequisite: HVAC 1335
Pre- or corequisite: HVAC 1425

The study of Energy Efficiency & Green Building Code Compliance, Course will cover Federal, State, and local Green Building Codes.

Theory Hours: 15

HVAC 2098 - Heating, Ventilating, Air Conditioning and Refrigeration Internship

3 credit hour(s)

Prerequisite: Department Approval
Students will complete 135 hours of supervised training experience at an approved Heating, Ventilation, Air Conditioning and Refrigeration workplace.

Lab Hours: 135
Internship Hours: 135

HVAC 2297 - Independent Study

Variable credit hour(s)
Prerequisite: Department approval

Focuses on a specific problem while working with an instructor.

History

HIST 1103 - Introduction to Historical Study

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course introduces students to the dynamic nature of the field of history. Students will survey the various types of sources that historians rely on to reconstruct past events and will learn to apply historical thinking methods to interpret and write about past events.

Theory Hours: 45

HIST 1110 - United States History I

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

The primary objective of this course is to serve as an introduction to the history of the United States from the pre-colonial period to the immediate aftermath of the Civil War. The elements of this course are designed to inform students on the major events and trends that are essential in the understanding of the development of the United States within the context of world societies.

Note(s):

- HIST 1110 and HIST 1120 can be taken in any order (do not need to be taken sequentially).
- Previously HIST 1161. Read more.

Theory Hours: 45

HIST 1120 - United States History II

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

The primary objective of this course is to serve as an introduction to the history of the United States from Reconstruction to the present. The elements of this course are designed to inform students on the major

events and trends that are essential in the understanding of the development of the United States within the context of world societies.

Note(s):

- HIST 1120 and HIST 1110 can be taken in any order (do not need to be taken sequentially).
- Previously HIST 1162. Read more.

Theory Hours: 45

HIST 1150 - Western Civilization I

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

This course is a chronological treatment of the history of the western world from ancient times to the early modern era. The elements of this course are designed to inform students on the major events and trends that are essential in the understanding of the development of western civilization within the context of world societies. Selective attention will be given to "non-western" civilizations which impact and influence the development of "western" civilization.

Note(s):

- HIST 1150 and HIST 1160 may be taken in either order (do not need to be taken sequentially).
- Previously HIST 1101. Read more.

Theory Hours: 45

HIST 1160 - Western Civilization II

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

This course is a chronological treatment of the history of the western world from the early modern era to the present. The elements of this course are designed to inform students on the major events and trends that are essential in the understanding of the development of western civilization within the context of world societies. Selective attention will be given to "non-western" civilizations which impact and influence the development of "western" civilization.

Note(s):

- HIST 1160 and HIST 1150 may be taken in either order (do not need to be taken sequentially).
- Previously HIST 1102. Read more.

Theory Hours: 45

HIST 1170 - Survey of Early Latin America

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

The primary objective of this course is to serve as a survey of the history of Latin America from pre-Columbian times through independence. This course will explore the contributions of Indigenous peoples, Africans, and Europeans to the creation of Latin America's diverse societies. The elements of this course are designed to inform students on the major events and trends that are essential to the understanding of the history of Latin America within the context of world societies.

Note(s):

- HIST 1170 and HIST 1180 can be taken in any order (do not need to be taken sequentially).
- Previously HIST 1181. Read more.

Theory Hours: 45

HIST 1180 - Survey of Modern Latin America

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

The primary objective of this course is to serve as a survey of the history of Latin America from independence to the present. This course will explore the contributions of Indigenous peoples, Africans, and Europeans to the creation of Latin America's diverse societies. The elements of this course are designed to inform students on the major events and trends that are essential to the understanding of the history of Latin America within the context of world societies.

Note(s):

- HIST 1180 and HIST 1170 can be taken in any order (do not need to be taken sequentially).
- Previously HIST 1182. Read more.

Theory Hours: 45

HIST 2088 - History Specialty

1-12 credit hour(s)

This course is used to transfer approved courses from other colleges and universities.

HIST 2110 - Survey of New Mexico History

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

The primary objective of this course is to serve as an introduction to the history of New Mexico from the pre-Columbian times to the present day. The elements of this course are designed to inform students on the major events and trends that are essential in the understanding of the development of New Mexico within the context of the Americas.

Note(s):

- Previously HIST 2260. Read more.

Theory Hours: 45

HIST 2240 - History of Vietnam

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

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. involvement in Vietnam and changes in the culture, institutions and political thought of the U.S. during and after the war.

* This course requires writing critical essays utilizing multiple source materials.

Theory Hours: 45

HIST 2510 - Uses of History

3 credit hour(s)

Prerequisite: Students must have successfully completed at least 6 credit hours of HIST prior to Uses of History.

This class examines the various ways that historical events and issues are relevant in the current moment in terms of public discourse, literature, and politics.

Theory Hours: 45

HIST 2996 - Special Topics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

Presents various topics.

* This course requires writing critical essays utilizing multiple source materials.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously HIST 2096-2996. Read more.

HIST 2998 - Internship in History

1-3 credit hour(s)

This course requires students work 45, 90, or 135 hours, depending on the internship placement. The internship will serve as an applied learning experience by observing, analyzing and participating in a related workplace.

N**ote(s):**

- Previously HIST 2298.

Honors

GNHN 2096-2996 - Special Topics

3 credit hour(s)
Prerequisite: Department approval

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

HNRS 1120 - Honors: Legacy Seminar

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Surveys of major ideas basic to the intellectual, historical and artistic traditions of Western culture.

N**ote(s):**

- Specific course topic changes each term. For more information, see the Honors Program website.
- Previously GNHN 1021. Read more.

Theory Hours: 45

HNRS 2112 - Honors: Rhetoric and Discourse

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course is an interdisciplinary study of writing. People read to engage ideas. They read to inform decisions. Effective writers make ideas and information accessible. Students in this seminar learn the elements of effective writing.

N**ote(s):**

- Specific course topic changes each term. For more information, see the Honors Program website.

Theory Hours: 45

HNRS 2113 - Honors: Fine Arts as Global Perspective

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course introduces interdisciplinary perspectives on fine art fields such as visual arts, theater, architecture, dance and music. Its goal is to encourage understanding of the role of art in society and culture

N**ote(s):**

- Specific course topic changes each term. For more information, see the Honors Program website.

Theory Hours: 45

HNRS 2167 - Honors: Humanities in Society and Culture

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course introduces interdisciplinary perspectives on humanities fields such as literature, history, and philosophy as well as associated disciplines. Its goal is to encourage understanding of the role of the humanities in society and culture.

N**ote(s):**

- Previously GNHN 2205. Read more.
- Specific course topic changes each term. For more information, see the Honors Program website.

Theory Hours: 45

HNRS 2221 - Honors: Mathematics in the World

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course is an interdisciplinary and rigorous introduction to mathematical reasoning. Themed sections connect foundational ideas of mathematics, such as logic, systems of numbers, sequences and series, geometry, and probability to other aspects of human thought.

N**ote(s):**

- Specific course topic changes each term. For more information, see the Honors Program website.

Theory Hours: 45

HNRS 2331 - Honors: Science in the 21st Century

4 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course introduces principles from scientific fields such as biology, chemistry, physics, geology, and

astronomy. It will familiarize students with scientific inquiry and an understanding of the role of the sciences in society and culture.

N**ote(s):**

- Specific course topic changes each term. For more information, see the Honors Program website.

Theory Hours: 60

HNRS 2364 - Honors: The Individual and the Collective

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course is an interdisciplinary introduction to the social and behavioral sciences. Insight from multiple disciplines including psychology, anthropology, political science, sociology and economics will be used to critically analyze local, national, or global problems.

Note(s):

- Specific course topic changes each term. For more information, see the Honors Program website.

Theory Hours: 45

Hospitality and Tourism

HRTM 1120 - Introduction to Tourism

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg
Pre- or corequisite: BCIS 1110

Survey of travel and tourism development and operating characteristics.

N**ote(s):**

- Previously HT 1101. Read more.

Theory Hours: 45

HRTM 1130 - Introduction to Hospitality Management

3 credit hour(s)
Pre- or corequisite: CULN 1010 or CULN 1100 or HRTM 1120 or NUTR 1010 or department approval

Overview of the major segments of the hospitality industry, with a focus on basic management principles.

N**ote(s):**

- Previously HT 2201. Read more.

Theory Hours: 45

HRTM 1310 - Safety, Sanitation and Health in the Hospitality Industry

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

Addresses public health, HACCP, and food safety responsibilities in the hospitality industry. Sanitation certification test allows students to receive national ServSafe Food Protection Manager Certification.

N**ote(s):**

- Previously CULN 1003. Read more.

Theory Hours: 15

HT 1096-1996 - Special Topics

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

HT 1106 - Hotel Operations

3 credit hour(s)
Prerequisite: BCIS 1110
Pre- or corequisite: CULN 1100 or HRTM 1120

Presents management concepts and the interdependence of hotel operations ranging from the front office, security, and housekeeping management to facilities, revenue management and guest services.

Theory Hours: 45

HT 1111 - Guest Service Management

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Introduces concepts of guest service management, including identifying and exceeding needs of both employees and guests, service recovery, and conflict resolution.

N**ote(s):**

- HT 1111 and BEV 1160 replaced HT 1164 in the Fall 2016 term. Students who received credit for HT 1164 may not have to take HT 1111.See the program director or school advisor for more information.

Theory Hours: 15

HT 2096-2996 - Special Topics

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

HT 2097 - Independent Study

1-8 credit hour(s)
Prerequisite: Department approval

Student works with the instructor on specific topics directly related to the course or program of study. The meeting time is arranged between the student and the instructor.

HT 2141 - Marketing Services

3 credit hour(s)
Pre- or corequisite: CULN 1100 or HRTM 1120

Employs concepts to develop, implement and evaluate a marketing plan to identify and reach prospective customers using marketing tactics specific to hospitality services.

Theory Hours: 45

HT 2215 - Purchasing and Cost Controls

3 credit hour(s)
Prerequisite: HRTM 1120 or CULN 1100

Focuses on the development and implementation of an effective purchasing program involving issues such as supplier relations, supplier selection, negotiation and evaluation. The process of resource control and effective budgeting to reduce costs and maximize revenue is introduced.

Theory Hours: 45

HT 2225 - Gaming Operations and Management

3 credit hour(s)
Pre- or corequisite: CULN 1100 or HRTM 1120 or department 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.

Theory Hours: 45

HT 2230 - Restaurant Management

3 credit hour(s)
Prerequisite: HRTM 1120 or CULN 1100

Provides an overview of managerial functions for different types of food and beverage operations. Topics include concept and menu planning, facility design, equipment selection, marketing, staffing, and evaluating and incorporating current trends into operations.

N**ote(s):**

- Similar NM courses: SFCC CULA 251 Restaurant Concept to Operation, ENMU HRTM 410 Food Operations Management

Theory Hours: 45

HT 2232 - Event Planning

3 credit hour(s)
Pre- or corequisite: CULN 1100 or HRTM 1120 or department approval

An overview of event planning ranging from special events, festivals, meetings and weddings. Focus will be on design, planning and organization of events including marketing and volunteer management.

Theory Hours: 45

HT 2235 - Leadership and Management in the Hospitality Industry

3 credit hour(s)
Prerequisite: CULN 1100 or HRTM 1120 or department approval

Explores quality concepts and tools within the hospitality industry. High-performance team building, strategic career plans and managing organizational change are covered.

Theory Hours: 45

HT 2240 - Hospitality Law

3 credit hour(s)
Prerequisite: BEV 1160 or HRTM 1120

Focuses on the application of the law to the hospitality and tourism and allied industries, the rights and obligations of guests, and effectively managing legal issues faced by hospitality managers.

Theory Hours: 45

HT 2242 - Hotel Operations

3 credit hour(s)
Prerequisite: HRTM 1120

Presents management concepts and the interdependence of hotel operations ranging from the front office, security, and housekeeping management to facilities, revenue management and guest services.

N**ote(s):**

- Replaces HT 1106 Hotel Operations
- Similar NM courses: ENMU HRTM 320 Hospitality Facilities Management, NMSU 331 Hotel Operations, NNMC HRTM 135 Hotel Management

Theory Hours: 45

HT 2252 - Hospitality Sales and Revenue

3 credit hour(s)
Prerequisite: HRTM 1120

Introduces tools and techniques used in maximizing revenues in hotel and other hospitality operations. Explores the relationship between revenue management with effective sales and marketing strategies.

Theory Hours: 45

HT 2798 - Internship

1 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 45 hours in a new job experience in a hospitality environment. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously HT 2198

Internship Hours: 45

HT 2898 - Internship

2 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 90 hours in a new job experience in a hospitality environment. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously HT 2298

Internship Hours: 90

HT 2998 - Internship

3 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 135 hours in a new job experience in a hospitality environment. Students are supervised jointly by CNM and

the company.

N**ote(s):**

- Previously HT 2098

Lab Hours: 135
Internship Hours: 135

HT 2999 - Capstone Course

1 credit hour(s)
Prerequisite: Department Approval

Focuses on assessment of student learning outcomes for the Hospitality and Tourism program of study.

Theory Hours: 15

Human Services

HMSV 1140 - Professional Skills in Human Services I

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Provides knowledge and skill development related to entry level professional responsibilities and job performance in human service settings. Skills and knowledge include understanding professional, ethical, and effective use of self; developing basic interpersonal rapport building skills for working with coworkers and diverse populations; and information management, documentation, and organizational skills for appropriately developing and maintaining confidential materials.

Note(s):

- Previously HSV 1015. Read more.

Theory Hours: 45

HMSV 1150 - Motivational Interviewing

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Explores the techniques in motivational interviewing counseling skills applied to the area of substance abuse counseling. Motivational interviewing is an evidence-based treatment that addresses ambivalence to change through a person-focused approach.

N**ote(s):**

- Previously HSV 1103. Read more.

Theory Hours: 45

HMSV 1210 - Foundations of Substance Abuse Services

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents the history of addictive disorder identification and service provision for substance abuse, addiction, prevention, and treatment services. Topics will also include, current and emerging trends in service delivery and service integration, development of national governing bodies and ethical standards, development of the profession, and the socio-political forces affecting the development, delivery and accessibility of substance abuse services.

Note(s):

- Previously HSV 1010. Read more.

Theory Hours: 45

HMSV 1220 - Physiological and Pharmacological Foundations of Substance Abuse Counseling

3 credit hour(s)
Pre- or corequisite: HMSV 1210

Examines the pharmacological and physiological effects of alcohol and other psychoactive substances according to human developmental stages, neurobiology, severity of use, drug interactions and co-occurring disorders across populations. This includes factors associated with drug intake from use to recovery, licit and illicit use, methods of administration, drug symptomology, patient education, and illnesses associated with use.

Note(s):

- Previously HSV 1150. Read more.

Theory Hours: 45

HMSV 2120 - Clinical Evaluation of Substance Abuse and Treatment

3 credit hour(s)
Pre- or corequisite: HMSV 1210

This course examines the principles and practice of clinical evaluation in substance abuse treatment and counseling, and presents a study of symptoms and manifestations of substance abuse as they relate to client evaluation, assessment, treatment, and referral. Students will gain an understanding of comprehensive assessment strategies, assessment in relation to diagnosis, the diagnostic classification system, and develop skills for using valid screening and diagnostic instruments.

N**ote(s):**

- Previously HSV 2110. Read more.

Theory Hours: 45

HMSV 2240 - Counseling in the Substance Abuse Field

3 credit hour(s)
Pre- or corequisite: HMSV 2120

This course advances students' skills, knowledge and attitudes for substance abuse counseling of individuals, couples, and groups. Emphasis will be on the principles of motivational counseling, client empowering approaches, and understanding diversity and culture to support counseling techniques. Goal setting, community reinforcement, crisis and relapse interventions, treatment modification, and adapting strategies to support client recovery will also be presented.

N**ote(s):**

- Previously HSV 2250. Read more.

Theory Hours: 45

HMSV 2330 - Professional Skills in Human Services II

3 credit hour(s)
Prerequisite: HMSV 1140 + SOWK 2110

Provides intermediate level training in the knowledge, skills, and attitudes related to professional responsibilities and job performance at the micro, mezzo, and macro levels in human service settings. Builds on previous

coursework to develop skills in information gathering, intervention, referral, management of competing needs, use of supervision, professional relationship development, troubleshooting, self-assessment and self-care.

N**ote(s):**

- Previously HSV 2115. Read more.

Theory Hours: 45

HMSV 2340 - Case Management and Professional Skills in Substance Abuse Treatment

3 credit hour(s)
Pre- or corequisite: HMSV 1210

Explores the principles and practice of case management in addiction treatment including collaboration with referral sources; review and interpretation of client evaluation information; administrative procedures for eligibility and admission for treatment; and coordination with service providers. Introduces legal, ethical, cultural, and professional issues in substance abuse treatment with the goal of developing student competencies in these areas. State and Federal regulations, laws and codes that protect client confidentiality, cultural values, service parity and equity will be emphasized. Strategic Prevention Framework skills such as team and capacity building, community assessment and planning will also be addressed.

N**ote(s):**

- Previously HSV 2204. Read more.

Theory Hours: 45

HMSV 2990 - Human Services Practicum

2 credit hour(s)
Pre- or corequisite: HMSV 2330 or HMSV 2340

This course provides the opportunity for students to explore human services professions in local community based agencies. Under supervision, students will experience how human services positively affect change for members of their communities and will gain understanding of professional skills, ethics, practice standards, and intervention models. Students will complete 45 hours of practical experience in an approved human services work or closely related setting.

N**ote(s):**

- Previously HSV 2890. Read more.

Theory Hours: 15
Practicum Hours: 45

Humanities

HUMN 1105 - Being Human: An Introduction to the Humanities

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course is an introduction to the academic study of the Humanities with a focus on the artistic, scientific, religious, and cultural expressions of New Mexico. It is inquiry and project based, providing students with a foundation of Humanistic thought and college level reading, writing and communication skills.

Theory Hours: 45

HUMN 1110 - Introduction to World Humanities I

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course is an interdisciplinary introduction to the cultural contributions and expressions in ancient world civilizations such as Mesopotamia, Greece, Rome, Asia, Africa, and the Americas, emphasizing artistic expression, philosophical thought, and religious practices in these civilizations, as well as historical, scientific, and technological developments.

N**ote(s):**

- Previously HUM 1111. Read more.

Theory Hours: 45

HUMN 1115 - The Medieval World

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

An introduction to the cultural developments of world civilizations between the years 500 and 1500 CE, examining intellectual, scientific and artistic expressions and developments through an interdisciplinary method of study. Special attention is given to cultures of Asia and Africa, religious and ethnic minorities of Europe and the lives and roles of women. Connections to the historical eras prior and subsequent will be noted. The course will employ a thematic approach through topics such as art, music, religion, philosophy, science and technology in each culture as well as lasting influence, impact, contributions and social trends.

N**ote(s):**

- Previously HUM 1115. Read more.

Theory Hours: 45

HUMN 2110 - Introduction to World Humanities II

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course is an interdisciplinary introduction to the interrelationships of cultural contributions and values during the Renaissance, Baroque, Enlightenment, Romantic, and Modern eras in Europe as well as those during the same time periods in China, Japan, Africa, other parts of the Middle East, and Latin America. The course will emphasize artistic expression, philosophical thought, and religious practices in these regions, as well as historical and technological developments.

Note(s):

- Previously HUM 1121. Read more.

Theory Hours: 45

HUMN 2996 - Special Topics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

- Previously HUM 2096-2996. Read more.

I-Best Early Education

IBEC 0500 - ESL Early Childhood Multicultural Education

0 credit hour(s)
Corequisite: Must be co-enrolled with ECME course

Develops English language skills needed to complete academic requirements and work in professional early child multicultural education positions. Language instruction is contextualized within the framework of the ECME class in which students are co-enrolled, and presented through group work, project-based instruction, paired practice and self-paced instruction. Content instruction in English and Spanish is used to achieve the objectives of both ESL and ECME components.

I-Best Nursing Assistant

IBNA 0500 - ESL Nursing Assistant

0 credit hour(s)

ESL for the Nursing Assistant Program develops English language skills needed to pass the CNA course, pass the state certification exam and to work successfully as a Certified Nursing Assistant. Language instruction is contextualized within the framework of the CNA class in which students are co-enrolled, and presented through group work, paired practice and self-paced instruction.

Industrial Technician

MECH 1001 - Introduction to Electrical Systems

3 credit hour(s)
Prerequisite: Math Skills 2 Alg + Reading and Writing Skills 2
Recommended: MECH 1005

This course prepares students to connect, adjust, operate, troubleshoot, analyze, install, test and commission electrical alternating-current (AC) and direct-current (DC) circuits, discrete and analog electronic sensor circuits, and electro-pneumatic relay control sequence circuits.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-201 Electrical Systems 1 and the SACA C-205 Sensor Logic Systems 1 Certification Exams.

Theory Hours: 30
Lab Hours: 45

MECH 1005 - Introduction to Mechatronics

3 credit hour(s)
Prerequisite: Math Skills 2 Alg + Reading and Writing Skills 2
Recommended: MECH 1001

This course prepares individuals to analyze, modify and perform maintenance in modern production control systems that use Industry 4.0 automation technology for advanced manufacturing processes. Topics cover a wide range of smart manufacturing content including industrial safety, electromechanical fabrication, precision measurement, print reading, and the fundamentals of mechanical, fluid power, electrical, and automation systems.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-101 Industry 4.0 Operations Certification Exam.

Theory Hours: 30
Lab Hours: 45

MECH 1011 - Introduction to Mechanical Drives

3 credit hour(s)
Prerequisite: Math Skills 2 Alg + Reading and Writing Skills 2
Recommended: MECH 1005

This course prepares students to install, adjust, align, tension, operate, troubleshoot, maintain, and analyze mechanical power transmission systems.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-210 Mechanical Power Systems 1 and the SACA C-301 Mechanical Power Systems 2 Certification Exams.

Theory Hours: 30
Lab Hours: 45

MECH 1021 - Introduction to Pneumatics & Hydraulics

3 credit hour(s)
Prerequisite: Math Skills 2 Alg + Reading and Writing Skills 2
Recommended: MECH 1005

This course prepares students to connect, adjust, operate, analyze, and maintain pneumatic and hydraulic circuits. Fluid power components studied include quick connect fittings, tee and cross fittings, air compressors, fixed displacement pumps, filters, regulators, lubricators, pilot-operated relief valves, direct operated relief valves, gauges, rotameters, flow meters, directional control valves, flow control valves, check valves, pressure reducing valves, sequence valves, accumulators, pressure compensated flow control valves, cylinders, and motors.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-209 Pneumatics Systems 1 and the SACAC-255 Hydraulic Systems 1 Certification Exams.

Theory Hours: 30
Lab Hours: 45

MECH 1031 - Introduction to Programmable Logic Controllers (PLCs)

3 credit hour(s)
Pre- or corequisite: MECH 1001 or MECH 1005

This course prepares students to program, configure, adjust, monitor, and operate industrial programmable logic controller (PLC) systems that use discrete inputs and outputs (I/O) and human machine interface (HMI) panels.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-207 Programmable Controller Systems 1 and the SACA C-212 Ethernet Communications 1 Certification Exams.

Theory Hours: 30
Lab Hours: 45

MECH 1041 - Introduction to Electric Motor Control

2 credit hour(s)
Pre- or corequisite: MECH 1001 or MECH 1005

This course prepares students to connect, configure, adjust, and operate electrical motor control circuits and AC variable frequency motor drives using these electrical components: 3-phase AC motors, reversing magnetic motor starters with overloads, drum switches, control relays, timer relays, pushbutton switches, selector switches, limit switches, pressure switches, and float switches.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-202 Electrical Motor Control Systems 1 and the SACA C-203 Variable Frequency Drive Systems 1 Certification Exams.

Theory Hours: 15
Lab Hours: 45

MECH 1051 - Lean Manufacturing Principles

3 credit hour(s)
Recommended: MECH 1005

Lean Manufacturing teaches learners ways to identify and eliminate waste in order to improve quality, reduce production time, and decrease cost: distilling down manufacturing processes to what is value added. The Total Productive Maintenance (TPM) topics of this course help learners develop smart manufacturing management skills including the importance of total productive maintenance and describing three principles of preventative maintenance, overall equipment effectiveness, implementing the elements of an autonomous maintenance program, and maintaining equipment including cleaning the equipment, eliminating sources of contamination, training, visual control methods, equipment inspection, and developing and testing standards.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-211 Industry 4.0 Total Productive Maintenance Certification Exam.

Theory Hours: 45

MECH 1101 - Industrial Electricity

3 credit hour(s)
Prerequisite: MECH 1001 + MECH 1041
Pre- or corequisite: MECH 1031

This course prepares students to install, connect, adjust, operate, analyze, troubleshoot, test and commission industrial electrical and electronic control systems that incorporate programmable logic controllers (PLC), human machine interface panels (HMI), alternating-current (AC) variable frequency drives (VFD), linear direct-current (DC) power supplies, discrete and analog input and output (I/O) devices, and switching motor control circuits and power supplies.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-206 Electrical Systems Installation 1 Certification Exam.

Theory Hours: 30
Lab Hours: 45

MECH 1111 - Advanced Mechanical Drives

3 credit hour(s)
Prerequisite: MECH 1011

This course prepares students to install, adjust, align, tension, operate, troubleshoot, and perform laser shaft precision alignment and predictive maintenance using vibration monitoring analysis techniques on mechanical power transmission drive systems.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-302 Laser Shaft Alignment 1 Certification Exam.

Theory Hours: 30
Lab Hours: 45

MECH 1120 - Advanced Pneumatics and Hydraulics

3 credit hour(s)
Prerequisite: MECH 1021 + MECH 1031

This course prepares individuals to connect, adjust, operate, analyze, maintain, troubleshoot and remedy faults in heavy-duty industrial electro-pneumatic and electro-hydraulic PLC-controlled systems.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-256 Hydraulic Maintenance 1 and the C-304 Pneumatic Troubleshooting 1 Certification Exams.

Theory Hours: 30
Lab Hours: 45

MECH 1131 - Advanced Programmable Logic Controllers (PLCs)

3 credit hour(s)
Prerequisite: MECH 1031
Recommended: MECH 1101

This course prepares students to connect, configure, program, operate, adjust, tune, calibrate, troubleshoot and remedy faults in programmable logic controller (PLC) systems that use human machine interface (HMI) panels for industrial production monitoring along with discrete and analog input and output (I/O) devices for open and closed loop industrial process control applications.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-208

Programmable Controller Troubleshooting 1 Certification Exam.

Theory Hours: 30
Lab Hours: 45

MECH 1205 - Advanced Industrial Control Systems

3 credit hour(s)
Prerequisite: MECH 1005 + MECH 1031

This course prepares individuals to program and optimize Industry 4.0 automation technologies such as Industrial Internet of Things (IIoT) devices, smart sensors and devices, industrial networking, and industrial data analytics software.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-104 Industry 4.0 IIoT, Networking & Data Analytics Certification Exam.

Theory Hours: 30
Lab Hours: 45

MECH 1241 - Advanced Electrical Motor Control

2 credit hour(s)
Prerequisite: MECH 1041

This course prepares students to troubleshoot and remedy faults in alternating current (AC) and direct-current (DC) electric motor control circuits and AC variable frequency drives. Skills include adhering to troubleshooting safety rules, motor control system troubleshooting, component-level testing, and using digital multimeters, clamp-on ammeters, and programmable logic controller (PLC) status indicators for fault identification.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-204 Motor Control Troubleshooting 1 and C-303 Electric Motor Troubleshooting 1 Certification Exams.

Theory Hours: 15
Lab Hours: 45

MECH 1251 - Industrial Robotics Integration

3 credit hour(s)

This course prepares individuals to operate, program, interface, monitor, and optimize industrial robotic systems in an industry 4.0 automation environment for pick and place, basic assembly, machine load, machine unload, and gluing applications. Robot system operation topics studied include robot operation safety, robotic components and end-effectors, robot work envelope, teach pendant operation, robot joint travel limits, and robot jog speed adjustment. Robotic programming topics studied include linear motion, joint motion, circular motion, motion speed control, position offset, data register commands, branching commands, inputs and outputs, looping, waiting commands, and macros.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the SACA C-215 Robot System Operations 1 and the C-216 Robot Systems Integration 1 Certification Exams.

Theory Hours: 30
Lab Hours: 45

MECH 1401 - Additive Manufacturing (3D Printing)

3 credit hour(s)
Recommended: ARTS 1610

This course introduces students to the capabilities of additive manufacturing (3D-printing) including a comprehensive overview of seven additive manufacturing technologies, processes, material selection, post-processing, and basic safety guidelines.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the CSWA Additive Manufacturing Certification Exam.

Theory Hours: 30
Lab Hours: 45

MECH 1430 - Intro to Engineering CAD

3 credit hour(s)
Recommended: ARTS 1610

This course prepares individuals to use the SOLIDWORKS® mechanical design automation software to build parametric models of parts and assemblies and to make production drawings of those parts and assemblies.

N**ote(s):**

- Upon successful completion of this course the student will be prepared to pass the CSWA Mechanical Design Certification Exam.

Theory Hours: 30
Lab Hours: 45

MECH 2096-2996 - Special Topics

1-7 credit hour(s)
Prerequisite: Department Approval

Presents various topics.

MECH 2998 - Internship

3 credit hour(s)
Prerequisite: Department Approval

In cooperation with local industry, the student will complete 135 hours of supervised training experience in an an appropriate, defined, training program at an approved workplace.

Internship Hours: 135

Information Technology

IT 1004 - Computer and Keyboarding Basics

3 credit hour(s)

This course covers computer basics, keyboarding, Windows navigation, file management and introduction to word processing and presentation software.

N**ote(s):**

- Course taught in a computer lab.

Theory Hours: 45

Lab Hours: 15

Integrated Reading & Writing

IRW 0970 - Integrated Reading and Writing I
3 credit hour(s)

Prerequisite: Appropriate placement score

Introduces various work-related and academic texts and assists students in comprehending these texts and in constructing effective work-related and academic writings of their own. Students develop strategies to improve their reading and writing skills. Students learn the fundamentals of sentence structure as well as grammar and mechanics.

Theory Hours: 45

IRW 0980 - Integrated Reading and Writing II
3 credit hour(s)

Prerequisite: Reading and Writing Skills 1

Focuses on critical reading, reasoning, and writing skills to prepare students for college-level course work. Students develop the reading comprehension and critical thinking skills needed for academic success. Students apply the fundamentals of sentence structure and paragraph development to their own writing and develop their skills in grammar and mechanics.

Theory Hours: 45

Language

LANG 8000 - Modern Language Elective
Variable credit hour(s)

This course allows students to apply language elective credit towards a Modern Language Elective program requirement.

Latin American Studies

LTAM 1110 - Introduction to Latin American Studies
3 credit hour(s)

Pre- or corequisite: Reading and Writing Skills 2

An interdisciplinary survey of Latin American history, culture, economics, politics, and social relations.

Theory Hours: 45

LTAM 1111 - Latin American Film
3 credit hour(s)

Pre- or corequisite: Reading and Writing Skills 2

Explores themes relevant to Latin American societies through the viewing and analysis of critically acclaimed films and documentaries from Latin America. Such themes include cultural and/or religious conflict, rural vs. urban and migration issues, changing gender and social roles, marginalized peoples, and globalization.

Theory Hours: 45

LTAM 1112 - Latin American Popular Culture Survey Through Media
3 credit hour(s)

Prerequisite: Reading and Writing Skills 2

This course introduces students to popular culture productions in Latin American contexts by examining how their transmission and consumption become meaningful and mainstream, and how the most iconic forms of popular culture are rooted in indigenous and African cultures.

Theory Hours: 45

LTAM 2088 - Latin American Studies Specialty
1-12 credit hour(s)

This course is used to transfer approved courses from other colleges and universities.

LTAM 2111 - Tourism and Culture
3 credit hour(s)

Prerequisite: LTAM 1110 or HIST 1170 or HIST 1180 or HIST 2110 or ANTH 1140 or ANTH 2222 or SOCI 1110 or SOCI 2340 or AMST 1140 or CCST 2110 or NATV 1150 or POLS 2120 or BUSA 2120 or HRTM 1120

This course explores the extent to which colonialism and tourism have shaped Latin American communities as well as North Americans' conceptions of the region, through the lenses of imperialism, indigeneity, identity, and politics in Latin American tourist economies.

Theory Hours: 45

LTAM 2996 - Topics in Latin American Studies
1-6 credit hour(s)

Prerequisite: Reading and Writing Skills 2

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously LTAM 2096-2996. Read more.

LTAM 2998 - Internship in Latin American Studies
1-3 credit hour(s)

This course requires students work 45, 90, or 135 hours, depending on the internship placement. The internship will serve as an applied learning experience by observing, analyzing and participating in a related workplace.

Note(s):

- Previously LTAM 2298.

Internship Hours: 45

Law Enforcement Academy

LEA 1001 - Law Enforcement Academy Preparation
2 credit hour(s)

Prerequisite: Department Approval

This course introduces students to the New Mexico Law Enforcement Academy entrance requirements as established by the New Mexico Law Enforcement Academy Board. During the course, students will be guided through the process of completing the required testing for police academy admission. This includes a psychological written test and interview, medical exam,

drug screen/hearing test, criminal history check, and physical fitness assessment. Failure of any stage will result in denial of admission to the law enforcement academy. Regular class sessions will focus on the fitness preparation and testing necessary to meet the fitness entrance requirements as established by the New Mexico Law Enforcement Academy Board.

N**ote(s):**

- Students must meet NMAC minimum standards for acceptance into a law enforcement academy program prior to receiving department approval.

Theory Hours: 15
Lab Hours: 45

LEA 1004 - Domestic Violence: From the Crime Scene to the Courtroom

3 credit hour(s)
Corequisite: HLTH 1003 + LEA 1005 + LEA 1006 + LEA 1007 + LEA 1008 + LEA 1009 + LEA 1010 + LEA 1014 + LEA 1015 + LEA 1016

This course prepares students to successfully demonstrate proficiency in proper report writing and documentation, investigation of domestic violence incidents and courtroom demeanor, and case presentation in order to meet the requirements established by the New Mexico Law Enforcement Academy for Basic Police Officer Training.

Note(s):

- 48 theory hours, as required by the NM Department of Public Safety.

Theory Hours: 48

LEA 1005 - Law Enforcement I

2 credit hour(s)
Corequisite: HLTH 1003 + LEA 1004 + LEA 1006 + LEA 1007 + LEA 1008 + LEA 1009 + LEA 1010 + LEA 1014 + LEA 1015 + LEA 1016

This course provides students with an introduction to the mission, objectives, and rules and regulations of the law enforcement academy. It will also cover topics such as law enforcement history, cultural diversity, ethics and standards of performance, and the criminal justice system in the State of New Mexico. This course meets all requirements established by the New Mexico Law Enforcement Academy for Basic Police Officer Training.

Theory Hours: 33

LEA 1006 - Traffic Enforcement and Investigation

4 credit hour(s)
Corequisite: HLTH 1003 + LEA 1004 + LEA 1005 + LEA 1007 + LEA 1008 + LEA 1009 + LEA 1010 + LEA 1014 + LEA 1015 + LEA 1016

This course will provide the student with an overview of the New Mexico Traffic Code, traffic laws, and the use of the Motor Vehicle Code as an enforcement tool. Students will develop the necessary skills to conduct a traffic accident investigation, with an emphasis on evidence-gathering techniques and the importance of physical evidence and documentation in accident reconstruction and litigation. This course meets the requirements established by the New Mexico Law Enforcement Academy for Basic Police Officer Training.

Note(s):

- 64 theory hours, as required by the NM Department of Public Safety.

Theory Hours: 63.9

LEA 1007 - Crisis Intervention

3 credit hour(s)
Corequisite: HLTH 1003 + LEA 1004 + LEA 1005 + LEA 1006 + LEA 1008 + LEA 1009 + LEA 1010 + LEA 1014 + LEA 1015 + LEA 1016

This course provides an overview of crisis intervention. Students will learn about crisis intervention strategies based on current theory and practice in order to develop the conceptual competency necessary for law enforcement officers engaged in crisis intervention. Topics include behavior management and crisis intervention, dispute intervention and crisis management, and handling individuals with behavioral health issues and other special populations. This course meets the requirements established by the New Mexico Law Enforcement Academy for Basic Police Officer Training.

Theory Hours: 45

LEA 1008 - Law Enforcement Lab

5 credit hour(s)
Corequisite: HLTH 1003 + LEA 1004 + LEA 1005 + LEA 1006 + LEA 1007 + LEA 1009 + LEA 1010 + LEA 1014 + LEA 1015 + LEA 1016

This course prepares students to successfully demonstrate proficiency in the handling of arrested subjects, defensive tactics, firearms, emergency vehicle operations, and patrol operations in order to meet the requirements established by the New Mexico Law Enforcement Academy for Basic Police Officer Training.

Lab Hours: 226.5

LEA 1009 - Physical Training for Law Enforcement

2 credit hour(s)
Corequisite: HLTH 1003 + LEA 1004 + LEA 1005 + LEA 1006 + LEA 1007 + LEA 1008 + LEA 1010 + LEA 1014 + LEA 1015 + LEA 1016

This course prepares students to meet the physical training requirements established by the New Mexico Law Enforcement Academy for Basic Police Officer Training. The goal of the course is for students to meet or exceed the physical fitness standards established by the New Mexico Law Enforcement Academy Board required for the successful completion of a law enforcement academy. Students will also learn about injury prevention, basic nutrition, recognizing and overcome job-related stress, recognizing indicators leading to police officer suicide, and techniques for improving emotional well-being.

Theory Hours: 15
Lab Hours: 45

LEA 1010 - Patrol Procedures for Law Enforcement

4 credit hour(s)
Corequisite: HLTH 1003 + LEA 1004 + LEA 1005 + LEA 1006 + LEA 1007 + LEA 1008 + LEA 1009 +

LEA 1014 + LEA 1015 + LEA 1016

This course introduces students to the basic patrol functions, theory, practices, and problems in law enforcement patrol and meets all learning objectives established by the New Mexico Law Enforcement Academy for Basic Police Officer Training. It provides students with the knowledge and skills needed to safely and effectively perform the functions of patrol as a law enforcement officer.

Theory Hours: 45
Lab Hours: 45

LEA 1014 - Constitutional Policing for Law Enforcement

3 credit hour(s)
Corequisite: HLTH 1003 + LEA 1004 + LEA 1005 + LEA 1006 + LEA 1007 + LEA 1008 + LEA 1009 + LEA 1010 + LEA 1015 + LEA 1016

This course focuses on constitutional policing as it pertains to law enforcement and meets all learning objectives established by the New Mexico Law Enforcement Academy for Basic Police Officer Training. Students will examine the constitutional laws and principles related to the investigation of crimes, including authority and jurisdiction, search and seizure, arrests, confessions, and pretrial processing of offenders. Students will learn about the individual rights found in the First, Fourth, Fifth, Sixth, Eighth, and Fourteenth Amendments of the United States Constitution and the comparable provisions of the New Mexico Constitution.

Theory Hours: 45

LEA 1015 - Criminal Law for Law Enforcement

3 credit hour(s)
Corequisite: HLTH 1003 + LEA 1004 + LEA 1005 + LEA 1006 + LEA 1007 + LEA 1008 + LEA 1009 + LEA 1010 + LEA 1014 + LEA 1016

This course focuses on criminal law as it applies to law enforcement and meets all learning objectives established by the New Mexico Law Enforcement Academy for Basic Police Officer Training. Topics covered in this course include basic principles of substantive New Mexico criminal law including criminal procedures and laws of arrest, civil laws, liquor laws, Indian country law, juvenile law, hate crimes, elements of crimes against persons, property, public order, public morality, defenses to crimes, and parties to crime.

Theory Hours: 45

LEA 1016 - Criminal Investigations for Law Enforcement

3 credit hour(s)
Corequisite: HLTH 1003 + LEA 1004 + LEA 1005 + LEA 1006 + LEA 1007 + LEA 1008 + LEA 1009 + LEA 1010 + LEA 1014 + LEA 1015

This course introduces the student to criminal investigations within the various local, state, and federal law enforcement agencies as it applies to law enforcement and meets all criminal investigations learning objectives established by the New Mexico Law Enforcement Academy for Basic Police Officer Training. Emphasis is given to the theory, techniques, aids, technology, collection, and preservation procedures that ensure evidentiary integrity. Courtroom evidentiary procedures and techniques will be introduced. This course includes exercises and practical demonstrations related to criminal investigations.

Theory Hours: 46.5

Liberal Arts

LBAR 1996 - Special Topics

3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See Schedule of Classes.)

LBAR 2610 - Liberal Arts Study Abroad

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

This course provides students with an immersive study of culture and social relations in another country. In preparation for the in-country Study Abroad experience, students will explore interdisciplinary approaches to the study of that place and peoples.

LBAR 2996 - Special Topics

3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See Schedule of Classes.)

LBAR 2999 - Community Leadership: Liberal Arts Capstone

3 credit hour(s)
Prerequisite: ENGL 1120 + (COMM 1130 or COMM 2120)

Using an interdisciplinary approach, engages students in projects designed to develop skills in critical thinking and effective communication. Includes applying skills valued by employers such as problem-solving techniques, effective use of digital tools for research and communication, small group communication, and leadership development.

N**ote(s):**

- Specifically, students will research and complete the Phi Theta Kappa Honors in Action Project, the Phi Theta Kappa College Project, professional career objectives and scholarship writing.
- Previously ALA 2999. Read more.

Theory Hours: 45

Machine Tool Technology

MATT 1001 - Metals Math I

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Presents whole numbers, fractions and decimals, shop geometry and algebra, formulas and equations and the Pythagorean Theorem. Emphasis is on developing problem solving skills specific to the machine industry.

Theory Hours: 30

MATT 1005 - Metals Blueprint Reading I

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Covers the interpretation of basic manufacturing and fabrication drawings, terminology, or orthographic projection, sectional views, dimensions, tolerances, symbols and drawing standards.

Theory Hours: 30

MATT 1030 - Metals Math II

2 credit hour(s)
Prerequisite: MATT 1001

Provides basic shop algebra, formulas, geometry and triangulation. Covers calculation of areas, volumes, material requirements, angles, applied trigonometry and advanced shop math applications.

Theory Hours: 30

MATT 1035 - Metals Blueprint Reading II

2 credit hour(s)
Prerequisite: MATT 1005

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.

Theory Hours: 30

MATT 1040 - Machine Tool Geometric Dimensioning and Tolerancing

2 credit hour(s)
Pre- or corequisite: MATT 1005

Covers all necessary standards and procedures related to industry geometric dimensioning and tolerancing. This course applies blueprint reading as well as measurement and inspection to the current industry ASME standard.

Theory Hours: 30

MATT 1045 - Advanced Manufacturing Methods and Industry Exploration

1 credit hour(s)
Pre- or corequisite: MATT 1130

Explores unconventional manufacturing methods, machine tool history, various sub-industries related to the machine tool trade and covers industry preparation for students entering the machine tool trade.

Theory Hours: 15

MATT 1060 - Machine Tool Technology Skills

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

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.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 15

MATT 1065 - Metallurgy

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Introduces the basic science of cutting metals, including material structure, properties, alloying and testing of ferrous and non-ferrous metals with emphasis on machining performance and tooling applications.

Theory Hours: 30

MATT 1099 - Machine Tool Lab I

1 credit hour(s)
Pre- or corequisite: MATT 1110 or MATT 1120 or MATT 1130

This course provides additional instructor guided lab time for assigned projects from other Term 1 MATT classes.

- Open to anyone taking one or more Term 1 MATT lab classes;
- Graded by project completion and attendance;
- Projects must be signed off by instructor.

Lab Hours: 45

MATT 1110 - Basic Lathe Principles

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: (MATT 1120 + MATT 1130) or department 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.

N**ote(s):**

- Previously MATT 1092

Theory Hours: 15
Lab Hours: 45

MATT 1120 - Basic Milling Machine Principles

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Corequisite: MATT 1110 and MATT 1130

Reviews rotary table work and locational operations. Offers safety, carbide shell mills, complex milling set-ups and advanced production and CNC milling techniques. Introduces basic milling machine principles and operations. Covers safety, basic setup, speeds and feeds, tooling, workholding and toolholding devices, squaring, step milling, drilling, reaming and tapping.

N**ote(s):**

- Previously MATT 1192

Theory Hours: 15
Lab Hours: 45

MATT 1130 - Basic Supporting Machine Tool Principles

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: (MATT 1110 and MATT 1120) or department approval

Introduces drill press, band saw, pedestal grinder and hand tool principles and operations. Covers safety, care and use of hand tools, layout, tool bit grinding and machine care and maintenance as well as basic measurement and inspection.

N**ote(s):**

- Previously MATT 1292

Theory Hours: 15
Lab Hours: 45

MATT 1140 - Basic Measurement and Inspection

1 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Provides practical exercises in basic metal shop measurement and inspection techniques, including use of rules, calipers, micrometers, comparison instruments and inspection reports.

N**ote(s):**

- Previously MATT 1392

Theory Hours: 15

MATT 1199 - Machine Tool Lab II

1 credit hour(s)
Pre- or corequisite: MATT 1210 or MATT 1220 or MATT 1230

This course provides additional instructor guided lab time for assigned projects from other Term 2 MATT classes.

- It is open to students taking one or more MATT lab classes;
- Graded by project completion and attendance;
- Projects must be signed off by instructor.

Lab Hours: 45

MATT 1210 - Intermediate Lathe Principles

2 credit hour(s)
Prerequisite: MATT 1110
Pre- or corequisite: MATT 1220 and MATT 1230

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.

N**ote(s):**

- Previously MATT 1492

Theory Hours: 15
Lab Hours: 45

MATT 1220 - Intermediate Milling Machine Principles

2 credit hour(s)
Prerequisite: MATT 1120
Pre- or corequisite: MATT 1210 and MATT 1230

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.

N**ote(s):**

- Previously MATT 1592

Theory Hours: 15
Lab Hours: 45

MATT 1230 - Intermediate Supporting Machine Tool Principles

2 credit hour(s)
Prerequisite: MATT 1130
Pre- or corequisite: MATT 1210 + MATT 1220 + MATT 1240

Presents concentrated training in safety, surface grinding, tool reconditioning, production support, advanced quality assurance methods and measurements and inspection.

N**ote(s):**

- Previously MATT 1692

Theory Hours: 15
Lab Hours: 45

MATT 1240 - Basic CAD/CAM

2 credit hour(s)
Prerequisite: MATT 1001 + MATT 1005
Pre- or corequisite: MATT 1110 + MATT 1120
Corequisite: MATT 1230

Introduces basic computer skills necessary to program using Mastercam and Solidworks for CNC milling and turning centers. Covers CNC G-coding reading and editing, basic Mastercam, Solidworks and conversational CNC programming.

N**ote(s):**

- Previously MATT 1792

Theory Hours: 30

MATT 1299 - Machine Tool Lab III

1 credit hour(s)
Pre- or corequisite: MATT 2050 or MATT 2140

This course provides additional instructor guided lab time for assigned projects from other Term 4 MATT classes.

- It is open to students taking one or more MATT lab classes in term 4
- Graded by project completion and attendance;
- Projects must be signed off by instructor.

Lab Hours: 45

MATT 2005 - Intermediate CNC CAD/CAM

3 credit hour(s)
Prerequisite: MATT 1240

Presents intermediate level computer skills necessary to program using Mastercam and Solidworks for CNC milling and turning centers.

Theory Hours: 30
Lab Hours: 45

MATT 2010 - Advanced Lathe Principles

1 credit hour(s)
Prerequisite: MATT 1210

Reviews carbide tooling applications, boring and threading. Covers safety, setup and use of soft jaws and advanced production and CNC turning techniques.

N**ote(s):**

- Previously MATT 2092

Lab Hours: 45

MATT 2020 - Advanced Milling Machine Principles

2 credit hour(s)

Prerequisite: MATT 1220

Reviews rotary table work and locational operations. Offers safety, carbide shell mills, complex milling set-ups and advanced production and CNC milling techniques.

N**ote(s):**

- Previously MATT 2192

Theory Hours: 15
Lab Hours: 45
Additional Lab Hours: 15

MATT 2025 - Advanced Machine Tool Technology Skills

3 credit hour(s)
Prerequisite: MATT 1060

Provides advanced instruction in safety, lathe, mill, blueprint reading and shop math.

Theory Hours: 30
Lab Hours: 45
Additional Lab Hours: 15

MATT 2030 - Advanced Supporting Machine Tool Principles

2 credit hour(s)
Prerequisite: MATT 1230
Corequisite: MATT 2035

Covers production support, safety, advanced surface grinding set ups and operations, assembly techniques, production inspection techniques to ANSI standards and advanced CNC set-up and operation for production applications.

Note(s):

- Previously MATT 2292

Theory Hours: 15
Lab Hours: 45

MATT 2035 - Advanced Machining

3 credit hour(s)
Prerequisite: MATT 1210 + MATT 1220

Covers advanced machining techniques for CNC lathe and mill. Reviews rotary table work and locational operations. Offers safety, carbide shell mills, complex milling set-ups and advanced production and CNC milling techniques. Reviews carbide tool applications, boring and threading. Covers safety, setup and use of soft jaws and advanced production and CNC turning techniques.

Theory Hours: 30
Lab Hours: 45

MATT 2040 - Computer Numerical Control II

2 credit hour(s)
Prerequisite: MATT 1240

Reviews programming, manuscript and tape preparation and editing. Presents various programming languages, subroutines and interactive graphic programming.

N**ote(s):**

- Previously MATT 2392

Theory Hours: 15
Lab Hours: 45
Additional Lab Hours: 15

MATT 2050 - Advanced Measurement and Inspection

2 credit hour(s)
Prerequisite: MATT 1040

Covers the use of Coordinate Measurement Machines, advanced open setup measurement/inspection methods as well as advanced GD&T principles.

Theory Hours: 30

MATT 2096-2996 - Special Topics

1-7 credit hour(s)
Prerequisite: Department approval

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

MATT 2097 - Independent Study

1-7 credit hour(s)
Prerequisite: Department approval

Focuses on a specific problem while working with an instructor.

MATT 2140 - Advanced Computer CNC, CAD/CAM

2 credit hour(s)
Prerequisite: MATT 2005

Builds on knowledge and skills developed in MATT 1240 and MATT 2005. Presents advanced techniques in CAD/CAM programming including multi axis and live tool programming, fixture making and 3D surfacing.

Theory Hours: 15
Lab Hours: 45

MATT 2198 - Machine Tool Internship

3 credit hour(s)

Prerequisite: MATT 2030
Provides an opportunity for students to gain real world work related experience in the industry.

Internship Hours: 135

MATT 2999 - Machine Tool Technology Capstone Course

1 credit hour(s)
Prerequisite: Department approval

Preparation of a professional portfolio that demonstrates student's mastery of technical and core competencies.

Theory Hours: 15

Management

MGMT 2110 - Principles of Management

3 credit hour(s)
Prerequisite: BUSA 1110 or BUSA 1130

An introduction to the basic theory of management including the functions of planning, organizing, staffing, leading, and controlling; while considering management's ethical and social responsibilities.

N**ote(s):**

- Previously BA 2133. Read more.

Theory Hours: 45

Manufacturing Technology

MT 2096-2996 - Special Topics

1-7 credit hour(s)
Prerequisite: Department approval

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

Marketing

MKTG 1210 - Advertising

3 credit hour(s)
Prerequisite: BUSA 1110 or ENTR 1110

A survey of currently available advertising media. A psychological approach to consumer persuasion; applied techniques in media selection, layout mechanics, production methods, and campaign structures.

N**ote(s):**

- Previously BA 2228. Read more.

Theory Hours: 45

MKTG 2110 - Principles of Marketing

3 credit hour(s)
Recommended: BUSA 1110 or HRTM 1120 or CULN 1100*

Survey of modern marketing concepts and practices focusing on the marketing mix: product, pricing, promotion, and distribution strategies. Topics include; the marketing environment, consumer behavior, marketing research, target marketing, and the ethical and social responsibilities of marketers.

N**ote(s):**

- Previously BA 2222. Read more.
- *Students in Business, Hospitality and Tourism or Culinary Arts will be able to apply marketing concepts to their individual program specific areas.

Theory Hours: 45

MKTG 2120 - Marketing Content Strategy and Branding

3 credit hour(s)
Pre- or corequisite: MKTG 2110

This course is designed to give the student insight into branding and content strategy. It aims to push students to explore concepts such as consumer psychology, appropriate content, and strategy and search engine optimization. Students will have the opportunity to practice their writing and communication skills -- both vital skills for digital marketing.

Theory Hours: 45

MKTG 2220 - Digital Marketing

3 credit hour(s)
Pre- or corequisite: MKTG 2110 or FDMA 1260

Focuses on how to plan, 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.

* Students will benefit from a foundational knowledge of web business.

Theory Hours: 45

MKTG 2230 - Marketing Analytics and Performance Optimization

3 credit hour(s)
Prerequisite: BCIS 1110
Recommended: MKTG 2110

This course aims to give students the skills needed to analyze results of marketing efforts. Students will learn about factors that drive conversion and how to optimize their efforts using data and A/B testing. Students will understand what the key metrics for digital marketing are. Students will be assessed through three projects that give them an opportunity to get hands-on experience using spreadsheets, Google Analytics and analyzing an A/B test. The course is part of Facebook's Digital Marketing curriculum and is required to gain the Facebook Certification. Basic internet skills and an understanding of Microsoft Office applications are recommended.

Theory Hours: 45

MKTG 2240 - Email Marketing

3 credit hour(s)
Pre- or corequisite: MKTG 2110

This course offers a deep dive into the world of email marketing, an incredibly effective marketing channel that can deliver great results for companies. In this course, students will learn about the role of email marketing in a company's marketing campaign, what stages of the customer journey email marketing is suited for, and best practices for email copy. The course will also touch upon more complex email practices such as automation and how to outline an email campaign. The students will be assessed on their performance on a capstone project which will entail outlining the components of an email campaign.

Theory Hours: 45

MKTG 2250 - Social Media Strategies

3 credit hour(s)
Pre- or corequisite: MKTG 2110 or FDMA 1260

This course focuses on the role social media plays in a digital marketing strategy. Topics include bid calculations, cost estimates, and various digital marketing platforms, as well as their practical application within the scope of a social media strategy. Students will also apply best practices to leverage social media in a time-specific marketing campaign to enhance social media skills.

Theory Hours: 45

Mathematics

MATH 0196-0996 - Special Topics

1-3 credit hour(s)

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

MATH 0850 - Math Test Preparation
1 credit hour(s)

The Math Test Preparation course is designed for students who need a "refresher" on basic arithmetic and algebraic topics. Using computer software, students will receive an individualized study plan based on what math skills they need to improve on so that they can score higher on the ALEKS placement test and possibly place into higher level math courses.

Theory Hours: 15

MATH 0970 - Algebraic Problem Solving I
3 credit hour(s)
Prerequisite: Math Skills 1

Students will build on their knowledge of algebraic and numerical expressions. Students will begin to build an understanding of geometric concepts, scientific notation, solving linear equations, solving linear inequalities, and solving systems of linear equations.

Theory Hours: 45

MATH 0975 - Introduction to Problem Solving
3 credit hour(s)
Prerequisite: Math Skills 1

This course presents strategies and applications for solving mathematical problems with emphasis on critical thinking and quantitative reasoning; topics include measurement, geometric concepts, linear equations and modeling, and an introduction to basic probability and statistics.

Theory Hours: 45

MATH 0980 - Algebraic Problem Solving II
3 credit hour(s)
Prerequisite: Math Skills 2 Alg

Students will build on their knowledge of algebraic and numeric expressions. Students will begin to build an understanding of exponential expressions (including scientific notation), polynomial expressions, radical expressions, and solving quadratic equations.

Theory Hours: 45

MATH 1110 - Math for Teachers I
3 credit hour(s)

Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

Investigates the representation of rational numbers and rational number arithmetic, including base ten and decimal numbers, fractions, and arithmetic operations on these sets. Connections to basic geometric concepts are included. Explanation and problem solving is emphasized throughout.

Theory Hours: 30
Lab Hours: 45

MATH 1115 - Math for Teachers II
3 credit hour(s)

Prerequisite: MATH 1110

Develops basic geometric concepts including rigid transformations and congruence; dilations and similarity; length, area and volume; systems of measurement and unit conversions; and connections to coordinate geometry. Problem solving is emphasized throughout.

Theory Hours: 45

MATH 1130 - Survey of Mathematics
3 credit hour(s)
Prerequisite: Math Skills 2 Alg or MATH 0975

This course will develop students' ability to work with and interpret numerical data, to apply logical and symbolic analysis to a variety of problems, and/or to model phenomena with mathematical or logical reasoning. Topics include financial mathematics used in everyday life situations, statistics, and optional topics from a wide array of authentic contexts.

N**ote(s):**

- Previously MATH 1320. Read more.

Theory Hours: 45

MATH 1140 - Geometry for Design
3 credit hour(s)
Prerequisite: Math Skills 3 Alg or MATH 0975

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, and ornamental. Compares aesthetic and technological issues in cultural context.

N**ote(s):**

- Previously MATH 1340. Read more.

Theory Hours: 45
Lab Hours: 15

MATH 1215 - Intermediate Algebra
4 credit hour(s)
Prerequisite: Math Skills 3 Alg

A study of linear and quadratic functions, and an introduction to polynomial, absolute value, rational, radical, exponential, and logarithmic functions. A development of strategies for solving single-variable equations and contextual problems.

N**ote(s):**

- Previously MATH 1310. Read more.

Theory Hours: 60

MATH 1215P - Intermediate Algebra Plus
6 credit hour(s)
Prerequisite: Math Skills 2 Alg

A study of linear and quadratic functions, and an introduction to polynomial, absolute value, rational, radical, exponential, and logarithmic functions. A development of strategies for solving single-variable equations and contextual problems.

N**ote(s):**

- In a face-to-face format, Intermediate Algebra Plus offers additional supporting materials and time in the classroom.
- In an online format, Intermediate Algebra Plus offers additional supporting materials and support from the instructor. Students will need to dedicate up to twice as much time to the course content when compared to a standard online Intermediate Algebra course (MATH 1215).
- In either format, the goal of Intermediate Algebra Plus is to prepare students to complete the Intermediate Algebra learning outcomes without first passing Algebraic Problem Solving II (MATH 0980), or attaining the equivalent placement score.
- Although MATH 0980 content is incorporated into MATH 1215P, students will not be provided the complete MATH 0980 course.

Theory Hours: 90

MATH 1220 - College Algebra

3 credit hour(s)
Prerequisite: (MATH 1215 or MATH 1215P) or appropriate placement scores

The study of equations, functions and graphs, reviewing linear and quadratic functions, and concentrating on polynomial, rational, exponential and logarithmic functions. Emphasizes algebraic problem solving skills and graphical representation of functions.

N**ote(s):**

- Previously MATH 1315. Read more.

Theory Hours: 45

MATH 1220P - College Algebra Plus

4 credit hour(s)
Prerequisite: Math Skills 3 Alg

The study of equations, functions and graphs, reviewing linear and quadratic functions, and concentrating on polynomial, rational, exponential and logarithmic functions. Emphasizes algebraic problem solving skills and graphical representation of functions.

N**ote(s):**

- This Plus course offers additional supporting materials and time in the classroom so that students can complete the College Algebra learning outcomes without first passing Intermediate Algebra (MATH 1215).
- Students will need to dedicate up to twice as much time to this Plus course compared to the standard version of this course, MATH 1220.
- Although MATH 1215 content is incorporated into MATH 1220P, students will not be provided the complete MATH 1215 course.

Theory Hours: 45
Lab Hours: 45

MATH 1230 - Trigonometry

3 credit hour(s)
Prerequisite: (MATH 1220 or MATH 1220P) or MATH 1240 or appropriate placement score

A study of plane trigonometry including the definitions of the fundamental trig functions using right angle triangle and unit circle approaches. Trig functions of any real number will be evaluated and the functions graphed along with their transformations. Trigonometric identities will be developed and demonstrated including multiple angle identities and identities developed from them. Inverse Trigonometric functions will be developed and used to solve trigonometric equations. Trigonometric applications will be solved using right angle trigonometry and the laws of sines and cosines. Trigonometric methods will be applied to complex numbers and the use of 2D vectors and vector dot products.

N**ote(s):**

- Previously MATH 1410. Read more.

Theory Hours: 45

MATH 1240 - Pre-Calculus

4 credit hour(s)
Prerequisite: (MATH 1220 or MATH 1220P) or MATH 1250 or appropriate placement score

This course extends students' knowledge of polynomial, rational, exponential and logarithmic functions to new contexts, including rates of change, limits, systems of equations, conic sections, and sequences and series.

N**ote(s):**

- Previously MATH 1415. Read more.

Theory Hours: 60

MATH 1250 - Trigonometry & Pre-Calculus

5 credit hour(s)
Prerequisite: (MATH 1220 or MATH 1220P) or appropriate placement score

Trigonometry & Pre-Calculus includes the study of functions in general with emphasis on the elementary functions: algebraic, exponential, logarithmic, trigonometric and inverse trigonometric functions. Topics include rates of change, limits, systems of equations, conic sections, sequences and series, trigonometric equations and identities, complex number, vectors,and applications.

N**ote(s):**

- Previously MATH 1530. Read more.

Theory Hours: 75

MATH 1350 - Introduction to Statistics

3 credit hour(s)
Prerequisite: Math Skills 3 or MATH 0975
Pre- or corequisite: MATH 1350Q (optional based on placement scores and prior coursework)

This course discusses the fundamentals of descriptive and inferential statistics. Students will gain introductions to topics such as descriptive statistics, probability and basic probability models used in statistics, sampling and statistical inference, and techniques for the visual presentation of numerical data. These concepts will be illustrated by examples from a variety of fields.

N**ote(s):**

- Previously MATH 1330. Read more.
- Learners who do not meet the prerequisite of Math Skills 3 or MATH 0975 must enroll in MATH 1350Q.

Theory Hours: 45

MATH 1350P - Introduction to Statistics Plus

4 credit hour(s)
Prerequisite: Math Skills 2 Alg or MATH 0975

This course discusses the fundamentals of descriptive and inferential statistics. Students will gain introductions to topics such as descriptive statistics, probability and basic probability models used in statistics, sampling and statistical inference, and techniques for the visual presentation of numerical data. These concepts will be illustrated by examples from a variety of fields.

N**ote(s):**

- This Plus course offers additional supporting materials and time in the classroom so that students can complete the Introduction to Statistics learning outcomes without first passing Algebraic Problem Solving II (MATH 0980) or Introduction to Problem Solving (MATH 0975).
- Students will need to dedicate up to twice as much time to this Plus course compared to the standard version of this course, MATH 1350.
- Although MATH 0980 content is incorporated into MATH 1350P, students will not be provided the complete MATH 0980 course.

Theory Hours: 45
Lab Hours: 45

MATH 1350Q - Introduction to Statistics Support Lab

1 credit hour(s)
Pre- or corequisite: MATH 1350

This course provides review and support for the skills necessary to succeed in MATH 1350 Introduction to Statistics. Students will discuss and practice prerequisite topics for MATH 1350, review and practice in preparation for assessments, and develop study and test-taking skills. Topics covered include arithmetic readiness, ratios and percentages, linear equations and inequalities, lines, and an introduction to basic probability and statistics.

Lab Hours: 45

MATH 1430 - Applications of Calculus I

3 credit hour(s)
Prerequisite: (MATH 1220 or MATH 1220P) or MATH 1240 or MATH 1250 or appropriate placement score

An algebraic and graphical study of derivatives and integrals, with an emphasis on applications to business, social science, economics and the sciences.

N**ote(s):**

- Previously MATH 1460. Read more.

Theory Hours: 45

MATH 1440 - Applications of Calculus II

3 credit hour(s)
Prerequisite: MATH 1430

Topics in this second course of Applications of Calculus include functions of several variables, techniques of integration, an introduction to basic differential equations, and other applications.

Note(s):

- Previously MATH 1465. Read more.

Theory Hours: 45

MATH 1510 - Calculus I

4 credit hour(s)
Prerequisite: (MATH 1230 + MATH 1240) or MATH 1250 or appropriate placement score

Introduces the intuitive, numerical and theoretical concepts of limits, continuity, differentiation and integration. Includes the study of extrema, curve sketching, and applications involving algebraic, exponential, logarithmic and trigonometric functions. Designed for mathematics, science and engineering majors.

Note(s):

- Previously MATH 1710. Read more.

Theory Hours: 60

MATH 1520 - Calculus II

4 credit hour(s)
Prerequisite: MATH 1510

Continues course of study begun in Calculus I. Covers integration techniques, numerical integration, improper integrals, some differential equations, sequences, series and applications.

Note(s):

- Previously MATH 1715. Read more.

Theory Hours: 60

MATH 1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously MATH 1096-1996. Read more.

MATH 2088 - Math Specialty

1-12 credit hour(s)

This course is used to transfer approved courses from other colleges and universities.

MATH 2110 - Math for Teachers III

3 credit hour(s)
Prerequisite: MATH 1110

Investigates algebra from the viewpoint of the elementary curriculum with an emphasis on proportional and linear relationships. Connections to statistics, probability, data analysis, and geometry from the elementary curriculum are included. Problem solving is emphasized throughout.

Theory Hours: 30
Lab Hours: 45

MATH 2410 - Applied Ordinary Differential Equations

3 credit hour(s)
Prerequisite: MATH 1520
Recommended: MATH 2530

An introduction to differential equations. Students will be able to classify, construct, and solve different types of equations. Systems of equations, Laplace transforms, series solutions, and numerical methods are introduced. This course is not designed for students seeking a degree in mathematics.

N**ote(s):**

- Although this Math course does not have a direct UNM Equivalency, it has been approved to satisfy UNM MATH 316 for all UNM majors EXCEPT MATH and PHYSICS MAJORS!
- Previously MATH 2910. Read more.

Theory Hours: 45

MATH 2420 - Applied Linear Algebra

3 credit hour(s)
Prerequisite: MATH 1520

An introductory study of the analysis and application of systems of linear equations, vector spaces, matrices, and linear transformations, including computer-based linear algebra.

Note(s):

- Although this Math course does not have a direct UNM Equivalency, it has been approved to satisfy UNM MATH 314 for all UNM majors EXCEPT MATH and PHYSICS MAJORS!
- Previously MATH 2810. Read more.

Theory Hours: 45

MATH 2530 - Calculus III

4 credit hour(s)
Prerequisite: MATH 1520

Continuation of Calculus 2 including multivariate and vector calculus, level curves and surfaces, partial derivatives, gradient, directional derivatives, tangent planes, optimization, multiple integrals in Cartesian, cylindrical and spherical coordinate systems.

Note(s):

- Previously MATH 2710. Read more.

Theory Hours: 60

MATH 2996 - Special Topics

3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously MATH 2096-2996. Read more.

Medical Assistant

MA 1010 - Medical Assistant Professional Overview

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg
Pre- or corequisite: COMM 2120 + HIT 1020 + HLTH 1010

Provides an overview of the role of the medical assistant in the healthcare setting. Covers medical assistant scope of practice, legal principles, ethics, standard of care, duties, and roles. Emphasis is placed on professional and therapeutic communication, affective competencies of empathy and respecting diversity, and demonstration of legal and ethical behaviors specific to medical assisting.

Theory Hours: 15

MA 1020 - Medical Assistant Clinical Skills 1

3 credit hour(s)
Prerequisite: COMM 2120 + HIT 1020 + HLTH 1010 + MA 1010
Pre- or corequisite: (HLTH 1001 or HLTH 1003)
Corequisite: MA 1030 + MA 1092 + MA 1520 + MA 1592

Introduction to the clinical role of the medical assistant in medical office/clinic settings with skills and knowledge development in positive patient interactions, dosage calculations, principles of pharmacology and medication administration, infection control, patient coaching, nutrition and health promotion.

Theory Hours: 45

MA 1030 - Medical Assistant Coding and Billing Procedures

3 credit hour(s)
Prerequisite: COMM 2120 + HIT 1020 + HLTH 1010 + MA 1010
Pre- or corequisite: (HLTH 1001 or HLTH 1003)
Corequisite: MA 1020 + MA 1092 + MA 1520 + MA 1592

Presents the fundamentals of insurance, diagnostic and procedural coding, posting to patient accounts, and preparing and submitting insurance claims for reimbursement.

Theory Hours: 45

MA 1092 - Medical Assistant Clinical Skills I Lab

1 credit hour(s)
Prerequisite: COMM 2120 + HIT 1020 + HLTH 1010 + MA 1010
Pre- or corequisite: (HLTH 1001 or HLTH 1003)
Corequisite: MA 1020 + MA 1030 + MA 1520 + MA 1592

Provides hands-on practice of skills that assist the medical provider in the clinical setting. Students will practice vital signs, basic patient data collection, assisting with exams and treatments, infection control, and administering medications.

Lab Hours: 45

MA 1520 - Medical Assistant Laboratory Skills

3 credit hour(s)
Prerequisite: COMM 2120 + HIT 1020 + HLTH 1010 + MA 1010
Pre- or corequisite: (HLTH 1001 or HLTH 1003)
Corequisite: MA 1020 + MA 1030 + MA 1092 + MA 1592

Introduces the Medical Assistant to their role in the clinic's lab related to collection, testing, handling,

processing and storage of specimens such as blood and urine, fecal samples and throat swabs. CLIA-waived tests, quality assurance and control, lab safety, patient preparation, EKGs and diagnostic equipment are also discussed.

Theory Hours: 45

MA 1540 - Medical Assistant Administrative Skills

2 credit hour(s)
Prerequisite: MA 1020 + MA 1030 + MA 1092 + MA 1520 + MA 1592
Corequisite: MA 2010 + MA 2092 + MA 2990 + MA 2999

Administrative topics include office technology, oral and written communications, new patient registration, appointment scheduling, application of HIPAA rules, handling of medical records, daily operations, self-awareness and patient orientation to office policies.

Theory Hours: 30

MA 1592 - Medical Assistant Laboratory Skills Lab

1 credit hour(s)
Prerequisite: COMM 2120 + HIT 1020 + HLTH 1010 + MA 1010
Pre- or corequisite: (HLTH 1001 or HLTH 1003)
Corequisite: MA 1020 + MA 1030 + MA 1092 + MA 1520

Provides hands-on practice of specimen collection, processing CLIA-waived tests in the clinical laboratory; setting up and assisting with multiple screening tests, and sterilizing equipment. Special attention is placed on empathy for the patient's concerns, critical thinking skills, quality control, documentation, and laboratory safety.

Lab Hours: 45

MA 2010 - Medical Assistant Clinical Skills II

2 credit hour(s)
Prerequisite: MA 1020 + MA 1030 + MA 1092 + MA 1520 + MA 1592
Corequisite: MA 1540 + MA 2092 + MA 2990 + MA 2999

Introduces principles of assisting with patients in multiple medical specialties. Sterile procedures are also examined and discussed.

Theory Hours: 30

MA 2092 - Medical Assistant Clinical Skills II Lab

1 credit hour(s)
Prerequisite: MA 1020 + MA 1030 + MA 1092 + MA 1520 + MA 1592
Corequisite: MA 1540 + MA 2010 + MA 2990 + MA 2999

Provides lab based, hands-on practice of skills pertaining to sterile technique and the MA's role when assisting with minor surgical procedures performed in the medical office. Assisting with common procedures for patients in multiple medical specialties and skills for medical emergencies are also practiced.

Lab Hours: 45

MA 2990 - Medical Assistant Practicum

4 credit hour(s)
Prerequisite: COMM 2120 + HIT 1020 + (HLTH 1001 or HLTH 1003) + HLTH 1010 + MA 1010 + MA 1020 + MA 1030 + MA 1092 + MA 1520 + MA 1592
Corequisite: MA 1540 + MA 2010 + MA 2092 + MA 2999

Supervised experience in a healthcare setting designed to provide students the opportunity to practice administrative and clinical medical assisting skills, reinforcing the cognitive, psychomotor, and affective competencies learned and achieved throughout the program.

Note(s):

- This class replaces MA 1090.
- All MAERB psychomotor and affective competencies must be achieved before participation in the practicum is allowed.
- Participants must provide their own transportation to and from the practicum site and be cleared through the compliance department.

Practicum Hours: 180

MA 2999 - Medical Assistant Capstone

1 credit hour(s)
Prerequisite: MA 1010 + MA 1020 + MA 1030 + MA 1092 + MA 1520 + MA 1592
Corequisite: MA 1540 + MA 2010 + MA 2092 + MA 2990

Facilitates preparation for a national MA credentialing exam by synthesizing both administrative and clinical coursework within the program. Study and test taking techniques, an in-class practice exam, and a voucher to sit for an accredited certification exam are included.

Theory Hours: 15

Medical Lab Technician

MLT 1001 - Preparation for Medical Lab Sciences

3 credit hour(s)

An introduction to the Medical Laboratory industry and the skills necessary to succeed in laboratory education and careers. Includes college success skills, an overview of technical departments and specialties, and non-technical aspects of working and gaining employment in healthcare. Coursework will include hands-on demonstrations and interactions with current laboratory personnel.

Theory Hours: 45

MLT 1012 - Clinical Urinalysis

1 credit hour(s)
Prerequisite: BIOL 1140 + BIOL 1140L + [CHEM 1120 + CHEM 1120L or (CHEM 1215 + CHEM 1215L + CHEM 1225 + CHEM 1225L)] + BIOL 2310 +BIOL 2310L + BIOL 2210 + BIOL 2225 + (ENGL 1110 or ENGL 1110P) + Social and

Behavioral Science Requirement + (MATH 1350 or MATH 1350P) + MLT 1001 + [MLT 1292 or (PHLB 1010 + PHLB 1092)]
Corequisite: MLT 1092 + MLT 1510 + MLT 1592 + MLT 1692 + MLT 2011 + MLT 2092

Introduces principles and procedures of physical, chemical and microscopic analysis of urine.

Theory Hours: 15

MLT 1092 - Clinical Urinalysis Laboratory
1 credit hour(s)
Corequisite: MLT 1012 + MLT 1510 + MLT 1592 + MLT 1692 + MLT 2011 + MLT 2092

Introduces basic medical laboratory techniques in urinalysis and special tests.

Note(s):

- Typically offered Fall term only.

Lab Hours: 45

MLT 1096-1996 - Special Topics
1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

MLT 1192 - Clinical Immunology Laboratory
1 credit hour(s)
Prerequisite: MLT 1012 + MLT 1092 + MLT 1510 + MLT 1592 + MLT 1692 + MLT 2011 + MLT 2092
Corequisite: MLT 1511 + MLT 1792 + MLT 2010 + MLT 2592

Teaches the basics of the body's immune response and introduction to diseases involving the immune system. Provides experience in serological testing.

Lab Hours: 45

MLT 1292 - Basic Phlebotomy Skills
1 credit hour(s)

Introduces principles and skills related to blood collection to meet the minimum requirement for entering the MLT profession without prior experience as a phlebotomist. This course is not intended as training to gain employment as a phlebotomist.

N**ote(s):**

- Prior completion of PHLB 1010 + PHLB 1092 will automatically substitute for this course
- Credit for Prior Learning (CPL) may be accepted for this course.

Lab Hours: 45

MLT 1510 - Clinical Hematology
3 credit hour(s)
Corequisite: MLT 1012 + MLT 1092 + MLT 1592 + MLT 1692 + MLT 2011 + MLT 2092

Teaches normal and abnormal blood cell morphology and the principles of routine procedures in a hematology laboratory.

N**ote(s):**

- Typically offered Fall term only.

Theory Hours: 45

MLT 1511 - Clinical Immunohematology
2 credit hour(s)
Corequisite: MLT 1192 + MLT 1792 + MLT 2010 + MLT 2592

Examines the theory principles for determining blood group typing, antibody detection and identification, cross matching and component therapy.

N**ote(s):**

- Typically offered Spring term only.

Theory Hours: 30

MLT 1592 - Clinical Coagulation Laboratory
1 credit hour(s)
Corequisite: MLT 1012 + MLT 1092 + MLT 1510 + MLT 1692 + MLT 2011 + MLT 2092

Presents basic coagulation concepts with practice performing the procedures. Also introduces advanced principles and procedures performed in the coagulation laboratory.

N**ote(s):**

- Typically offered Fall term only.

Lab Hours: 45

MLT 1692 - Clinical Hematology Laboratory
2 credit hour(s)
Corequisite: MLT 1012 + MLT 1092 + MLT 1510 + MLT 1592 + MLT 2011 + MLT 2092

Presents experiences for performing the basic procedures in a hematology laboratory including the identification and enumeration of blood cells.

N**ote(s):**

- Typically offered Fall term only.

Lab Hours: 90

MLT 1792 - Clinical Immunohematology Laboratory
2 credit hour(s)
Corequisite: MLT 1192 + MLT 1511 + MLT 2010 + MLT 2592

Provides experience in clinical blood bank.

N**ote(s):**

- Typically offered Spring term only.

Lab Hours: 90

MLT 2010 - MLT Microbiology
3 credit hour(s)
Corequisite: MLT 1192 + MLT 1511 + MLT 1792 + MLT 2592

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.

N**ote(s):**

- Typically offered Spring term only.

Theory Hours: 45

MLT 2011 - Clinical Chemistry

3 credit hour(s)
Corequisite: MLT 1012 + MLT 1092 + MLT 1510 + MLT 1592 + MLT 1692 + MLT 2092

Presents the principles and methods used in testing for chemical components in blood and other body fluids including basic instrumentation.

N**ote(s):**

- Typically offered Fall term only.

Theory Hours: 45

MLT 2092 - Clinical Chemistry Laboratory

1 credit hour(s)
Corequisite: MLT 1012 + MLT 1092 + MLT 1510 + MLT 1592 + MLT 1692 + MLT 2011

Presents experiences for performing the basic procedures used in a clinical chemistry laboratory including basic chemistry instrumentation.

N**ote(s):**

- Typically offered Fall term only.

Lab Hours: 45

MLT 2592 - Clinical Microbiology Laboratory

3 credit hour(s)
Corequisite: MLT 1192 + MLT 1511 + MLT 1792 + MLT 2010

Identifies the microorganisms of clinical significance from specimens obtained from patients. Students utilize current methodologies and identification techniques.

N**ote(s):**

- Typically offered Spring term only.

Lab Hours: 135

MLT 2712 - Advanced MLT Topics and Exam Preparation

1 credit hour(s)
Corequisite: MLT 2790

Includes topics such as emerging laboratory technologies, laboratory regulation, personnel qualifications, day-to-day operations, responsible research and national MLT certification exam preparation.

Theory Hours: 15

MLT 2790 - MLT Clinical Experience

5 credit hour(s)
Prerequisite: (HLTH 1001 or HLTH 1003) + MLT 1192 + MLT 1511 + MLT 1792 + MLT 2010 + MLT 2592
Corequisite: MLT 2712

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 credit/no credit course.

Clinical Intensive Hours: 300

Military Science

MSL 1092 - Foundations of Officership Lab

1 credit hour(s)
Corequisite: MSL 1101

Training on basic soldier skills and tasks, such as land navigation, basic rifle marksmanship and movement as a member of a fire team and rifle squad. Practical application of field craft and soldier skills in a tactical environment.

Lab Hours: 45

MSL 1101 - Foundations of Officership

1 credit hour(s)

Introduction to competencies central to the responsibilities of a commissioned officer. Establishes a framework for understanding officership, leadership and Army values in addition to life skills such as personal fitness, time management and stress management.

Theory Hours: 15

MSL 1102 - Basic Leadership

1 credit hour(s)

This course expands on the fundamentals introduced in MSL 1101 focusing on communication, leadership and goal setting. Course builds on the previous course exposing students to different methodologies of critical thinking and problem solving.

Theory Hours: 15

MSL 1292 - Basic Leadership Lab

1 credit hour(s)
Corequisite: MSL 1102

Continuation of MSL 1092.

Lab Hours: 45

MSL 2092 - Individual Leadership Studies Lab

1 credit hour(s)
Corequisite: MSL 1101

Builds on the topics covered in MSL 1092 and MSL 1292. Further in depth training on basic soldier skills and tasks, such as land navigation, basic rifle marksmanship and movement as a member of a fire team and rifle squad. Practical application of field craft and soldier skills in a tactical environment.

Lab Hours: 45

MSL 2192 - Individual Leadership Studies Lab

1 credit hour(s)
Corequisite: MSL 2202

Continuation of MSL 2092.

Lab Hours: 45

MSL 2201 - Individual Leadership Studies

2 credit hour(s)

Explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework

(trait and behavior theories). Students practice aspects of personal motivation and team building in the context of planning, executing, and assessing team exercises and participating in leadership labs. Focus in on continued development of the knowledge of leadership values and attributes through an understanding of Army rank, structure, and duties and basic aspects of land navigation and squad tactics. Case studies provide tangible context for learning the Soldier's Creed and Warrior Ethos as they apply in the contemporary operating environment (COE).

Theory Hours: 30

MSL 2202 - Leadership and Teamwork
2 credit hour(s)

Examines the challenges of leading tactical teams in the complex contemporary operating environment (COE). The course highlights dimensions of terrain analysis, patrolling and operation orders. Further study of the theoretical basis of the Army leadership framework explores the dynamics of adaptive leadership in the context of military operations. Cadets develop great self-awareness as they assess their own leadership styles and practice communication and team building skills. COE case studies give insight into the importance and practice of teamwork and tactics in real-world scenarios.

Theory Hours: 30

MSL 2219 - Directed Studies
1-3 credit hour(s)

Explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that for the basis of the Army leadership framework (trait and behavior theories). Cadets develop greater self-awareness as they assess their own leadership styles and practice communication and team building skills.

MSL 2220 - Military Fitness I
1-2 credit hour(s)
Corequisite: MSL 1101 or MSL 2201

Course is designed to teach students the principles of fitness, proper nutrition and a healthy lifestyle while exposing them to different methodologies of personal fitness.

Lab Hours: 15

MSL 2221 - Military Fitness II
1-2 credit hour(s)
Corequisite: MSL 1102 or MSL 2202

Continuation of MSL 2220.

Lab Hours: 15

Music

MUSC 1110 - Music Appreciation: Jazz
3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course explores the ideas of music in society and its cultural relevance and is designed to increase the students' appreciation of music as well as to enhance their listening skills. Students are introduced to various periods, styles, and composers of music and become acquainted with knowledge and appreciation of Jazz from various cultures and times.

Note(s):

- Previously MUS 1172. Read more.

Theory Hours: 45

MUSC 1130 - Music Appreciation: Western Music
3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course explores the ideas of music in society and its cultural relevance and is designed to increase the students' appreciation of music as well as to enhance their listening skills. Students are introduced to various periods, styles, and composers of music and become acquainted with knowledge and appreciation of Western music from various cultures and times.

Note(s):

- Previously MUS 1139. Read more.

Theory Hours: 45

MUSC 1140 - Music Appreciation: World Music
3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course explores the ideas of music in society and its cultural relevance and is designed to increase the students' appreciation of music as well as to enhance their listening skills. Students are introduced to various periods, styles, and composers of music and become acquainted with knowledge and appreciation of World music from various cultures and times.

N**ote(s):**

- Previously MUS 1140. Read more.

Theory Hours: 45

MUSC 1210 - Fundamentals of Music for non-majors
4 credit hour(s)
Prerequisite: Reading and Writing Skills 2

A beginning course in the fundamentals of music, this course includes notation, scales, key signatures and intervals. Aural comprehension is introduced through singing intervals, scales and triads and dictating simple rhythmic and melodic patterns and students explore the basic components of music.

Note(s):

- Previously MUS 1103. Read more.

Theory Hours: 60

MUSC 1250 - Class Voice I
3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Laboratory experiences to help solve vocal problems and develop singing potential through group methods; emphasis on development of breathing, phonation, articulation and expression.

N**ote(s):**

- Previously MUS 1109. Read more.

Theory Hours: 45

MUSC 1375 - Group Piano I

3 credit hour(s)

Beginning group piano lessons designed primarily for students with little or no previous piano experience. Students are introduced to scales, chords, memorization and harmonization of simple melodies and rhythms.

N**ote(s):**

- Previously MUS 1111. Read more.

Studio Hours: 90

MUSC 1377 - Group Piano II

3 credit hour(s)
Prerequisite: MUSC 1375

Late elementary repertoire, sight-reading, moving out of the five-finger position, minor scale and chord patterns

N**ote(s):**

- Previously MUS 1112. Read more.

Studio Hours: 90

MUSC 1520 - Class Guitar I

3 credit hour(s)

Basic Instruction in classical guitar from beginning to intermediate level.

N**ote(s):**

- Previously MUS 2096. Read more.

Studio Hours: 90

MUSC 1891 - Music Practicum

1-3 credit hour(s)
Prerequisite: MUSC 1210 + department approval

Music Practicum complements MUS 1103 and the performance classes in Music (Piano I & II, Guitar) by providing on-the-job musical training or performance. Requires students to complete a minimum of 45 hours in a community, professional, or educational music production.

N**ote(s):**

- Previously MUS 1290. Read more.

MUSC 2160 - Music Today

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course is a study of music in the United States, how Western art music, folk music, sacred music, and popular music developed from America's early beginnings to modern times, with a focus on the societal history that shaped the music to its modern cultural influences.

Note(s):

- Previously MUS 2271. Read more.

Theory Hours: 45

MUSC 2996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously MUS 2096-2996. Read more.

Native American Studies

NATV 1150 - Introduction to Native American Studies

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

This course surveys the significance of Native American Studies through an inter-disciplinary approach to two areas of academic concentration: Indigenous Learning Communities, and Leadership and Building Native Nations.

Theory Hours: 45

NATV 2088 - Native American Studies Specialty

1-12 credit hour(s)

This course is used to transfer approved courses from other colleges and universities.

NATV 2110 - Sociopolitical Concepts in Native America

3 credit hour(s)
Prerequisite: NATV 1150

This course examines a body of politics identified with Native America specific to historical and contemporary relevance for understanding Native American/Indigenous/American Indian nations and communities. Students are challenged to identify issues and debates based on selected readings, films; case examples; and guest presentations to engage in informed discussions about the socio-political experience of Native Americans within the U.S. and indigenous peoples internationally, including 'global' activist movements. The course will use a seminar discussion format to present key (theoretical-methodological) approaches to developing a critical understanding of social and political issues impacting Native Americans today. To make the 'intangible' i.e., thinking, values, and belief systems but not limited to policies and political behavior, cultural expression that result in tangible actions affecting Native American peoples. Students are expected to develop and refine their skills in articulating verbal and written critiques of sociopolitical concepts identified.

Theory Hours: 45

NATV 2120 - The Native American Experience

3 credit hour(s)
Prerequisite: NATV 1150

Introductory survey of Native American history, culture and contemporary issues. Students read literature by and about Native Americans covering a variety of topics including tribal sovereignty, federal policy, activism, economic development, education, and community life.

Theory Hours: 45

NATV 2140 - Research Issues in Native America

3 credit hour(s)
Prerequisite: NATV 1150 or NATV 2110

In this course, you will critically examine research

theories, methodologies, and practices of various academic disciplines used to study Native Americans. You will review research databases and collections pertaining to Native Americans. The course focuses on developing your research skills and places an emphasis on the impact and value of research for Native communities.

Theory Hours: 45

NATV 2315 - Language Recovery, Revitalization, and Community Renewal

3 credit hour(s)
Prerequisite: NATV 1150

Examines Native language loss from the boarding school era to current trends in language planning and revitalization. Special emphasis is placed on the importance of language to culture and on current community renewal efforts by Native people.

Theory Hours: 45

Natural Science

NTSC 1110 - Physical Science for Teachers

4 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

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.

N**ote(s):**

- Meets lab class requirement
- Previously NS 1010. Read more.

Theory Hours: 60

NTSC 1120 - Life Science for Teachers

4 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

Uses activities for the study of science topics including botany, cell biology, genetics, microbiology and zoology with emphasis on science processes, inquiry and the integration of technology.

N**ote(s):**

- Meets lab class requirement
- Previously NS 1015. Read more.

Theory Hours: 60

NTSC 1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously NS 1096-1996. Read more.

NTSC 2110 - Environmental Science for Teachers

4 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

Introduces major issues in environmental science with emphasis on science processes, scientific investigations and field-based activities, and the integration of technology. Course topics include current issues on population, healthy ecosystems, and natural resources.

Note(s):

- Meets lab class requirement
- Previously NS 2010. Read more.

Theory Hours: 60

Naval Science Studies

NAVS 1101 - Principles and Concepts of Naval Science

3 credit hour(s)

Introduces the naval service, customs, traditions, courtesies and naval officers communities.

N**ote(s):**

- Fall only

Theory Hours: 45

NAVS 1105 - Naval Ship Systems I

3 credit hour(s)

Introduces naval engineering systems concepts and practices.

N**ote(s):**

- Spring only

Theory Hours: 45

NAVS 1192 - Naval Professional Laboratory

1 credit hour(s)

Offers drills and information for NROTC students.

N**ote(s):**

- Fall, spring only.

Lab Hours: 45

NAVS 1193 - Navy & Marine Corps Fitness

1 credit hour(s)

This course will develop, enhance and solidify physical fitness levels of future Navy and Marine Corps Officers. It will incorporate various core, cardio, and muscle strengthening events derived from Navy and Marine Corps standards.

Lab Hours: 45

NAVS 2201 - Naval Ship Systems II

3 credit hour(s)

Explores the principles of naval weapons systems.

N**ote(s):**

- Fall only

Theory Hours: 45

NAVS 2202 - Sea Power

3 credit hour(s)

Surveys US naval history from the American Revolution to the present.

N**ote(s):**

- Fall only

Theory Hours: 45

NAVS 2203 - Navigation
3 credit hour(s)

Offers theory, principles and procedures of ship coastal and celestial navigation.

N**ote(s):**

- Spring only

Theory Hours: 45

NAVS 2204 - Naval Operations
3 credit hour(s)

Explores naval ship operations, tactical formations and dispositions; relative motion tactical plots and maneuvering boards are analyzed.

N**ote(s):**

- Spring only

Theory Hours: 45

NAVS 2231 - Evolution of Warfare
3 credit hour(s)

Surveys evolution of the basic principles and techniques of warfare throughout history.

N**ote(s):**

- Fall only, even years.

Theory Hours: 45

NAVS 2241 - Leadership & Management
3 credit hour(s)

Explores the structure and principles of naval leadership and management.

N**ote(s):**

- Fall only

Theory Hours: 45

NAVS 2247 - Principles of Naval Leadership
3 credit hour(s)

Examines the structure and principles of naval leadership and management.

N**ote(s):**

- Spring only

Theory Hours: 45

NAVS 2251 - Amphibious Warfare
3 credit hour(s)

Explores the concepts, techniques and history of amphibious warfare.

N**ote(s):**

- Fall only, odd years.

Theory Hours: 45

Nurse Refresher

NR 2110 - Nursing Refresher Course
7 credit hour(s)

Prerequisite: Department Approval

Designed to provide nurses with an active or expired New Mexico nursing license (RN or LPN) with an opportunity to learn current best practices in assessment, pharmacology, dosage calculation and medical surgical nursing.

N**ote(s):**

- Expired or Active New Mexico license to practice as an LPN or RN.

Theory Hours: 105

NR 2190 - Nurse Refresher Clinical Application
2 credit hour(s)

Prerequisite: NR 2110 + Department approval

Course is designed to provide nurses with an opportunity to update their practice in a medical surgical or skilled nursing facility.

N**ote(s):**

- Active or temporary New Mexico license to practice as an LPN or RN + current professional CPR card + required compliances

Clinical Hours: 90

Nursing

NMNC 1110 - Introduction to Nursing Concepts
3 credit hour(s)

Prerequisite: Mathematics Requirement + (ENGL 1110 or ENGL 1110P) + BIOL 2210 + BIOL 2310 + BIOL 2310L + PSYC 1110 + PSYC 2120 + BIOL 2510 + department approval
Pre- or corequisite: BIOL 2225 + BIOL 2520
Corequisite: NMNC 1135

This course introduces the nursing student to the concepts of nursing practice and conceptual learning.

N**ote(s):**

- Special requirements:
  Students must apply to the Nursing program through coordinated program entry.
- Previously NRSG 1010. Read more.

Theory Hours: 45

NMNC 1135 - Principles of Nursing Practice
4 credit hour(s)

Corequisite: NMNC 1110

This course introduces the nursing student to the application of concepts through clinical skills in seminar, laboratory, and/or clinical settings. Principles of communication, assessments, safety, and interventions, including accurate calculation, measurement, and administration of medications will be included.

N**ote(s):**

- Credit for Prior Learning (CPL) awarded if criteria are met.

Theory Hours: 15
Clinical Hours: 135

NMNC 1210 - Health and Illness Concepts I
3 credit hour(s)

Prerequisite: NMNC 1110 + NMNC 1135 + BIOL 2225 +BIOL 2520
Corequisite: NMNC 1220 + NMNC 1230 + NMNC 1235

This course will focus on health and illness concepts across the lifespan. Concepts covered are related to homeostasis/regulation, sexuality/reproductive, protection/movement, and emotional processes.

Theory Hours: 45

NMNC 1220 - Health Care Participant

3 credit hour(s)
Corequisite: NMNC 1210 + NMNC 1230 + NMNC 1235

This course introduces the nursing student to the attributes of the health care participant as an individual, a family, or a community.

Theory Hours: 45

NMNC 1230 - Nursing Pharmacology

3 credit hour(s)
Corequisite: NMNC 1210 + NMNC 1220 + NMNC 1235

This course introduces the nursing student to pharmacologic nursing practice from a conceptual approach.

Theory Hours: 45

NMNC 1235 - Assessment and Health Promotion

4 credit hour(s)
Corequisite: NMNC 1210 + NMNC 1220 + NMNC 1230

This course introduces the nursing student to the assessment of and the health promotion for the health care participant as an individual, a family, or a community. This course uses seminar, laboratory and/or clinical settings.

Theory Hours: 15
Clinical Hours: 135

NMNC 2310 - Health & Illness Concepts II

3 credit hour(s)
Prerequisite: NMNC 1210 + NMNC 1220 + NMNC 1230 + NMNC 1235
Corequisite: NMNC 2320 + NMNC 2335

This course covers health and illness concepts across the lifespan with the focus on chronic conditions. Concepts covered are related to oxygenation and hemostasis, homeostasis and regulation, protection and movement, and cognition and behavior processes.

Theory Hours: 45

NMNC 2320 - Professional Nursing Concepts I

3 credit hour(s)
Corequisite: NMNC 2310 + NMNC 2335

This course covers foundational concepts for professional development, including selected professional attributes and care competencies.

Theory Hours: 45

NMNC 2335 - Care of Patients with Chronic Conditions

4 credit hour(s)
Corequisite: NMNC 2310 + NMNC 2320

The focus of this course is to provide safe, evidence-based nursing care for patients with chronic conditions, across the lifespan in a variety of settings. This course builds upon curricular concepts. This course is a combination of lab and clinical.

Clinical Hours: 180

NMNC 2410 - Health & Illness Concepts III

4 credit hour(s)
Prerequisite: BIOL 2520 + NMNC 2310 + NMNC 2320 + NMNC 2335
Corequisite: NMNC 2435

This course will cover health and illness concepts, with the focus on acute conditions across the lifespan. Concepts covered are related to homeostasis/regulation, oxygenation/hemostasis, protection/movement and emotional processes.

Theory Hours: 60

NMNC 2435 - Clinical Intensive I

4 credit hour(s)
Corequisite: NMNC 2410

This is the first of two Level Four clinical courses in which the student will apply the curricular concepts in the management of care participants with acute conditions across the lifespan. This course is a combination of seminar, lab, and clinical.

N**ote(s):**

- This course may not be transferred to CNM.

Theory Hours: 15
Clinical Hours: 135

NMNC 2445 - ADN Capstone

2 credit hour(s)
Corequisite: NMNC 2410 + NMNC 2435

The synthesis, integration, and application of concepts to professional nursing practice will be applied in the final clinical course to ensure readiness to enter practice. This course is a combination of seminar, lab, and clinical. (90 practicum hours).

Practicum Hours: 90

Nursing Assistant

NA 1020 - Principles of Nursing Assistant

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: HLTH 1001 or HLTH 1003
Corequisite: NA 1093 + NA 1190

This course emphasizes the roles and responsibilities of the Nursing Assistant. The course provides instruction in patient's rights, communications with the health team, body structure and function, infection prevention, nutrition, principles of growth and development, safety in healthcare, home health care, and care of the older person.

Theory Hours: 45

NA 1093 - Principles of Nursing Assistant Lab

2 credit hour(s)
Corequisite: NA 1020 + NA 1190

This course provides laboratory instruction and practice of basic patient care skills required for Nursing Assistants. Skills practiced include patient assistance with activities of daily living, personal care, transfer and positioning, vital sign measurement, intake and output measurement, restorative care, and communication.

Lab Hours: 90

NA 1115 - Nursing Assistant Supplemental Skills

1 credit hour(s)
Prerequisite: Department Approval

This course provides additional theory and laboratory instruction and practice of basic patient care skills required for Nursing Assistants. Skills practiced include patient assistance with activities of daily living, personal care, transfer and positioning, vital sign measurement, intake and output measurement, restorative care, and communication. Reinforces topics in preparation for state certification exams. This is an optional course.

Theory Hours: 15

NA 1190 - Nursing Assistant Clinical

1 credit hour(s)
Corequisite: NA 1020 + NA 1093

This clinical course provides the opportunity for students to practice supervised basic patient care in a long-term or skilled nursing unit setting.

Clinical Hours: 45

Nutrition

NUTR 1010 - Personal and Practical Nutrition

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: NUTR 1010L*

This class presents nutrition concepts from a practical viewpoint that can be applied to your personal goals. Current and controversial topics in nutrition that are of concern to the consumer will be included. Topics may vary but will address issues of individual nutrient needs, nutrition throughout the life cycle, alternative eating patterns and nutrition as part of disease prevention. This class fulfills the nutrition requirement for culinary arts but is not the course required for nursing majors. A computerized dietary analysis personalizes some of the information for the students.

*It is recommended that students take NUTR 1010L concurrently with the lecture. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.

Theory Hours: 45

NUTR 1010L - Personal and Practical Nutrition Lab

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: NUTR 1010

This course introduces non-science majors to the basic science of nutrition. Information required to understand a variety of nutrition topics currently in the news affecting our community and society, and to promote nutritional science literacy in the public arena, will be presented. Students will investigate their own dietary practices using dietary assessment tools and apply the scientific principles of human nutrition to promote personal health and well-being. Case studies, problems and laboratory exercises will contribute to the process of scientific inquiry and help students to value science as a way to develop reliable nutrition knowledge.

Note(s):

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously NUTR 1092. Read more.

Lab Hours: 45

NUTR 1015 - Nutrition Fundamentals and Medical Nutrition Therapy

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course explores the fundamentals of nutrition science and medical nutrition therapy for various conditions and disease states. Topics covered include basic nutrition science, including macronutrients, micronutrients, vitamins, minerals, water, general dietary recommendations, as well as medical nutrition therapy basics such as scope of practice, screening for nutritional risks, assessment of dietary intake, dietary modifications for various health conditions, and care planning in the Nutrition Care Process. The course is intended for students enrolled in the Dietary Manager Certification program.

Theory Hours: 45

NUTR 1020 - Sports Nutrition

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

This course will explore the role of nutrition in physical performance of competitive and recreational sports participants.

Note(s):

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.

Theory Hours: 45

NUTR 1060 - Foodservice Management I for Dietary Managers

3 credit hour(s)
Pre- or corequisite: NUTR 1015

This course explores the fundamentals of non-commercial foodservice and dining services management for dietary managers, with a focus on quantity food production, meal service, and food safety and sanitation in care centers,

schools, correctional facilities, hospitals, and employee feeding venues. Topics covered include standardized recipes, food production systems, preparation of nourishments and supplements, client satisfaction, quality processes, sanitation, and safe food handling. The course is intended for students enrolled in the Dietary Manager Certification program.

Theory Hours: 45

NUTR 1070 - Foodservice Management II for Dietary Managers

3 credit hour(s)
Pre- or corequisite: NUTR 1015

This course explores the fundamentals of non-commercial foodservice and dining services management for dietary managers, with a focus on personnel, communications, and business operations in care centers, schools, correctional facilities, hospitals, and employee feeding venues. Topics covered include managing personnel, employment regulations, managing budgets, revenue, and cost controls, as well as professional development and ethics.

Theory Hours: 45

NUTR 1090 - Dietary Manager Clinical I

2 credit hour(s)
Pre- or corequisite: NUTR 1015

This course provides a learning experience in clinical and community environments with emphasis on developing skills in Nutrition/Medical Nutrition Therapy and Sanitation/Food Safety. This is a coordinated supervised practice field experience requiring a minimum of 90 hours and is required for students seeking a certificate in the Dietary Managers Program. The course prepares learners to complete nutritional assessments and care plans for patients; describe the nutritional needs of people across the life cycle; prepare menus and transpose these to modified diets; develop an infection control program based on principles of sanitation; and develop a preventative accident program to reduce work related accidents.

N**ote(s):**

- This course offered Fall and Spring terms.

Clinical Hours: 90

NUTR 1190 - Dietary Manager Clinical II

2 credit hour(s)
Pre- or corequisite: NUTR 1015

This course provides a learning experience in clinical and community environments with emphasis on developing skills in Management of Food Service Operations and Human Resource Management. This is a coordinated supervised practice field experience requiring a minimum of 90 hours and is required for students seeking a certificate in the Dietary Manager Program. Focus areas include quality improvement and evaluation of service, meal planning, recipe development, safe and sanitary food procurement and production methods, facility layout and design, staffing, marketing, and financial management.

N**ote(s):**

- This course is only offered during the Fall and Spring terms

Clinical Hours: 90

NUTR 1996 - Topics in Nutrition

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously NUTR 1096-1996. Read more.

NUTR 2110 - Human Nutrition

3 credit hour(s)
Pre- or corequisite: CHEM 1120 or CHEM 1215 or BIOL 1140 or appropriate placement score

This course provides an overview of nutrients, including requirements, digestion, absorption, transport, function in the body and food sources. Dietary guidelines intended to promote long-term health are stressed.

Theory Hours: 45

NUTR 2996 - Topics in Nutrition

1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously NUTR 2096-2996. Read more.

Occupational Safety and Health

OSH 2006 - Occupational Safety for Construction I

1 credit hour(s)

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 Department of Labor card acknowledging completion of the 10-hour awareness course for 29 CFR 1926.

Theory Hours: 15

OSH 2010 - Occupational Safety for Construction - 30 Hour

3 credit hour(s)

Introduces students to Occupational Safety and Health Act policies, procedures, 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.

N**ote(s):**

- An OSHA Construction Industry Outreach Training Program 30 hour card is awarded upon successful course completion.

Theory Hours: 45

OSH 2016 - Occupational Safety I

1 credit hour(s)

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.

Theory Hours: 15

OSH 2017 - Occupational Safety II
1 credit hour(s)

Covers lock-out/tag-out, material handling, hazardous communication (MSDS and labeling), machine guarding, welding/cutting/brazing, confined spaces, hearing conservation and general environmental controls.

Theory Hours: 15

OSH 2018 - Occupational Safety III
1 credit hour(s)

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 OSH 2016, OSH 2017 and ESH 2018.

Theory Hours: 15

OSH 2030 - Occupational Safety General Industry 30 Hour
3 credit hour(s)

Course introduces hazard recognition, analysis, and safe working practices for common general industry hazards such as walking/working surfaces, electrical, blood borne pathogens, health hazards, lock-out/tag-out, material handling, machine guarding, welding, and confined spaces. Includes record keeping, hazardous communication, inspections and general environmental control methods. An OSHA General Industry Safety and Health Outreach Program 30-hour certificate will be awarded on successful completion.

Theory Hours: 45

OSH 2096-2996 - Special Topics
1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

Office Technology

OTEC 1096-1996 - Special Topics
1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. See *Schedule of Classes*.

OTEC 1101 - Keyboarding
3 credit hour(s)

Develops proper keyboarding technique to achieve speed and accuracy. A minimum average of 25 wpm on three five-minute timings is required.

Theory Hours: 45

OTEC 1170 - Business Telephone Techniques
1 credit hour(s)

Presents concepts to develop effective speaking, listening and questioning skills. Methods for handling incoming calls, outbound calls, customer orders, customer problems and customer complaints.

Theory Hours: 15

OTEC 1175 - Computers in the Medical Office
2 credit hour(s)

Introduces tasks performed in a medical office utilizing a computerized software package, including scheduling appointments, gathering and recording patient information, recording diagnoses and procedures, billing patients, filing insurance claims, recording payments and preparing reports.

Theory Hours: 30

OTEC 1301 - Introduction to Practical and Ethical AI Usage
3 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: IRW 0980

This beginner-friendly course is designed for those who want to master enhancing their productivity and efficiency with AI tools. Through hands-on activities and real-world examples, students will delve into the fundamentals of AI, such as learning to integrate AI into daily tasks including developing effective prompts. Students will also learn to navigate ethical considerations in AI usage to understand responsible and fair practices. This course also prepares students to make informed decisions about AI usage in the workplace and educational settings.

Theory Hours: 45

OTEC 2096-2996 - Special Topics
1-3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

OTEC 2097 - Independent Study
1-6 credit hour(s)
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.

OTEC 2201 - Document Production and Integration
3 credit hour(s)
Prerequisite: BCIS 1220 + OTEC 1101
Pre- or corequisite: BCIS 1215

Create and format documents to develop business

document production skill. Presents advanced applications for document integration.

Theory Hours: 45

OTEC 2998 - Internship

3 credit hour(s)
Prerequisite: Department approval

Provides students the opportunity to work a minimum of 135 hours in a new job experience in office-related supervised workstations. Students are supervised jointly by CNM and the company.

N**ote(s):**

- Previously OTEC 2098

Internship Hours: 150

Paralegal Studies

PL 1096-1996 - Special Topics

1-3 credit hour(s)
Prerequisite: Department approval

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

PL 1110 - Introduction to Paralegal Studies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: BCIS 1110*

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.

* This course requires a proficiency in word processing.

Theory Hours: 45

PL 1120 - American Law and Ethics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: BCIS 1110*

Covers concepts such as the origins, nature, history and structure of the American legal system and rules of professional conduct for lawyers and paralegals.

* This course requires a proficiency in word processing.

Theory Hours: 45

PL 1130 - Torts

3 credit hour(s)
Pre- or corequisite: PL 1110

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.

Theory Hours: 45

PL 1140 - Legal Research and Writing I

3 credit hour(s)
Prerequisite: BUSA 1115 + (ENGL 1110 or ENGL 1110P)
Pre- or corequisite: PL 1110 + PL 1120 + PL 1130

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.

Theory Hours: 45

PL 1150 - Court Operations and Ethics

3 credit hour(s)

This course introduces concepts about the New Mexico judiciaries, includes tracking of a civil and criminal case in each court. It also introduces concepts such as ethical and specific court operation issues with an emphasis on ethics in the workplace.

Theory Hours: 45

PL 2096-2996 - Special Topics

1-3 credit hour(s)
Prerequisite: Department approval

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

PL 2097 - Independent Study

1-9 credit hour(s)
Prerequisite: Department 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.

PL 2098 - Internship

3 credit hour(s)

Prerequisite: Department approval

Provides the opportunity to perform 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.

Internship Hours: 135

PL 2120 - Civil Litigation

3 credit hour(s)

Prerequisite: BCIS 1220 + ENGL 1120 + PL 1130 + PL 1140
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.

Theory Hours: 45

PL 2130 - Criminal Litigation

3 credit hour(s)

Prerequisite: COMM 1130 + ENGL 1120 + PL 1130 + PL 1140

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.

Theory Hours: 45

PL 2140 - Legal Research and Writing II

3 credit hour(s)
Prerequisite: COMM 1130 + ENGL 1120 + PL 1130 + PL 1140

Continues development of legal research, analysis and writing skills, with the focus on advanced legal research problems.

Theory Hours: 45

PL 2150 - Evidence

3 credit hour(s)
Prerequisite: COMM 1130 + ENGL 1120 + PL 1130 + PL 1140

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.

Theory Hours: 45

PL 2160 - Law Office Management

3 credit hour(s)
Prerequisite: COMM 1130 + ENGL 1120 + PL 1130 + PL 1140

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.

Theory Hours: 45

PL 2220 - Wills Probate and Estate Planning

3 credit hour(s)
Prerequisite: (PL 2120 or PL 2130) + PL 2140 + PL 2150 + PL 2160

Covers concepts such as the drafting of wills and trusts, administration of estates, formal and informal probate proceedings and estate tax returns. A review of the probate code and drafting projects are included.

Theory Hours: 45

PL 2240 - Paralegal Computer Applications

3 credit hour(s)
Prerequisite: PL 1120 + PL 1130 + PL 1140

Course content includes computer applications in legal research including legal databases, internet resources, law-oriented concepts and applications using word processing, spreadsheets, data management programs, and introduces students to various law-oriented software in the area of case management, time and billing, deposition digest and calendaring and docket control.

Theory Hours: 45

PL 2425 - Domestic Relations

3 credit hour(s)
Prerequisite: PL 1140 or department approval

Focuses on legal issues in family relations with emphasis on local procedures in the domestic relations court and its satellites.

Theory Hours: 45

PL 2430 - Constitutional Law

3 credit hour(s)
Prerequisite: PL 1140 or department 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.

Theory Hours: 45

Patient Care Technician

PCT 1020 - Patient Care Technician

4 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg
Pre- or corequisite: HLTH 1001 or HLTH 1003
Corequisite: PCT 1090 + PCT 1092

Provides instruction needed to function as a Patient Care Technician including communication with patients and the healthcare team, medical terminology, principles of sterile technique, urinary catheterization, 12-lead EKG acquisition, venipuncture, point of care testing and other concepts related to the care of a patient in an acute care setting.

Theory Hours: 60

PCT 1090 - Patient Care Tech Clinical Experience

2 credit hour(s)
Corequisite: PCT 1020 + PCT 1092

Provides students who have successfully completed the Patient Care Tech course with clinical experience in an acute care setting or clinic. Students will perform the skills within the role of the patient care tech on various inpatient units. Background check and drug screen required.

Clinical Hours: 90

PCT 1092 - Patient Care Technician Lab

3 credit hour(s)
Corequisite: PCT 1020 + PCT 1090

Provides supervised practice in a laboratory and simulation setting of concepts and skills related to caring for the hospitalized patient.

Lab Hours: 135

Pharmacy Technician

PT 1003 - Pharmacy Calculations

3 credit hour(s)
Pre- or corequisite: Laboratory Science Requirement
Corequisite: PT 1011 + PT 1192 + PT 1316

Provides skills in pharmaceutical calculations necessary for safely compounding and preparing prescriptions or other pharmacy products.

Theory Hours: 45

PT 1011 - Pharmacy Technician Introduction

3 credit hour(s)
Pre- or corequisite: Laboratory Science Requirement
Corequisite: PT 1003 + PT 1192 + PT 1316

Provides a discussion of the pharmacy technician, pharmacist, and other healthcare occupation roles in the healthcare environment. Emphasizes the history of pharmacy, state and federal laws, ethics, professional standards of practice, prescription preparation, inventory management, and institutional drug distribution.

Theory Hours: 45

PT 1096-1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

PT 1192 - Pharmacy Technician Processes Lab

2 credit hour(s)
Corequisite: PT 1011 + PT 1003 + PT 1316

Focuses on the fundamentals of current pharmacy practice and technology, including basic pharmacy skills including reading and entering prescription/medication orders into a computer software program, labeling, packaging and dispensing medications, and inventory management in various pharmacy settings. Patient safety, drug safety, and patient service are introduced and practiced.

Lab Hours: 90

PT 1316 - Pharmacy Technician Pharmacology I

3 credit hour(s)
Corequisite: PT 1003 + PT 1011 + PT 1192

Presents a study of therapeutic categories and classifications of drugs that affect the Central Nervous System (CNS) and Skeletal Muscles exploring the pharmacologic and mechanism of actions, adverse effects, side effects, drug interactions, and disease prevention concepts.

Theory Hours: 45

PT 1710 - Intermediate Pharmacy Technician

3 credit hour(s)
Prerequisite: Laboratory Science Requirement + PT 1003 + PT 1011 + PT 1192 + PT 1316
Pre- or corequisite: (HLTH 1001 or HLTH 1003) + HLTH 1010 + (ENGL 1110 or ENGL 1110P)
Corequisite: PT 1716 + PT 2092

Provides a discussion of the pharmacy technician and pharmacist roles in medication management services and direct patient care in various practice settings. This course emphasizes quality assurance measures, basic safety, and emergency preparedness procedures as described by Occupational Safety and Health Administration (OSHA), National Institute of Occupational Safety and Health (NIOSH), United States Pharmacopeia (USP) and other quality organizations.

Theory Hours: 45

PT 1716 - Pharmacy Technician Pharmacology II

3 credit hour(s)
Corequisite: PT 1710 + PT 2092

Presents a study of therapeutic categories and classifications of drugs that affect the Central Nervous System (CNS) and Cardiovascular System exploring the pharmacologic and mechanism of actions, adverse effects, side effects, drug interactions, and disease prevention concepts.

Theory Hours: 45

PT 1792 - Non-sterile USP Compounding Laboratory – Hazardous & Non-Hazardous Preparations

2 credit hour(s)
Prerequisite: (ENGL 1110 or ENGL 1110P) + (HLTH 1001 or HLTH 1003) + HLTH 1010 + PT 1710 + PT 1716 + PT 2092
Pre- or corequisite: (COMM 1130 or COMM 2120 or COMM 2140 or COMM 2180)
Corequisite: PT 2010 + PT 2016 + PT 2090

Provides a study and practice of compounding non-sterile preparations according to current United States Pharmacopeia (USP) chapters, National Institute of Occupational Safety and Health (NIOSH) Hazardous Drug List, Occupational Safety and Health Administration (OSHA) guidelines, and Board of Pharmacy regulations.

Lab Hours: 90

PT 2010 - Pharmacy Technician Professionalism

3 credit hour(s)
Pre- or corequisite: (COMM 1130 or COMM 2120 or COMM 2140 or COMM 2180) + PT 1792 + PT 2016 + PT 2090

Provides practical aspects of successful employment, patient service, and pharmacy professionalism including lifelong learning, Board of Pharmacy registration and national certification requirements.

Theory Hours: 45

PT 2010 - Pharmacy Technician Professionalism

3 credit hour(s)
Corequisite: PT 1792 + PT 2016 + PT 2090

Provides practical aspects of successful employment, patient service, and pharmacy professionalism including lifelong learning, Board of Pharmacy registration and national certification requirements.

Theory Hours: 45

PT 2016 - Pharmacy Technician Pharmacology III

3 credit hour(s)
Corequisite: PT 1792 + PT 2010 + PT 2090

Presents a study of therapeutic categories and classifications of drugs that affect the Respiratory System, Digestive System, Endocrine System, and Immune System exploring the pharmacologic and mechanism of actions, adverse effects, side effects, drug interactions, and disease prevention concepts.

Theory Hours: 45

PT 2090 - Pharmacy Technician Clinical

3 credit hour(s)
Corequisite: PT 1792 + PT 2010 + PT 2016

Provides the opportunity for practical experience applying skills gained through classroom and lab instruction, within institutional and community pharmacies.

Clinical Intensive Hours: 180

PT 2092 - Sterile USP Compounding Lab – Hazardous and Non-Hazardous Preparations

2 credit hour(s)
Corequisite: PT 1710 + PT 1716

Provides a study and practice of compounding sterile preparations according to current United States Pharmacopeia (USP) chapters, National Institute of Occupational Safety and Health (NIOSH) Hazardous Drug List, Occupational Safety and Health Administration (OSHA) guidelines, and Board of Pharmacy regulations.

Lab Hours: 90

PT 2510 - Advanced Pharmacy Technician

3 credit hour(s)
Prerequisite: ASHP/ACPE Accredited Pharmacy Technician Entry Level Certificate + Department Approval
Pre- or corequisite: Social and Behavioral Science Requirement
Corequisite: PT 2515 + PT 2520 + PT 2592

Presents an introduction to the knowledge and skills required for achieving Advanced Pharmacy Technician competencies. Current trends, initiatives, goals, and issues in the profession of pharmacy are emphasized.

Theory Hours: 45

PT 2515 - Advanced Pharmacy Technician Medication and Patient Safety

3 credit hour(s)
Prerequisite: ASHP/ACPE Accredited Pharmacy Technician Entry Level Certificate + Department Approval
Pre- or corequisite: Social and Behavioral Science Requirement
Corequisite: PT 2510 + PT 2520 + PT 2592

Expands Medication and Patient Safety practice concepts introduced in the Entry-Level courses. Error reduction strategies are discussed using current Institute for Safe Medication Practices (ISMP) guidelines. Pharmacy Technician roles in the Medication Reconciliation and Transition of Care processes are introduced and practiced.

Theory Hours: 45

PT 2520 - Advanced Pharmacy Technician Informatics

2 credit hour(s)
Corequisite: PT 2510 + PT 2515 + PT 2592

Provides an introduction to Pharmacy Informatics. Focuses on key technologies and the role the Information Technology and Pharmacy teams play in increasing Medication Safety.

Theory Hours: 30

PT 2592 - Advanced Pharmacy Technician Laboratory

2 credit hour(s)
Corequisite: PT 2510 + PT 2515 + PT 2520

Provides the opportunity to manage, supervise, and verify the work of pharmacy technicians or other healthcare professionals in a simulated pharmacy setting. Simulated patient point of care testing and immunization techniques are practiced. Communication with healthcare professionals and patients is emphasized.

Lab Hours: 90

PT 2690 - Advanced Pharmacy Technician Clinical

3 credit hour(s)
Prerequisite: PT 2510 + PT 2515 + PT 2520 + PT 2592 + Social and Behavioral Science Requirement
Pre- or corequisite: Mathematics Requirement
Corequisite: PT 2999

Provides the opportunity for practical experience applying advanced skills gained through classroom and lab instruction, within institutional and community pharmacies.

Clinical Intensive Hours: 180

PT 2999 - Advanced Pharmacy Technician Capstone

1 credit hour(s)
Prerequisite: PT 2510 + PT 2515 + PT 2520 + PT 2592 + Social and Behavioral Science Requirement
Pre- or corequisite: Mathematics Requirement
Corequisite: PT 2690

Preparation of a focused project or portfolio that demonstrates student's mastery of the technical and core competencies required of an Advanced Level Pharmacy Technician.

Theory Hours: 15

Philosophy

PHIL 1115 - Introduction to Philosophy

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

In this course, students will be introduced to some of the key questions of philosophy through the study of classical and contemporary thinkers. Some of the questions students might consider are: Do we have free will? What is knowledge? What is the mind? What are our moral obligations to others? Students will engage with and learn to critically assess various philosophical approaches to

such questions.

N**ote(s):**

- Previously PHIL 1110. Read more.

Theory Hours: 45

PHIL 1120 - Logic, Reasoning, & Critical Thinking

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

The purpose of this course is to teach students how to analyze, critique, and construct arguments. The course includes an introductory survey of important logical concepts and tools needed for argument analysis. These concepts and tools will be used to examine select philosophical and scholarly texts.

Note(s):

- Previously PHIL 1156. Read more.

Theory Hours: 45

PHIL 1130 - Contemporary Moral Issues

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course will introduce students to and engage them in the philosophical analysis of contemporary moral issues. Students will read and discuss texts dealing with various controversial social issues, which might include health care access, physician-assisted suicide and euthanasia, the death penalty, incarceration, war, and terrorism.

Note(s):

- Previously PHIL 1102. Read more.

Theory Hours: 45

PHIL 1135 - Introduction to Asian Philosophies

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: ENGL 1110 or ENGL 1110P

For as long as human beings have recorded their thoughts, they have shown an interest in what it means to be a human being of good character, a useful citizen within society and a fulfilled and contented person. In this course we shall examine how several thinkers from India and China have approached this problem. Some have provided anecdotes from which the reader is expected to extract an important lesson, while others have written more systematic essays or set out programs for the cultivation of virtue and guidelines of appropriate conduct. The class will combine background lectures and class discussion of assigned readings.

Theory Hours: 45

PHIL 2120 - Biomedical Ethics

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

The course examines ethical theories against the reality of current issues in the medical professions and in the fields of bio-research. Topics such as euthanasia, genetic experimentation, informed consent, abortion and human and animal experimentation are studied from widely different ethical perspectives.

Note(s):

- Previously PHIL 2247. Read more.

Theory Hours: 45

PHIL 2130 - Environmental Ethics

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course will be an introductory survey of approaches to the ethical responsibilities humans have to the environment. Students will explore the ethical issues raised by the way humans engage with the environment in areas that might include science, engineering, and technology.

Note(s):

- Previously PHIL 2246. Read more.

Theory Hours: 45

PHIL 2135 - Ethics of Technology

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Provides a forum for discussion of the ethical and social problems arising from the uses of computers and technology.

Note(s):

- Previously PHIL 2248. Read more.

Theory Hours: 45

PHIL 2210 - Early Modern Philosophy

3 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

This course is an introductory survey of early modern Western philosophy. Through an in-depth reading of primary source material, this course will examine the traditions of Rationalism and Empiricism that emerged during the seventeenth and eighteenth centuries. Concepts to be discussed might include theories of knowledge and metaphysics, early modern scientific thought, and theories of the self.

Note(s):

- Previously PHIL 2202. Read more.

Theory Hours: 45

PHIL 2220 - Greek Philosophy

3 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P

This course is an introductory survey of early and classical Greek philosophy. The course will include discussion of such philosophers as the Pre-Socratics, the Sophists, Socrates, Plato and Aristotle. Topics to be discussed may include the beginnings of scientific thought, theories of the self, the concept of being, virtue ethics, happiness, and theories of justice.

Note(s):

- Previously PHIL 2201. Read more.

Theory Hours: 45

PHIL 2240 - Introduction to Existentialism

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

The aim of this course is to introduce students to the tradition of existential philosophy through a careful reading of philosophical texts by authors, such as Kierkegaard, Nietzsche, Sartre, de Beauvoir, and Heidegger.

Note(s):

- Previously PHIL 2244. Read more.

Theory Hours: 45

PHIL 2310 - Business Ethics

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Business Ethics is a philosophy course that studies ethical theory and applies it to contemporary ethical and social problems that arise in the practice of business. These will include concerns with how businesses affect employees, stakeholders, governments, economics, and the environment. This will entail concerns about how society should cope with certain kinds of problems of production and distribution, for instance, how it should distribute wealth or regulate commerce.

Note(s):

- Previously PHIL 2245. Read more.

Theory Hours: 45

PHIL 2996 - Special Topics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously PHIL 2096-2996. Read more.

Phlebotomy

PHLB 1010 - Phlebotomy Theory

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg + (HLTH 1001 or HLTH 1003)
Pre- or corequisite: MLT 1001
Corequisite: PHLB 1092

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.

Theory Hours: 45

PHLB 1090 - Clinical Phlebotomy

2 credit hour(s)
Pre- or corequisite: PHLB 1010 + PHLB 1092

Provides opportunity for students to practice phlebotomy procedures on actual patients in area hospitals and clinics.

Clinical Intensive Hours: 120

PHLB 1092 - Phlebotomy Lab

2 credit hour(s)
Corequisite: PHLB 1010

Provides opportunity to practice phlebotomy skills and apply theory using artificial arms and human subjects.

Lab Hours: 90

PHLB 1096-1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

Physical Education

PHED 1230A - Individual Sport: Ultimate Frisbee

1 credit hour(s)

Covers rules, techniques and tactics involved in playing Ultimate Frisbee while participating in various conditioning and skill-related drills and semi-competitive games.

Note(s):

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1993. Read more.

Lab Hours: 45

PHED 1230B - Individual Sport: Beginning Bowling

1 credit hour(s)

Provides instruction in the basic principles and skills of bowling which include the four-step approach, grip, delivery, and scoring. Spare and strike position strategies, ball control techniques will be emphasized. Students will learn care of equipment for bowling, safety, rules, and etiquette.

Note(s):

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1794. Read more.

Lab Hours: 45

PHED 1410A - Yoga: Beginning Yoga

1 credit hour(s)

An introduction to yoga and yoga movements. Students explore various concepts and fundamentals of yoga while also learning about the history of the practice.

Note(s):

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1593. Read more.

Lab Hours: 45

PHED 1410D - Yoga: Healing Hatha Yoga Stretch and Breathe

1 credit hour(s)

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 persons. Students are responsible for purchasing their own mat.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1893. Read more.

Lab Hours: 45

PHED 1420 - Stretch/Relax: Flexibility Training
1 credit hour(s)

Increases and maintains joint range of motion as well as facilitates relaxation; includes abdominal training.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1393. Read more.

Lab Hours: 45

PHED 1430 - Pilates
1 credit hour(s)

Designed to introduce students to movements and breathing patterns based on techniques developed by Joseph Pilates. Students will learn how to develop core strength, stability, muscle tone, proper body alignment, flexibility, balance, and coordination and how to facilitate relaxation. Emphasis is placed on proper breathing patterns as well as the flow of the movements.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 2392. Read more.

Lab Hours: 45

PHED 1460 - Conditioning: Personal Fitness
1 credit hour(s)

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.

N**ote(s):**

- Previously FITT 1792. Read more.

Lab Hours: 45

PHED 1510A - Training: Circuit Training
1 credit hour(s)

Combines strength and aerobic training to provide a total body workout, alternating aerobic exercise with the use of a variety of strength-training modalities. Weight training exercises are performed consecutively to tone and strengthen major muscle groups.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1992. Read more.

Lab Hours: 45

PHED 1510B - Training: Body Sculpting
1 credit hour(s)

Designed for individuals to achieve aerobic fitness and muscular endurance, focusing on correct body alignment and exercise technique. Emphasis will be placed on core strengthening.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1192. Read more.

Lab Hours: 45

PHED 1510D - Training: Resistance Training
1 credit hour(s)

Introduce students to resistance training through the use of free weights, machines, bodyweight exercises and other fitness tools. Emphasizes weight training orientation, correct lifting techniques, and basic program design for resistance training.

Note(s):

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1093. Read more.

Lab Hours: 45

PHED 1510E - Training: Kickboxing
1 credit hour(s)

Designed for students who desire to increase cardiovascular fitness, flexibility, and muscular endurance in an aerobic format utilizing kicking, jumping, and boxing movements. Emphasis will be on safe exercise progression and technique in a format utilizing aerobic kickboxing.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1092. Read more.

Lab Hours: 45

PHED 1510F - Training: Fit Ball Training
1 credit hour(s)

Uses fit balls, exercise bands, medicine balls and hand weights to improve flexibility, coordination and extremity and core strength.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1493. Read more.

Lab Hours: 45

PHED 1620A - Fitness: Core Fitness I
1 credit hour(s)

Teaches core strength and stabilization as well as improves joint range of motion and facilitate relaxation. Students are responsible for purchasing their own mats.

N**ote(s):**

- Previously FITT 1693. Read more.

Lab Hours: 45

PHED 1620B - Fitness: Walking for Fitness
1 credit hour(s)

Introduces cardio-respiratory fitness, flexibility and body composition for individuals who have never participated in a walking program.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1894. Read more.

Lab Hours: 45

PHED 1630 - Career Fitness: Fitness for Public Safety Professionals
2 credit hour(s)

This course will provide students with the knowledge and practical skills necessary to become physically fit in preparation of becoming a public safety professional. The class will include both classroom curriculum which will be reinforced by practical exercise skills specific to public safety. Both classroom and field practicum will focus on the essential components of public safety fitness to include, aerobics, muscular strength & endurance, core strength and stability and flexibility. In addition, students will learn about public safety wellness including basic nutritional needs, hydration and rest and include specific preparation for taking the required Work Capacity Test.

N**ote(s):**

- Previously FITT 1410. Read more.

Theory Hours: 15
Lab Hours: 45

PHED 1670A - Aerobics: Beginning Step Aerobics
1 credit hour(s)

Introduces cardiorespiratory fitness, flexibility and body composition for individuals who have never participated in a step aerobics program.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1193. Read more.

Lab Hours: 45

PHED 1670B - Aerobics: Step/Circuit Combo
1 credit hour(s)

Uses a combination of step-aerobics and circuit resistance training with hand weights, resistances tubes and fit ball for individuals looking for a cross-training effect. No previous step experience is required.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1492. Read more.

Lab Hours: 45

PHED 1670D - Aerobics: Step/Kick Combo
1 credit hour(s)

Uses a combination of step-aerobics and cardio kickbox training for individuals looking for a cross training effect. No previous step experience is required.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1592. Read more.

Lab Hours: 45

PHED 1830 - Running: Running for Fitness
1 credit hour(s)

Provides instruction in the fundamental skills of running to improve cardiovascular fitness, increase flexibility, develop endurance, and introduce students to the physiologic responses of the body to running. Cardiovascular workout strategies, injury prevention, safety factors, health issues and the components of fitness will be examined.

Note(s):

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 1994. Read more.

Lab Hours: 45

PHED 2280 - Volleyball II: Sand Volleyball
1 credit hour(s)

Covers rules, techniques and tactics involved in playing Sand Volleyball while participating in various conditioning and skill-related drills and semi-competitive games.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 2592. Read more.

Lab Hours: 45

PHED 2410 - Yoga II: Fitness Yoga
1 credit hour(s)
Prerequisite: PHED 1410A

Continuation of PHED 1410A - Yoga: Beginning Yoga. Students are responsible for purchasing their own mat.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 2292. Read more.

Lab Hours: 45

PHED 2460 - Conditioning II: Extreme Conditioning
1 credit hour(s)

Covers highly intense activities that prepare individuals for the CPAT entrance test and the physical training portion of the firefighter academy.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 2093. Read more.

Lab Hours: 45

PHED 2620 - Fitness II: Fast Track Fitness
1 credit hour(s)

Covers several aspects of fitness during including but are not limited to Weight Training, Endurance Training, Circuit Training, Ultimate Frisbee, Core Workouts, and many others.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 2692. Read more.

Lab Hours: 45

PHED 2670 - Aerobics II: Step Challenge

1 credit hour(s)
A Step Class for the more experienced stepper.

N**ote(s):**

- Repeatable for credit. Financial aid may be limited to two attempts.
- Previously FITT 2293. Read more.

Lab Hours: 45

Physical Therapy Assistant

PTA 1010 - The Profession of Physical Therapy

1 credit hour(s)
Pre- or corequisite: Mathematics Requirement + (ENGL 1110 or ENGL 1110P)

This course introduces prospective Physical Therapist Assistant students to the profession and allows for career exploration related to physical therapist assistant.

Theory Hours: 15

PTA 1020 - Pre-PTA Anatomy Fundamentals

4 credit hour(s)
Pre- or corequisite: Mathematics Requirement + (ENGL 1110 or ENGL 1110P) + BIOL 1140 + BIOL 1140

This course introduces the prospective PTA student to in-depth anatomy and physiology of systems particularly important to the profession of physical therapy. Systems include muscular, skeletal, neuromuscular, cardiovascular and respiratory.

Theory Hours: 30
Lab Hours: 90

PTA 1110 - Orientation to Physical Therapist Assistant

3 credit hour(s)
Prerequisite: PTA 1010 + PTA 1020 + department approval
Corequisite: PTA 1120 + PTA 1130 + PTA 1140 + PTA 1135

Provides PTA students with fundamental information related to the profession of physical therapist assistant.

Theory Hours: 45

PTA 1120 - Clinical Kinesiology

3 credit hour(s)
Corequisite: PTA 1110 + PTA 1130 + PTA 1135 + PTA 1140

Covers physiological and kinesiological fundamentals as they relate to physical therapy.

Theory Hours: 15
Lab Hours: 90

PTA 1130 - PTA Pathophysiology

3 credit hour(s)
Corequisite: PTA 1110 + PTA 1120 + PTA 1135 + PTA 1140

This course covers the disease processes most commonly seen in physical therapy patients. Etiology, pathology, pathophysiology, signs and symptoms, diagnosis, treatment and prognosis are covered for each disease process.

Theory Hours: 45

PTA 1135 - Pathophysiology Lab

1 credit hour(s)
Corequisite: PTA 1110 + PTA 1120 + PTA 1130 + PTA 1140

This course will focus on disorders and diseases of the human body, including etiology, signs, symptoms, methods of diagnosis, and treatment. Implications for physical therapy intervention as well as disease prevention will also be covered.

This course provides laboratory time for students to properly assess a patient and display competence as an entry level PTA in hands-on and performance practice in the lab environment. Students will develop their skills in psychomotor and behavioral domains.

Lab Hours: 45

PTA 1140 - PTA Procedures I

5 credit hour(s)
Corequisite: PTA 1110 + PTA 1120 + PTA 1130 + PTA 1135

This course is the first of two courses that introduces students to procedures performed by physical therapists and physical therapist assistants. This course combines the theory behind the procedures with development of the skills for providing therapeutic modalities that will be performed in the clinical setting later in the program.

Theory Hours: 45
Lab Hours: 90

PTA 1192 - PTA Supplemental Lab I

1 credit hour(s)
Prerequisite: PSYC 1110 + PTA 1010 + PTA 1020 + BIOL 2210 + BIOL 2225 + department approval
Corequisite: PTA 1110 + PTA 1120 + PTA 1130 + PTA 1140

For PTA first term students to gain skills practice in PTA lab rooms with an instructor. Provides Physical Therapy Assistant students participation in supervised learning and review of basic and specialized practices in the field of Physical Therapy such as: Anatomy and Physiology, Clinical Kinesiology, Gait and Transfer procedures. Allows PTA students opportunity to review in preparation for PTA exit competencies.

Lab Hours: 45

PTA 1520 - Therapeutic Exercise

5 credit hour(s)
Corequisite: PTA 1530 + PTA 1540

This course covers the fundamentals of exercises used in physical therapy to help patients improve their health, especially with respect to recovery from injury or disease. Students will study the theory behind these exercises as well as practice them in the lab setting.

Theory Hours: 45
Lab Hours: 90

PTA 1530 - Orthopedics for PTA

2 credit hour(s)
Prerequisite: PTA 1110 + PTA 1120 + PTA 1130 + PTA 1140
Pre- or corequisite: HLTH 1001
Corequisite: PTA 1520 + PTA 1540 + PTA 1531 + PTA 1533

This course covers the theory aspect of orthopedics as it relates to physical therapy. Students will study pathologies associated with orthopedics as well as assessment and treatment of patients with orthopedic problems.

Theory Hours: 30

PTA 1531 - Orthopedics for the PTA Lab

2 credit hour(s)
Corequisite: PTA 1520 + PTA 1530 + PTA 1533 + PTA 1540

This course will provide students with foundational principles of orthopedic disorder, injury, surgical procedures, musculoskeletal and neurovascular tissue healing; and related physical therapy treatment interventions, including precautions and contraindications to treatment approaches. Students will be provided with basic principles of pharmacology, orthotics, musculoskeletal imaging, and chronic pain to facilitate a comprehensive understanding of orthopedic treatment approaches.

Lab Hours: 90

PTA 1533 - Physical Agents Lab

2 credit hour(s)
Corequisite: PTA 1520 + PTA 1530 + PTA 1531 + PTA 1540

This lab course will study the biophysical principles, assessment, and application of therapeutic physical agents with specific emphasis on indications, contraindications, medical efficacy, and physiological effects. Additionally this course will introduce proper documentation of physical agents and corresponding patient responses.

Lab Hours: 90

PTA 1540 - Clinical Neurology and Management

4 credit hour(s)
Corequisite: PTA 1520 + PTA 1530

This course covers the theory specific to neurological diseases as they relate to physical therapy along with assessment and treatment of patients with a history of neurological deficit.

Theory Hours: 45
Lab Hours: 45

PTA 2010 - PTA Procedures II

3 credit hour(s)
Prerequisite: PTA 1520 + PTA 1530 + PTA 1540 + HLTH 1001
Corequisite: PTA 2090

This course is the second of two courses that introduces students to procedures performed by physical therapist assistants. This course combines the theory behind the procedures with development of the skills for providing therapy that will be performed in the clinical setting as part of the program.

Theory Hours: 30
Lab Hours: 45

PTA 2090 - Clinical Practicum I

4 credit hour(s)
Corequisite: PTA 2010

This course applies skills and knowledge learned in the PTA theory and lab courses to direct patient care in clinical settings. This course is integrated with PTA 2010. Students will be under the direct supervision of a clinical professional.

Clinical Intensive Hours: 240

PTA 2192 - PTA Supplemental Lab II

1 credit hour(s)
Prerequisite: PTA 1110 + PTA 1120 + PTA 1130 + PTA 1140
Corequisite: PTA 1520 + PTA 1530 + PTA 1540

For PTA second term students to gain skills practice in PTA lab rooms with an instructor. Provides Physical Therapist Assistant students with the opportunity for additional learning and practice of PTA skills in the areas of: Therapeutic Exercise/Orthopedics and Neuro-developmental techniques within the campus laboratory. Encourages preparation for required clinical practicums.

Lab Hours: 45

PTA 2210 - Professional Issues

1 credit hour(s)
Prerequisite: PTA 2010 + PTA 2090
Corequisite: PTA 2290 + PTA 2390

This course explores a variety of professional aspects that are related to physical therapy. Topics include ethical and legal considerations, team dynamics, preparing for board exams and licensure, etc.

Theory Hours: 15

PTA 2290 - Clinical Practicum II

4 credit hour(s)
Corequisite: PTA 2210 + PTA 2390

This course applies skills and knowledge learned in the PTA theory and lab courses to direct patient care in clinical settings. Students will be under the direct supervision of a clinical professional.

Clinical Intensive Hours: 240

PTA 2390 - Clinical Practicum III

4 credit hour(s)
Corequisite: PTA 2210 + PTA 2290

This course applies skills and knowledge learned in the PTA theory and lab courses to direct patient care in clinical settings. Students will be under the direct supervision of a clinical professional.

Clinical Intensive Hours: 240

Physics

PHYS 1115 - Survey of Physics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Recommended: Math Skills 3 and PHYS 1115L*

Overview of the concepts and basic phenomena of physics. This course provides a largely descriptive and qualitative treatment with a minimum use of elementary mathematics to solve problems. No previous knowledge of physics is assumed.

N**ote(s):**

- Students not meeting the Reading and Writing Skills 2 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- * It is strongly recommended that students take the lab course concurrently with the lecture. The lab experience serves to enhance the student's understanding of the concepts discussed in the lecture.
- Previously PHYS 1010. Read more.

Theory Hours: 45

PHYS 1115L - Survey of Physics Laboratory

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: Math Skills 3 + PHYS 1115

A series of laboratory experiments associated with the material presented in PHYS 1115.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously PHYS 1092. Read more.

Lab Hours: 45

PHYS 1230 - Algebra-Based Physics I

4 credit hour(s)
Prerequisite: (MATH 1220 or MATH 1220P or MATH 1240 or MATH 1250 or MATH 1430 or appropriate placement scores) + Reading and Writing Skills 2
Recommended: PHYS 1230L
An algebra-based treatment of Newtonian mechanics. Topics include kinematics and dynamics in one and two dimensions, conservation of energy and momentum, rotational motion, equilibrium, and fluids.

N**ote(s):**

- Students not meeting the Reading and Writing Skills 2 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously PHYS 1510. Read more.

Theory Hours: 60

PHYS 1230L - Algebra-Based Physics I Laboratory

1 credit hour(s)
Prerequisite: (MATH 1220 or MATH 1220P or MATH 1240 or MATH 1250 or MATH 1430 or appropriate placement scores) + Reading and Writing Skills 2
Pre- or corequisite: PHYS 1230

A series of laboratory experiments associated with the material presented in PHYS1230.

N**ote(s):**

- Students not meeting the Reading and Writing Skills 2 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously PHYS 1592. Read more.

Lab Hours: 45

PHYS 1240 - Algebra-Based Physics II

4 credit hour(s)
Prerequisite: PHYS 1230
Recommended: PHYS 1240L

The second half of a two semester algebra-based introduction to Physics. This course covers electricity, magnetism and optics.

N**ote(s):**

- Previously PHYS 1610. Read more.

Theory Hours: 60

PHYS 1240L - Algebra-Based Physics II Laboratory

1 credit hour(s)
Pre- or corequisite: PHYS 1240

A series of laboratory experiments associated with the material presented in PHYS1240.

Note(s):

- Previously PHYS 1692. Read more.

Lab Hours: 45

PHYS 1310 - Calculus-Based Physics I

4 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: MATH 1510
Recommended: PHYS 1310L

A calculus level treatment of classical mechanics and waves, which is concerned with the physical motion concepts, forces, energy concepts, momentum, rotational motion, angular momentum, gravity, and static equilibrium.

N**ote(s):**

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously PHYS 1710. Read more.

Theory Hours: 60

PHYS 1310L - Calculus-Based Physics I Laboratory

1 credit hour(s)
Prerequisite: Reading and Writing Skills 2
Pre- or corequisite: PHYS 1310

A series of laboratory experiments associated with the material presented in Calculus-based Physics I. Students will apply the principles and concepts highlighting the main objectives covered in coursework for Calculus-based Physics I.

Note(s):

- Students not meeting the IRW 0980 prerequisite may elect to take FYEX 1110 as a Pre- or Corequisite to this course.
- Previously PHYS 1792. Read more.

Lab Hours: 45

PHYS 1320 - Calculus-Based Physics II

4 credit hour(s)
Prerequisite: PHYS 1310
Pre- or corequisite: MATH 1520
Recommended: PHYS 1320L

A calculus level treatment of classical electricity and magnetism. It is strongly recommended that this course is taken at the same time as Calculus-based Physics II laboratory.

N**ote(s):**

- Previously PHYS 1810. Read more.

Theory Hours: 60

PHYS 1320L - Calculus-Based Physics II Laboratory

1 credit hour(s)
Pre- or corequisite: PHYS 1320

A series of Laboratory experiments associated with the material presented in Calculus-Based Physics II. Students will apply the principles and concepts highlighting the main objectives covered in coursework for Calculus-Based Physics II.

Note(s):

- Previously PHYS 1892. Read more.

Lab Hours: 45

PHYS 1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously PHYS 1096-1996. Read more.

PHYS 2310 - Calculus-based Physics III

4 credit hour(s)
Prerequisite: PHYS 1320
Pre- or corequisite: MATH 2530

This course, the third in the calculus based sequence for science and engineering students, is a study of optics and topics in modern physics.

Note(s):

- Previously PHYS 2710. Read more.

Theory Hours: 60

Plumbing

PLMB 1105 - Basic Plumbing, Safety and Pipe Fitting

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

An introduction to basic plumbing, safety and pipe fitting. This course will introduce students to today's complex and sophisticated plumbing systems and the career opportunities available. Major topics include safety, tools, materials, equipment, and procedures. The course will introduce students to installation and repair techniques as well as development in materials , fixtures and appliances. The program will cover both hands, the proper use of plumbing tools and customer service for employment skills.

Theory Hours: 30
Lab Hours: 45

PLMB 1111 - Plan Reading/Drawing

2 credit hour(s)
Pre- or corequisite: PLMB 1105

This course will emphasize the skills needed to properly interpret building prints and the ability to draw isometric sketches in the field to be pre-fabricated in a shop environment. Areas covered include basic drawing tools, measuring tools and lettering; graphic symbols for pipes, fittings and valves; interpretations of technical diagrams; interpretation of isometric drawings; and drawing three view, plan view and elevation view representations.

N**ote(s):**

- Previously PLMB 1110. Read more.

Theory Hours: 15
Lab Hours: 45

PLMB 1115 - Introduction to Gas Fitting and Combustion Venting

2 credit hour(s)
Pre- or corequisite: PLMB 1111 or department approval

An introduction to the installation of piping and venting for natural gas and liquid petroleum systems. Topics include piping design, fuel combustion piping systems and domestic hot water systems. The course will also cover the proper installation of gas piping system; clockwise and orifice sizing. Be able to install venting valves, regualtors, and eletrical systems controls.

Theory Hours: 15
Lab Hours: 45

PLMB 1120 - Drain Waste and Vent I

2 credit hour(s)
Pre- or corequisite: PLMB 1115

Emphasizes layout and design of drain and vent systems in residential buildings.

Theory Hours: 15
Lab Hours: 45

PLMB 1125 - Drain/Waste/Vent and Gray Water

3 credit hour(s)
Pre- or corequisite: PLMB 1130 or department approval

Covers the layout and design of drain and vent systems in

residential and commercial buildings including those using gray water systems. Topics include safety requirements, tools and materials, proper installation, maintenance and principles of gravity, air pressure, DWV sizing, storm drainage, sewers and sewage treatment, private sewage disposal systems, and alternate water source drainage systems.

Theory Hours: 15
Lab Hours: 90

PLMB 1130 - Water Piping Systems

2 credit hour(s)
Pre- or corequisite: PLMB 1120

Introduces layout and design of water piping systems as well as the installation of plumbing fixtures.

Theory Hours: 15
Lab Hours: 45

PLMB 1205 - Water Supply Systems and Backflow Prevention

2 credit hour(s)
Pre- or corequisite: PLMB 2210 or department approval

Covers the design and application of water delivery systems used for domestic and commercial potable drinking water. The course will concentrate on water pipe sizing as well as types of materials and fittings. Water supply sources and treatment. Cross connection prevention will be covered as well as the hands-on use of backflow prevention and test gauges.

Theory Hours: 15
Lab Hours: 45

PLMB 1210 - Commercial Plumbing

2 credit hour(s)
Pre- or corequisite: PLMB 1205

Presents the different aspects of the commercial plumbing industry.

Theory Hours: 15
Lab Hours: 45

PLMB 1215 - Service Plumbing, Repair, and Maintenance

2 credit hour(s)
Pre- or corequisite: PLMB 1125 or department approval

This course will provide the student with a basic understanding of the theory and practices of fixture installation and the use of various types of fixtures. Fixtures in both residential and commercial applications will be explored. Topics covered include plumbing fixtures; installation practices; institutional fixture and equipment; fixture controls; and appliances and accessories.

Theory Hours: 15
Lab Hours: 45

PLMB 1225 - Building Maintenance and Repair

2 credit hour(s)
Pre- or corequisite: PLMB 2211 or department approval

Presents requirements for installation and repair of heating and cooling systems for commercial and residential applications.

Theory Hours: 15
Lab Hours: 45

PLMB 1230 - Boilers and Hydronic Systems

2 credit hour(s)
Pre- or corequisite: PLMB 1210 or department approval

An introduction to boilers and hydronic systems. Students will study fundamental hydronic heating concepts, heat load design, estimating, heating sources, the properties of water as it relates to hydronics, system components, heating control panels, and distribution piping systems. Included ai air management and piping materials.

Theory Hours: 15
Lab Hours: 45

PLMB 1305 - Trades Math

2 credit hour(s)
Pre- or corequisite: PLMB 1105

Includes basic arithmetic, whole numbers, fractions and decimals. Covers volumes, weight measurements and basic algebra as it applies to plumbing.

Theory Hours: 30

PLMB 1321 - Solar Thermal Systems

3 credit hour(s)
Pre- or corequisite: PLMB 1230 or department approval

Introduces Solar Thermal Systems including accessing, installing and evaluating fully operational solar water heating systems.

N**ote(s):**

- Previously PLMB 1320. Read more.

Theory Hours: 30
Lab Hours: 45

PLMB 1331 - Energy and Water Conservation Systems

3 credit hour(s)
Pre- or corequisite: PLMB 1321 or department approval

Introduces the newest energy-saving techniques for homes and commercial applications as they relate to the plumbing field. Including gray water, geo- thermal, energy design and application (LEED). Emphasis on energy-saving appliances and low water consumption fixtures.

N**ote(s):**

- Previously PLMB 1330. Read more.

Theory Hours: 30
Lab Hours: 45

PLMB 2096-2996 - Special Topics

1-7 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See

Schedule of Classes.)

PLMB 2210 - Mechanical Code

3 credit hour(s)
Pre- or corequisite: PLMB 1225 or department approval

This course students will gain insight into the Uniform Mechanical Code and the New Mexico Mechanical Code. Regulations and guidelines for proper installation will be explored in preparation for the New Mexico State Gasfitters License for Journeyman Certification which is a requirement within this program. Topics covered include Administration; Definitions; General Regulations; Combustion air; Chimneys and vents; Installation of Specific appliances; Boilers and pressure vessels; Hydronics; and Fuel gas piping.

N**ote(s):**

- Previously PLMB 1235. Read more.

Theory Hours: 30
Lab Hours: 45

PLMB 2211 - Plumbing Code

3 credit hour(s)
Pre- or corequisite: PLMB 1215

In this course students will gain insight into the Uniform Plumbing Code and the 2015 New Mexico Plumbing Code. Regulations and guidelines for proper installation will be explored in preparation for the New Mexico State Plumbing License for Journeyman Certification which is a requirement within this program. Topics covered include Administration; Definitions; General Regulations; Plumbing Fixtures; Water heaters; Water Supply, Sanitary Drainage; Indirect Wastes; Vents; Traps and interceptors; Storm Drainage; and Fuel gas piping.

Note(s):

- Previously PLMB 1220. Read more.

Theory Hours: 30
Lab Hours: 45

PLMB 2997 - Independent Study

1-7 credit hour(s)
Prerequisite: Department approval

Focuses on a specific problem while working with an instructor.

Political Science

POLS 1110 - Introduction to Political Science

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

This course covers fundamental concepts in political science, such as political theories, ideologies, and government systems.

N**ote(s):**

- Students planning to transfer to the University of New Mexico's Political Science program should take PSCI 1110 first in their sequence of classes for articulation.
- Previously PSCI 1110. Read more.

Theory Hours: 45

POLS 1120 - American National Government

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: ENGL 1120*

This course explains the role of American national government, its formation and principles of the Constitution; relation of state to the national government; political parties and their relationship to interest groups. This course also explains the structure of the legislative, executive, and judicial branches.

N**ote(s):**

- Previously PSCI 2200. Read more.

Theory Hours: 45

POLS 2110 - Comparative Politics

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: ENGL 1120*

This course introduces comparative politics by examining the political history, social and economic structures, and contemporary political institutions and behavior, with focus on occurrences in countries representing diverse cultures, geographies, and levels of development.

N**ote(s):**

- Typically offered in Fall and Spring terms only.
- Previously PSCI 2220. Read more.

Theory Hours: 45

POLS 2120 - International Relations

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: ENGL 1120 + POLS 1110 + POLS 1120*

This course covers the analysis of significant factors in world politics, including nationalism, national interest, political economy, ideology, international conflict and collaboration, balance of power, deterrence, international law, and international organization.

N**ote(s):**

- Previously PSCI 2240. Read more.

Theory Hours: 45

POLS 2130 - Political Ideas/Introduction to Political Theory

3 credit hour(s)
Pre- or corequisite: POLS 1110 + POLS 1120
Recommended: ENGL 1120*

This course offers an introductory survey of political theory. Emphasis is placed on (1) textual analysis of primary sources and on (2) scholarly analysis of the foundational questions and methods central to the academic study of political ideas. Studying political ideas involves thinking about a) the very definition of political theory itself, b) what one would need to know in order to make evidence- based claims about political theory texts and c) why and how the study of political theory leads political scientists into the exploration of "essentially contested concepts." More specifically, throughout the semester, we will explore questions relating to 1) what is the definition of political theory; 2) why/how are interpretative disputes at the core of political theory and

3) how have major political theories/ideas—democracy, liberalism, conservatism, socialism, liberation theory, and fascism—changed and developed over time? In sum, this is a survey course on the history of political ideas.

N**ote(s):**

- Typically offered Fall term only.
- Previously PSCI 2260. Read more.

Theory Hours: 45

POLS 2140 - Introduction to Political Analysis

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: ENGL 1120*

What makes the field of Political Science a science? What are the variety of research methods and tools for analysis employed by scholars? The goal of this course is to introduce students to the scientific process by political scientists. The interpretation and analysis of data is also essential for almost any career that a political science major might pursue. Lawyers and lobbyists, politicians and professors all need to be able to read and understand reports in which numerical summaries of data (i.e., statistics) are used as evidence to support an argument or point of view. These professionals need to ascertain whether these statistics are being used appropriately. In addition, many of these professionals need to do their own statistical analysis. This course introduces students to statistics and the scientific study of politics. Students will learn why statistics are useful, how to interpret a variety of statistics, how to analyze data to generate their own statistics, and how to tell whether their statistics support their own argument. Students will also learn how to apply the scientific research process to their own research questions by completing a research design project.

N**ote(s):**

- Previously PSCI 2280. Read more.

Theory Hours: 45

POLS 2150 - Public Policy and Administration

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: ENGL 1120 + POLS 1110 + POLS 1120*

The objective of this introductory course in public policy and public administration is to provide students with a basic understanding of the ways that government deals with problems affecting society. We will explore the political tools used to address public policy problems, as well as the political environment in which public policies are formed. Additionally, several specific public policy problems will be discussed during the semester. For each topic, we will try to understand the goals that the government and society seem to be seeking, alternative means for achieving those goals, the costs and benefits of the various alternatives, and the impact of politics on those goals. We will primarily examine policymaking at the national level, but we will also look at some examples at the state and local level.

N**ote(s):**

- Previously PSCI 2270. Read more.

Theory Hours: 45

POLS 2170 - State and Local Politics

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Analyze state and local politics, using New Mexico and other states as examples.

N**ote(s):**

- Typically offered in Fall and Spring terms only.
- Previously PSCI 2210. Read more.

Theory Hours: 45

POLS 2996 - Special Topics

3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously PSCI 2096-2996. Read more.

POLS 2998 - Internship in Politics

1-3 credit hour(s)
Prerequisite: POLS 1120 or POLS 2150

This course will require students to work up to 135 hours in an internship placement in the state legislature, a national representative or senate office or another approved political environment. The internship will serve as a "real life" classroom for observing, analyzing and participating in the political process as well as provide practical experience in a political-science related workplace.

N**ote(s):**

- Previously PSCI 2298.

Internship Hours: 45

Portuguese

PORT 1110 - Beginning Portuguese I

4 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Designed for students with no previous exposure to Portuguese, this course develops basic listening, speaking, reading, and writing skills. This is an introductory course aimed at teaching the student to communicate in Portuguese in everyday situations.

Note(s):

- Previously PORT 1101. Read more.

Theory Hours: 60

PORT 1120 - Beginning Portuguese II

4 credit hour(s)
Prerequisite: PORT 1110 or department approval

A continuation of Portuguese I, students will develop a broader foundation in skills gained during the first semester, including understanding, speaking, reading and writing Portuguese. Students will also gain more in-depth knowledge of Portuguese-speaking cultures.

Note(s):

- Previously PORT 1102. Read more.

Theory Hours: 60

PORT 2996 - Special Topics

1-6 credit hour(s)

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously PORT 2096-2996. Read more.

Practical Nursing

PN 1110 - Introduction to PN Concepts

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + (Math Skills 2 Alg or Math Skills 2 Non-Alg)
Pre- or corequisite: BIOL 1130 or (BIOL 2210 + BIOL 2225) + HLTH 1001 + PSYC 1110

Introduces the student to the concepts of practical nursing. This includes providing the student with the basic knowledge and skills to care for the individual in wellness and illness across the life span.

Theory Hours: 45

PN 1120 - Fundamentals of PN Practice

3 credit hour(s)
Pre- or corequisite: PN 1110

Introduces the skills of the PN through lecture and lab. Principles of communication, assessment, and safety are included.

Theory Hours: 15
Lab Hours: 90

PN 1135 - Clinical Fundamentals of PN Practice

1 credit hour(s)
Pre- or corequisite: PN 1110 + PN 1120

Introduces the PN student to the application of concepts through clinical skills in the clinical setting.

Clinical Hours: 45

PN 1210 - PN Health and Illness Concepts I

4 credit hour(s)
Prerequisite: PN 1110 + PN 1120 + PN 1135 + [BIOL 1130 or (BIOL 2210 + BIOL 2225)] + PSYC 1110

This course covers health and illness concepts across the lifespan, as they relate to the PN's caregiver and discipline specific roles, with the focus on wellness and common variations.

Theory Hours: 60

PN 1220 - PN Professional Communication

1 credit hour(s)
Prerequisite: PN 1110 + PN 1120 + PN 1135 + [BIOL 1130 or (BIOL 2210 + BIOL 2225)] + PSYC 1110

Introduces the PN student to professional written and verbal communication skills required for communicating with other health care providers and patients.

Theory Hours: 15

PN 1230 - PN Pharmacology

3 credit hour(s)
Prerequisite: PN 1110 + PN 1120 + PN 1135
Pre- or corequisite: PN 1210 + PN 1220

Introduces the PN student to pharmacological nursing practice across the lifespan.

Theory Hours: 45

PN 1235 - PN Care of the Patient with Chronic Conditions

4 credit hour(s)
Prerequisite: PN 1110 + PN 1120 + PN 1135
Pre- or corequisite: PN 1210 + PN 1220 + PN 1230

Apply safe, evidence-based PN care of patients with chronic conditions across the lifespan in the clinical setting. This course builds upon curricular concepts presented in the program.

Clinical Hours: 180

PN 1310 - PN Health and Illness Concepts II

4 credit hour(s)
Prerequisite: PN 1210 + PN 1220 + PN 1230 + PN 1235

Covers health and illness concepts across the lifespan, with the focus on acute conditions.

Theory Hours: 60

PN 1320 - Professionalism in Practical Nursing

4 credit hour(s)
Prerequisite: PN 1210 + PN 1220 + PN 1230 + PN 1235
Pre- or corequisite: PN 1310

Discusses professional issues related to the role of the licensed practical nurse (LPN), including an overview of professional and ethical responsibilities. The transition of the student to the role of an entry-level LPN and preparation tips for the National Council Licensure Examination (NCLEX-PN) are also included.

Theory Hours: 60

PN 1335 - PN Care of the Acute Patient

4 credit hour(s)
Prerequisite: PN 1210 + PN 1220 + PN 1230 + PN 1235
Pre- or corequisite: PN 1310 + PN 1320

Apply theoretical knowledge and skills acquired in previous coursework to the care of acutely ill patients in a hospital or acute care setting.

Clinical Hours: 180

Psychology

PSYC 1110 - Introduction to Psychology

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course will introduce students to the concepts, theories, significant findings, methodologies, and terminology that apply to the field of psychology.

Note(s):

- Previously PSY 1105. Read more.

Theory Hours: 45

PSYC 2110 - Social Psychology

3 credit hour(s)
Prerequisite: PSYC 1110

This course is an introduction to the scientific study of human social influence and interaction, and explores how an individual's actions, emotions, attitudes and thought processes are influenced by society and other individuals.

N**ote(s):**

- Previously PSY 2271. Read more.

Theory Hours: 45

PSYC 2120 - Developmental Psychology

3 credit hour(s)
Prerequisite: PSYC 1110

Study of human physical and psychological change and stability from a lifespan development perspective.

N**ote(s):**

- Previously PSY 2220. Read more.

Theory Hours: 45

PSYC 2210 - Abnormal Psychology

3 credit hour(s)
Prerequisite: PSYC 1110

This course provides students with an introduction to the field of abnormal psychology. Subject areas include history, methods, etiologies, classification and treatments of disorders.

Theory Hours: 45

PSYC 2220 - Cognitive Psychology

3 credit hour(s)
Prerequisite: PSYC 1110

The course provides an overview of human cognitive processes such as attention, perception, memory, language, categorization, decision making, reasoning, and problem solving. Includes methods, theories, and applications.

N**ote(s):**

- Previously PSY 2265. Read more.

Theory Hours: 45

PSYC 2250 - Brain and Behavior

3 credit hour(s)
Prerequisite: PSYC 1110 or BIOL 1140 + BIOL 1140L

A general survey of the biological foundations of behavior and mental processes. Students will gain an understanding of anatomy, physiology, and chemistry of the nervous system and their relationships to human behavior.

N**ote(s):**

- Previously PSY 2240. Read more.

Theory Hours: 45

PSYC 2270 - Psychology of Learning and Memory

3 credit hour(s)
Prerequisite: PSYC 1110

This course provides an overview of how information is acquired, stored, retrieved, and manifested in the behavior of human and non-human animals.

N**ote(s):**

- Previously PSY 2260. Read more.

Theory Hours: 45

PSYC 2280 - Introduction to Clinical Psychology

3 credit hour(s)
Prerequisite: PSYC 1110

Introduces the field of clinical psychology including a discussion of historical development, growth of the field, current training methods, ethics of practice, the nature of interviewing and assessment, various therapeutic techniques, and current areas of clinical practice.

N**ote(s):**

- Previously PSY 2232. Read more.

Theory Hours: 45

PSYC 2320 - Health Psychology

3 credit hour(s)
Prerequisite: PSYC 1110

This course examines how biological, psychological, and social factors interact with and affect different areas within health. Course will cover the role of stress in illness, coping with illness, pain management, and the role of health behavior in health and disease.

N**ote(s):**

- Previously PSY 2280. Read more.

Theory Hours: 45

PSYC 2330 - Psychology of Human Sexuality

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Exploration of the psychological, physiological, cultural, social and individual factors that influence sexual behavior, sex roles, and sex identity.

N**ote(s):**

- Previously PSY 2231. Read more.

Theory Hours: 45

PSYC 2360 - Psychology and Film

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Psychological topics (e.g., basic principles, classic theories, and famous psychologists) are explored by screening popular films/documentaries. Readings and lectures are linked to films that offer students an opportunity to better understand topics across major subfields of psychology. An appreciation for the cinema's ability not only to reflect but also affect our understanding of human behavior is stressed.

N**ote(s):**

- Previously PSY 2233. Read more.

Theory Hours: 45

PSYC 2380 - Death and Dying

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Examines the psychological, emotional and sociological aspects of death in American Culture. This course is designed to provide the student with a greater understanding of death and the dying process, including exposure from the consumer's perspective of the death industry.

N**ote(s):**

- Previously PSY 2289. Read more.

Theory Hours: 45

PSYC 2510 - Statistical Principles for Psychology

3 credit hour(s)
Prerequisite: (Math Skills 4) or (MATH 1111 [Inactive] + MATH 1112 [Inactive]) or (MATH 1130 or higher) + PSYC 1110 + any one of the following courses: (PSYC 2110 or PSYC 2120 or PSYC 2220 or PSYC 2250 or PSYC 2270 or PSYC 2320)

This course covers introductory-level topics in statistics that are applicable to psychological research. Both descriptive and inferential statistics are covered. Topics include applying statistical formulas to psychological data and interpreting the results of statistical analyses.

N**ote(s):**

- Previously PSY 2220. Read more.

Theory Hours: 45

PSYC 2996 - Special Topics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.).
- Previously PSY 2096-2996. Read more.

PSYC 2998 - Internship in Psychology

1-3 credit hour(s)

This course requires students work 45, 90, or 135 hours, depending on the internship placement. The internship will serve as an applied learning experience by observing, analyzing and participating in a related workplace.

N**ote(s):**

- Previously PSY 2298.

Internship Hours: 45

Public Health Science

PHLS 1120 - Introduction to Community Health Care

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Overview of current health care delivery systems and organization structure, third-party payers, facility ownership, patient rights and quality care. Procedures for determining care payment eligibility are also covered. Covers public financing available to clients as well as non-governmental third-party insurance. Provides information relevant to health care organizations to include workplace behavior, communication and teamwork, legal issues and decision making in the health care setting.

N**ote(s):**

- Previously HLTH 1030. Read more.

Theory Hours: 45

Public Safety Dispatcher

PSD 1002 - Public Safety Dispatch Foundational Skills

3 credit hour(s)
Prerequisite: Department Approval

This course introduces the student to the basic skills, knowledge and abilities every successful public safety telecommunicator needs to meet the demands of this critical work. This course provides the foundational competency as a public safety telecommunicator as outlined by the New Mexico Department of Public Safety training standards and it meets or exceeds the American National Standards as contained in the ANSI approved Minimum Training Standard for Public Safety Telecommunicators (APCO ANS 3.103.2.2015). Topics include interpersonal communications, telephone communication techniques, liability issues, computer-aided dispatch, and radio communication techniques.

N**ote(s):**

- Prerequisites include completion of current FEMA ICS-100, ICS-200, ICS-700, ICS-800 online courses.

Theory Hours: 45

PSD 1102 - Public Safety Dispatch Advanced Skills

5 credit hour(s)
Prerequisite: PSD 1002

This course builds on the foundation of PSD 1002 by providing students with advanced training and skills to professionally and effectively handle all the responsibilities of public safety telecommunicators. Topics include civil law and liability, crisis intervention and management, National Crime Information Center operations, fire and emergency medical communications, and critical incident management. In conjunction with PSD 1002, this course prepares the student to take the NMDPS Public Safety Telecommunicator Certification Examination.

N**ote(s):**

- Credit for Prior Learning (CPL) may be accepted for the prerequisite of PSD 1002.

Theory Hours: 75

Radiologic Technology

RADT 1070 - Radiographic Positioning I

5 credit hour(s)
Prerequisite: [BPCS 1092 or (NA 1020 + NA 1093 + NA 1190)] + BIOL 2210 + (ENGL 1110 or

ENGL 1110P) + Mathematics Requirement + department approval
Pre- or corequisite: HLTH 1001 + BIOL 2225
Corequisite: RADT 1075 + RADT 2410

Presents the fundamental 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, image critique, basic equipment and portable radiography.

Theory Hours: 45
Lab Hours: 90

RADT 1075 - Patient Care for Radiography

2 credit hour(s)
Corequisite: RADT 1070 + RADT 2410

Review of basic patient care skills. Introduction of the specific patient care skills required for radiography to include history taking, immobilization techniques, medical emergencies, pharmacology, principles of drug administration, contrast media, and introduction to radiopharmaceuticals.

Theory Hours: 15
Lab Hours: 45

RADT 1096-1996 - Special Topics

1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

RADT 1192 - Supplemental Skills Lab

1 credit hour(s)
Prerequisite: HLTH 1001
Corequisite: RADT 1070

For Radiologic Technology (RADT) second term students to gain additional skills practice in the radiography lab with an instructor.

N**ote(s):**

- Credit/No Credit

Lab Hours: 45

RADT 1292 - Advanced Supplemental Lab

1 credit hour(s)
Prerequisite: RADT 1070
Corequisite: RADT 1570

For Radiologic Technology (RADT) third term students to gain skills practice in RADT lab with an instructor.

N**ote(s):**

- Credit/No Credit

Lab Hours: 45

RADT 1520 - Radiation Biology and Protection

2 credit hour(s)
Prerequisite: RADT 2090 + RADT 2404 + PHIL 2120
Corequisite: RADT 2408 + RADT 2490

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.

Theory Hours: 30

RADT 1570 - Radiographic Positioning II

5 credit hour(s)
Prerequisite: HLTH 1001 + RADT 1070 + RADT 1075 + RADT 2410 + BIOL 2225
Corequisite: RADT 1690 + RADT 2010

Continues course of study begun in RADT including procedures, projections, anatomy, osteology and arthrology of the vertebral column, skull and facial bones, and sinuses. Other topics will include foreign body localization and image 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.

Theory Hours: 45
Lab Hours: 90

RADT 1690 - Clinical Experience I

5 credit hour(s)
Corequisite: RADT 1570 + RADT 2010

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.

Clinical Intensive Hours: 300

RADT 2010 - Radiographic Imaging I

3 credit hour(s)
Corequisite: RADT 1570 + RADT 1690

Covers analog and digital imaging with related accessories. Employs radiographic image critique to emphasize the methods of diagnostic quality control.

Theory Hours: 30
Lab Hours: 45

RADT 2090 - Clinical Experience II

5 credit hour(s)
Prerequisite: RADT 1570 + RADT 1690 + RADT 2010
Pre- or corequisite: PHIL 2120
Corequisite: RADT 2404

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, image processing and image critiques. Assistance in a variety of patient care needs,

safety issues, PACS and radiologic contrast studies.

Clinical Intensive Hours: 300

RADT 2096-2996 - Special Topics
1-6 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

RADT 2404 - Radiographic Imaging II
3 credit hour(s)
Corequisite: RADT 2090

Surveys the special procedures and special imaging modalities (ultrasound, mammography, nuclear medicine, tomography, computed tomography, positron emission tomography, magnetic resonance imaging, oncology and interventional radiography) utilized to explore topics in imaging equipment and image processing.

Theory Hours: 45

RADT 2408 - Radiographic Pathology and Cross-sectional Anatomy
3 credit hour(s)
Corequisite: RADT 1520 + RADT 2490

Surveys additional body systems and the relative pathologies affecting them. Radiographic imaging methods will be considered to demonstrate how to best demonstrate these pathologies.

Theory Hours: 45

RADT 2410 - Radiographic Physics and Instrumentation
3 credit hour(s)
Corequisite: RADT 1070 + RADT 1075

This course is a comprehensive review of the physical principles of diagnostic radiography.

Theory Hours: 30
Lab Hours: 45

RADT 2490 - Clinical Experience III
5 credit hour(s)
Corequisite: RADT 1520 + RADT 2408

Continues course of study with direct supervision, a continued development of competence and practice in basic positioning. Independent/intermediate level of performance in selected procedures, image processing and image critiques. Assists in a variety of patient care activities.

Clinical Intensive Hours: 300

RADT 2890 - Clinical Experience IV
6 credit hour(s)
Corequisite: RADT 2999

Continues course of study with instruction and practice in a clinical facility under direct supervision. Student will continue to develop competencies. Observation, involvement and assistance in special procedures and special imaging modalities. Review of radiographs, preparation for employment as radiologic technologists.

Clinical Intensive Hours: 360

RADT 2999 - Radiologic Technology Capstone
2 credit hour(s)
Prerequisite: RADT 2408 + RADT 2490
Corequisite: RADT 2890

A capstone experience for students preparing for employment as radiologic technologists. Will consider topics in leadership, clinical management, professional development, quality assurance, quality control, professional organizations and preparation for the national registry exam as well as current developments in the field.

Theory Hours: 30

Religion

RELG 1110 - Introduction to World Religions
3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course introduces major world religions and the scholarly methods of the academic study of religion. Religions covered may include: Hinduism, Buddhism, Confucianism, Daoism, Judaism, Christianity, Islam and/or New Religious Movements.

N**ote(s):**

- Previously RLGN 1107. Read more.

Theory Hours: 45

RELG 1120 - Introduction to the Bible
3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Introduction to the Bible is an introductory study of the structure and content of the Hebrew and Christian Scriptures. This class provides the context and reading skills for study and investigation of the Bible and its influence upon western culture and religion.

N**ote(s):**

- This is an introductory course; no previous knowledge of the Bible is required.
- Previously RLGN 1103. Read more.

Theory Hours: 45

RELG 1520 - Religion and the Arts
3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: (ENGL 1110 or ENGL 1110P) *

Introduction to the relationship between religion and culture as reflected in the arts. Surveys the roles and functions of visual, performing, and literary arts and architecture in experiencing and expressing the social and doctrinal dimensions of several indigenous and major world religions.

* This course requires writing critical essays utilizing multiple source materials.

N**ote(s):**

- Previously RLGN 1105. Read more.

Theory Hours: 45

RELG 2110 - Eastern Religions

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Eastern Religions provides an academic overview of the major religious traditions of Asia, which may include the religions of India (Hinduism, Buddhism, and Jainism, China (Daoism and Confucianism, Chan Buddhism), and Japan (Shinto and Zen Buddhism). Students will be assigned both primary and secondary texts.

N**ote(s):**

- Previously RLGN 2263. Read more.

Theory Hours: 45

RELG 2120 - Western Religions

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This is a survey course that will cover major religious traditions of the West, including the three Abrahamic religions (Judaism, Christianity, and Islam) and other religious systems. The course will focus on how each tradition has developed historically and how it exists in the world today.

N**ote(s):**

- Previously RLGN 2264. Read more.

Theory Hours: 45

RELG 2135 - Ancient Religions

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Examines the religions of the ancient Middle East, Egypt, Greco-Roman, Germanic and Celtic worlds. Provides students with an understanding of the origins of modern religions and spirituality.

N**ote(s):**

- Previously RLGN 2240. Read more.

Theory Hours: 45

RELG 2996 - Special Topics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously RLGN 2096-2996. Read more.

Respiratory Therapy

RT 1020 - Physics of Respiratory Therapy

3 credit hour(s)
Corequisite: RT 1060 + RT 1080 + RT 1090 + RT 1093 + RT 1094

Covers basic concepts of physics related to physiology of the lungs, gas laws, gas flow and mechanics of breathing. Concepts are applied to operation of respiratory therapy equipment.

Theory Hours: 45

RT 1030 - Pharmacology of Respiratory Therapy

3 credit hour(s)
Corequisite: RT 1560 + RT 1580 + RT 1590 + RT 1592 + RT 1593

Presents concepts and principles of pharmacologic agents used in cardiopulmonary care. Includes study of biologic interactions, dosage calculations, side effects, indications of medication, therapeutic, diagnostic procedures and ethical and legal issues.

Theory Hours: 45

RT 1060 - Respiratory Therapy I

3 credit hour(s)
Prerequisite: BIOL 2210 + (ENGL 1110 + ENGL 1110P) + HLTH 1001 + Mathematics Requirement + department approval
Pre- or corequisite: BIOL 2225 + BIOL 2310 + BIOL 2310L
Corequisite: RT 1020 + RT 1080 + RT 1090 + RT 1093 + RT 1094

Introduces respiratory therapy as a health sciences profession. Topics include cardiopulmonary assessment, medical gas administration, aerosol therapy, oxygen therapy, microbiology, infection control, equipment maintenance, incentive breathing exercises, chest physiotherapy, and introduction to pulmonary function testing and acid/base balance.

Theory Hours: 45

RT 1080 - Cardiopulmonary Pathophysiology I

1 credit hour(s)
Corequisite: RT 1020 + RT 1060 + RT 1090 + RT 1093 + RT 1094

Presents pathophysiology and management of patients with pulmonary diseases 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.

Theory Hours: 15

RT 1090 - Clinical Experiences I

3 credit hour(s)
Corequisite: RT 1020 + RT 1060 + RT 1080 + RT 1093 + RT 1094

Provides supervised clinical experiences in area hospitals and health care facilities.

Clinical Hours: 135

RT 1093 - Respiratory Therapy Lab I

1 credit hour(s)
Corequisite: RT 1020 + RT 1060 + RT 1080 + RT 1090 + RT 1094

This course is designed to give students a hands-on lab to learn and understand various basic respiratory therapy tasks to include: cardiopulmonary assessment, aerosol therapy, oxygen therapy, infection control, equipment management, incentive spirometer and chest physiotherapy using state of the art equipment in the learning laboratory.

Lab Hours: 45

RT 1094 - Basic Clinical Preparation Lab

1 credit hour(s)
Corequisite: RT 1020 + RT 1060 + RT 1080 + RT 1090 + RT 1093

This course is designed to help students with the foundation of basic respiration. The course will teach students an introduction of how to effectively care for patients in the general medical care units prior to clinical rotations.

Lab Hours: 45

RT 1096-1996 - Special Topics

1-6 credit hour(s)
Prerequisite: Department approval

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

RT 1560 - Respiratory Therapy II

3 credit hour(s)
Prerequisite: RT 1020 + RT 1060 + RT 1080 + RT 1090 + RT 1093 + RT 1094
Corequisite: RT 1030 + RT 1580 + RT 1590 + RT 1592 + RT 1593

Emphasizes airway management, pulmonary function testing, arterial puncture and blood gas analysis. Other topics covered include therapeutic administration, home care therapy, and introduction to mechanical ventilation.

Theory Hours: 45

RT 1580 - Cardiopulmonary Pathophysiology II

1 credit hour(s)
Corequisite: RT 1030 + RT 1560 + RT 1590 + RT 1592 + RT 1593

Presents pathophysiology and management of patients with pulmonary diseases, often from the perspective of a physician. Includes causes, signs and symptoms, pathophysiology, diagnosis, treatments, and prognosis for patients with diseases involving the cardio-pulmonary systems.

Theory Hours: 15

RT 1590 - Clinical Experiences II

3 credit hour(s)
Corequisite: RT 1030 + RT 1560 + RT 1580 + RT 1592 + RT 1593

Continuation of RT 1090 which provides supervised clinical experiences in area hospitals and health care facilities.

Clinical Hours: 135

RT 1592 - Scenario Procedures Lab I

1 credit hour(s)
Corequisite: RT 1030 + RT 1560 + RT 1580 + RT 1590 + RT 1593

Provides first-year Respiratory Therapy students the opportunity for additional learning and practice of respiratory therapy skills in the campus laboratory.

Lab Hours: 45

RT 1593 - Respiratory Therapy Lab II

1 credit hour(s)
Corequisite: RT 1030 + RT 1560 + RT 1580 + RT 1590 + RT 1592

Students practice airway management, pulmonary function testing, arterial puncture and blood gas analysis, administering home care therapy procedures, and introduction to managing mechanical ventilation using state of the art equipment in the learning laboratory under simulated patient situations.

Lab Hours: 45

RT 2060 - Advanced Respiratory Therapy I

3 credit hour(s)
Prerequisite: RT 1030 + RT 1560 + RT 1580 + RT 1590 + RT 1592 + RT 1593
Corequisite: RT 2080 + RT 2090 + RT 2092 + RT 2093 + RT 2094

Presents concepts of adult care medicine including adult intensive care and pathophysiology of diseases, concepts of positive pressure ventilation and advanced airway care. Covers positive pressure mechanical ventilation equipment and procedures related to critical care medicine for adults using state of the art equipment and computer simulations in the learning laboratory.

Theory Hours: 45

RT 2080 - Cardiopulmonary Pathophysiology III

2 credit hour(s)
Corequisite: RT 2060 + RT 2090 + RT 2092 + RT 2093 + RT 2094

Presents pathophysiology and management of patients with pulmonary diseases from the perspective of a physician including causes, signs and symptoms, pathophysiology, diagnosis, treatments, mechanical ventilation management and prognosis for patients with cardiopulmonary diseases.

Theory Hours: 30

RT 2090 - Advanced Clinical Experiences I

3 credit hour(s)
Corequisite: RT 2060 + RT 2080 + RT 2092 + RT 2093 + RT 2094

Master skills for respiratory care in adult 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.

Clinical Intensive Hours: 180

RT 2092 - Scenario Procedures Lab II

1 credit hour(s)
Corequisite: RT 2060 + RT 2080 + RT 2090 + RT 2093 + RT 2094

Provides second-year Respiratory Therapy students the opportunity for additional learning and practice of respiratory therapy skills in the campus laboratory.

Lab Hours: 45

RT 2093 - Advanced Respiratory Therapy Lab I

1 credit hour(s)
Corequisite: RT 2060 + RT 2080 + RT 2090 + RT 2092 + RT 2094

Practice skills on positive pressure mechanical ventilation equipment and procedures related to critical care medicine for adults using state of the art equipment and computer simulations in the learning laboratory.

Lab Hours: 45

RT 2094 - Advanced Clinical Prep Lab I

1 credit hour(s)
Corequisite: RT 2060 + RT 2080 + RT 2090 + RT 2092 + RT 2093

This course is designed to help students transition basic respiratory skills to advanced respiratory skills. The course is an introduction on how to effectively care for critically ill patients in the intensive care units prior to attending their clinical rotations.

Lab Hours: 45

RT 2096-2996 - Special Topics

3-6 credit hour(s)
Prerequisite: Department approval

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

RT 2460 - Advanced Respiratory Therapy II

3 credit hour(s)
Prerequisite: RT 2060 + RT 2080 + RT 2090 + RT 2092 + RT 2093 + RT 2094
Pre- or corequisite: Humanities Requirement
Corequisite: RT 2480 + RT 2490 + RT 2492 + RT 2493

Presents concepts of critical care medicine for infants and children including theory of life support systems. Presents mechanical ventilation procedures related to critical care medicine for children and infants using state of the art equipment and computer simulation in the learning laboratory. Introduces strategies for successful completion of national board exams.

Theory Hours: 45

RT 2480 - Cardiopulmonary Pathophysiology IV

2 credit hour(s)
Corequisite: RT 2460 + RT 2490 + RT 2492 + RT 2493

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 infant and pediatric cardiac and respiratory disorders, cystic fibrosis, congestive heart failure, neuromuscular disease, traumatic injuries, burns, respiratory failure and adult/acute respiratory distress syndrome.

Theory Hours: 30

RT 2490 - Advanced Clinical Experiences II

3 credit hour(s)
Corequisite: RT 2460 + RT 2480 + RT 2492 + RT 2493

Introduces skills for respiratory care in pediatric and neonatal critical care environments including initiation, monitoring and maintaining life support systems. Includes independent study project in an area of respiratory care and supervised mentorship experiences.

Clinical Intensive Hours: 180

RT 2492 - Scenario Procedures Lab III

1 credit hour(s)
Corequisite: RT 2460 + RT 2480 + RT 2490 + RT 2493

Provides second-year respiratory therapy students the opportunity for additional learning over pediatric and neonatal intensive care. Provides practice of advanced respiratory therapy skills in the pediatric and neonatal patient population within the campus laboratory.

Lab Hours: 45

RT 2493 - Advanced Respiratory Therapy Lab II

1 credit hour(s)
Corequisite: RT 2460 + RT 2480 + RT 2490 + RT 2492

Presents mechanical ventilation procedures related to critical care medicine for adults, children and infants using state of the art equipment and computer simulation in the learning laboratory. Students will focus on cardiopulmonary assessment and diagnosis with correlation of cardiopulmonary anatomy, physiology and pathophysiology and evaluation of cardiopulmonary function.

Lab Hours: 45

Service Learning

SERV 1190 - Service Learning

1 credit hour(s)
Prerequisite: Instructor Approval; must be linked with an anchor course.

Students have the opportunity to earn college credit through a structured service-learning experience. This course combines community service and classroom instruction with a focus on critical, reflective thinking as well as personal and civic responsibility. Students complete a minimum of twenty (20) hours of service learning in a non-profit, school or government agency.

N**ote(s):**

- To enroll in a particular section of this course, students must be enrolled in the anchor course that corresponds to that section.

Social Work

SOWK 2110 - Introduction to Human Services and Social Work

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course is for students who are interested in social

welfare issues and/or are considering entering a social service profession. The course presents an overview of social problems, issues and trends, and the network of social agencies developed to address these concerns. The course examines the influence of personal and professional values and ethics on the helping relationship. The concept of social welfare will be discussed from a social work perspective (with an emphasis on social justice), and students will gain a basic understanding of social work in U.S. society, social work career opportunities, and contemporary issues facing social workers. Approaches relevant to work with individuals, families, groups and communities are presented, with special emphasis on Hispanic and Indigenous populations of New Mexico and the Southwest.

Note(s):

- Previously HSV 1110. Read more.

Theory Hours: 45

Sociology

SOCI 1110 - Introduction to Sociology

3 credit hour(s)
Pre- or corequisite: IRW 0970 or FYEX 1110 or appropriate placement score

This course will introduce students to the basic concepts and theories of sociology, as well as to the methods utilized in sociological research. The course will address how sociological concepts and theories can be utilized to analyze and interpret our social world, and how profoundly our society and the groups to which students belong influence them. Students will be given the opportunity to challenge their "takenforgranted" or "common sense" understandings about society, social institutions, and social issues. Special attention will also be paid to the intimate connections between their personal lives and the larger structural features of social life. In addition, the implications of social inequalities, such as race/ethnicity, gender, and social class will be central to the course's examination of social life in the United States.

N**ote(s):**

- Previously SOC 1101. Read more.

Theory Hours: 45

SOCI 2120 - Introduction to Criminal Justice Systems

3 credit hour(s)
Prerequisite: SOCI 1110

This course provides an introduction to social issues that are currently affecting the criminal justice system in the United States. The course will cover the history of the US criminal justice system and how our system compares with other countries. We will address how the U.S. criminal justice system attempts to create and preserve a balance between sustaining order, maintaining individual rights, and promoting justice. Important themes also include, but are not limited to: discussions of how crime and delinquency are measured, key correlates of crime, sociological approaches to researching crime, sociological theories of crime, the quality of crime data in the U.S. and how it is used to make public policy decisions, and the causes and consequences of mass incarceration in the United States.

N**ote(s):**

- Previously SOC 2205. Read more.

Theory Hours: 45

SOCI 2130 - Introduction to Criminology

3 credit hour(s)
Prerequisite: SOCI 1110

Students will learn to understand and apply criminological theories that are produced within the field of sociology. These theories focus on how social structures, social contexts and particular kinds of social relationships influence the social activity of crime at both the micro and macro levels. Students will understand and analyze a variety of topics also pertinent to the study of crime, such as divergent definitions of crime, various correlates of criminal activities, criminal trends, and other key topics within the field of criminology.

N**ote(s):**

- Previously SOC 2215. Read more.

Theory Hours: 45

SOCI 2140 - Juvenile Delinquency

3 credit hour(s)
Prerequisite: SOCI 1110

This course is an introduction to sociological theories that explain juvenile delinquency in the United States. The course will explore the history of the juvenile justice in the U.S. and the causes and solutions of juvenile delinquency. The course will also cover how the U.S. juvenile justice system works and how it is different from the adult criminal justice systems in the US. The course will examine policing of juvenile delinquents, juvenile rehabilitation, probation services, and approaches to address limitations of the current U.S. juvenile justice system.

N**ote(s):**

- Previously SOC 2212. Read more.

Theory Hours: 45

SOCI 2210 - Sociology of Deviance

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: SOCI 1110*

This course is designed to provide an overview of the study of deviance and social control from multiple sociological perspectives. The instructor will present how sociologists research deviance and social control and the ethical issues involved in studying human subjects involved in these activities. The course also examines central sociological theories for understanding the causes of deviant behavior.

N**ote(s):**

- Previously SOC 2213. Read more.

Theory Hours: 45

SOCI 2220 - Sociology of Gender

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: SOCI 1110 or PSYC 1110

This course is an introduction to the sociology of gender and gendered inequalities. While analyzing how

masculinity, femininity and other gender forms are socially constructed, we will also analyze how gender intersects with other forms of social stratification such as race, socio-economic status, disability and sexual orientation. Our analysis of gender will focus on gender socialization, gender identities, and how gender forms are deeply rooted and reproduced in social institutions, interactions and relationships.

N**ote(s):**

- Previously SOC 2235. Read more.

Theory Hours: 45

SOCI 2235 - LGBTQ Issues & Identities

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Examines the various ways lesbian, gay, bisexual, transgender, and queer experiences and identities are shaped by social and structural forces in contemporary US society.

N**ote(s):**

- Previously SOCI 2850. Read more.

Theory Hours: 45

SOCI 2240 - Sociology of Intimate Relationships and Family

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course provides an overview of contemporary intimate relationships and families from sociological perspectives. We will examine intimate relationships and families as social constructions whose meanings have changed over time and from place to place. This course will aid students in developing a greater understanding of intimate relationships and families as institutions in contemporary U.S. society. Intersections of race, class, gender, sexual orientation, nationality, and other factors within these institutions will be addressed.

N**ote(s):**

- Previously SOC 2225. Read more.

Theory Hours: 45

SOCI 2250 - Sociology of Race and Ethnicity

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: SOCI 1110

This class will examine race and ethnicity as social constructs, including the history of race and ethnic relations in the United States and how and why these constructs continue to play such important roles in the lives of U.S. peoples today. This course will also explore how other types of social stratification, such as class, gender, nationality, and sexual orientation, intersect with race and ethnicity.

N**ote(s):**

- Previously SOC 2216. Read more.

Theory Hours: 45

SOCI 2310 - Contemporary Social Problems

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: SOCI 1110

This course studies the nature, scope, and effects of social problems and their solutions. The course will concentrate on sociological perspectives, theories, and key concepts when investigating problems, such as inequality, poverty, racism, alienation, family life, sexuality, gender, urbanization, work, aging, crime, war and terrorism, environmental degradation, and mass media. This course is designed to build students' sociological understanding of how sociological approaches attempt to clarify various issues confronting contemporary life, as well as how sociologists view solutions to these problems.

N**ote(s):**

- Previously SOC 2211. Read more.

Theory Hours: 45

SOCI 2330 - Society and Personality

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: SOCI 1110 or PSYC 1110

From a sociological vantage point, this course will introduce students to the discipline of social psychology, which is the scientific study of how people think about, influence, and relate to one another. Special attention will be given to the applications of social psychological insights. The course will explore the many ways our social environment influences our behavior.

N**ote(s):**

- Previously SOC 2230. Read more.

Theory Hours: 45

SOCI 2340 - Global Issues

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: SOCI 1110

Many of the problems we face on a daily basis are global in scope and global in origin. The world is now more interconnected than ever. The things that happen in China or in Saudi Arabia affect us in the United States, just as the things that we do here affect the people in Russia or Egypt. This course offers a sociological perspective on this phenomenon of globalization and explores its origins in the culture of capitalism. To this end, we will examine topics such as consumption, labor, migration and immigration, economic inequality, the natural environment, and health. We will also consider various ways in which these problems can, or cannot, be solved for us and for future generations.

N**ote(s):**

- Previously SOC 2221. Read more.

Theory Hours: 45

SOCI 2410 - Introduction to Research Methods

3 credit hour(s)
Prerequisite: SOCI 1110

This course is a survey of qualitative and quantitative approaches to sociological research. The course provides an overview of the research process, focusing on research design, hypothesis formulation, measurement, and data collection. In this course, students will develop the ability to critically analyze social research, as well as design and

execute their own research projects. At the conclusion of this course, students should also have more confidence critically analyzing, writing about, and otherwise discussing research findings they encounter, while also becoming better equipped to comprehend complex social structures and concerns.

N**ote(s):**

- Previously SOC 2280. Read more.

Theory Hours: 45

SOCI 2996 - Special Topics

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously SOC 2096-2996. Read more.

SOCI 2998 - Internship in Sociology

1-3 credit hour(s)

This course requires students work 45, 90, or 135 hours, depending on the internship placement. The internship will serve as an applied learning experience by observing, analyzing and participating in a related workplace.

N**ote(s):**

- Previously SOC 2298.

Internship Hours: 45

SOCI 2999 - Sociology and Criminology Capstone

3 credit hour(s)
Prerequisite: SOCI 1110 + any 2000 level SOCI course

The Capstone class revolves around a central theme of public sociology and criminology. As you put your sociological/criminological perspectives into action, you will have opportunities to reflect on your previous training at CNM and how to best achieve your future education and career goals. You will participate in public sociology/criminology through a community engagement project. The project will allow you to practice and express the sociological perspective you've developed in past semesters. It will also be an opportunity for you to translate academic skills into professional terms that will be useful for whatever realm you enter next. To that end, you will also explore various jobs that sociologists and criminologists pursue, learn about professional networks that may further occupational goals, and prepare materials to use in applying for careers and/or academic programs.

N**ote(s):**

- Previously SOC 2999. Read more.

Theory Hours: 45

Spanish

SPAN 1110 - Spanish I

4 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Designed for students with little exposure to Spanish, this course develops basic listening, speaking, reading, and writing skills and basic intercultural competence in interpretive, interpersonal and presentational modes of communication at the Novice Level of proficiency based on ACTFL guidelines. During this course, students perform better and stronger in the Novice Mid level while some abilities emerge in the Novice High range. This is an introductory course aimed at helping the student to communicate in Spanish in everyday familiar situations via recognition and production of practiced or memorized words, phrases, and simple sentences.

N**ote(s):**

- Previously SPAN 1101. Read more.

Theory Hours: 60

SPAN 1120 - Spanish II

4 credit hour(s)
Prerequisite: SPAN 1110 or appropriate placement score

Designed for students with some degree of exposure to Spanish in high school and/or at home, this course continues to develop basic listening, speaking, reading, and writing skills and basic intercultural competence in interpretive, interpersonal and presentational modes of communication based at the Novice High Level of proficiency based on ACTFL guidelines, although a few abilities may emerge in the Intermediate Low Level. Students in this course communicate in Spanish in familiar topics using a variety of words, phrases, simple sentences and questions that have been highly practiced and memorized.

N**ote(s):**

- Previously SPAN 1102. Read more.

Theory Hours: 60

SPAN 1125 - Conversational Spanish I

3 credit hour(s)
Pre- or corequisite: SPAN 1120 or department approval

This third-semester Spanish course emphasizes oral communication, idiomatic usage and the development of vocabulary, with a review of basic syntax.

Theory Hours: 45

SPAN 1210 - Spanish for Heritage Learners I

4 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or SPAN 1110 or Appropriate placement score or department approval

This is a beginning-level Spanish course designed for students who have a cultural connection to the Spanish language. Some students have had very little exposure to the language and enter the class to develop beginning-level skills. Other students may have grown up hearing the heritage language in the community and may understand some Spanish and speak at a basic level as a result. The objective is to draw upon the connection to the heritage language as a source of motivation and engagement for our learning communities. At the same time, we build upon the language base that students may already have as a result of their heritage learner experience in order to develop new proficiencies in

Spanish and reactivate the Spanish that students have learned previously. By the end of this course, students will be able to describe their home, campus surroundings and common activities including cultural traditions. At the same time, students gain cultural competency and develop a critical understanding of their linguistic and cultural background.

N**ote(s):**

- Previously SPAN 1111. Read more.

Theory Hours: 60

SPAN 1220 - Spanish for Heritage Learners II
4 credit hour(s)
Prerequisite: SPAN 1110 or SPAN 1210 or appropriate placement score or department approval

Spanish as a Heritage Language II is a second semester class designed for students who have developed some basic Spanish proficiency from previous classes and/or from community experiences. This course provides students with the opportunity to develop their proficiency in the four language skills (speaking, listening, reading, and writing). Class activities are designed to strengthen oral communication skills (speaking and listening) through a variety of group activities. By the end of the course students will be able to understand and produce narrations of past events in oral and written Spanish. In order to foster a desire to revitalize and maintain the Spanish language in the US context we attempt to raise students' critical awareness of what it means to be part of a specific speech community.

N**ote(s):**

- Previously SPAN 1112. Read more.

Theory Hours: 60

SPAN 1410 - Spanish for Health Care Professionals
3 credit hour(s)
Prerequisite: SPAN 1110 or appropriate placement score

This course is designed to develop the student's ability to understand, speak, read and write the Spanish language within a health profession framework because linguistic and cultural knowledge are essential for communication with patients.

Theory Hours: 45

SPAN 2088 - Spanish Specialty
1-12 credit hour(s)
This course is used to transfer approved courses from other colleges and universities.

SPAN 2110 - Spanish III
3 credit hour(s)
Prerequisite: SPAN 1120 or appropriate placement score

This course is based on the integration of learning outcomes across Interpersonal, Interpretive, and Presentational Modes of Communication at the Intermediate Low Level of proficiency based on ACTFL guidelines. Students accomplish real-world communicative tasks in culturally appropriate ways as they gain familiarity with the target culture(s). This is an intermediate course aimed at helping the student to communicate in Spanish on familiar topics about self, others and everyday life at the same time that they recognize and handle short social interactions in everyday situations by asking and answering a variety of questions.

N**ote(s):**

- Previously SPAN 2201. Read more.

Theory Hours: 45

SPAN 2120 - Spanish IV
3 credit hour(s)
Prerequisite: SPAN 2110 or appropriate placement score

This course is based on the integration of learning outcomes across Interpersonal, Interpretive, and Presentational Modes of Communication at the Intermediate High Level of proficiency based on ACTFL guidelines. Students accomplish real-world communicative tasks in culturally appropriate ways as they gain familiarity with the target culture(s). This is an intermediate course aimed at helping the student to communicate in Spanish on familiar topics about self, others and everyday life at the same time that they recognize and handle short social interactions in everyday situations by asking and answering a variety of questions.

N**ote(s):**

- Previously SPAN 2202. Read more.

Theory Hours: 45

SPAN 2125 - Conversational Spanish II
3 credit hour(s)
Pre- or corequisite: SPAN 2120 or department approval

A conversational Spanish course designed for the "intermediate" level student. The course provides intensive conversation practice and a review of selected grammar items. It emphasizes vocabulary expansion and enhancement.

Theory Hours: 45

SPAN 2204 - Spanish Language in Film
1 credit hour(s)
Pre- or corequisite: SPAN 2120 or SPAN 2376

Explores themes relevant to Spanish-speaking societies through the viewing and analysis of critically acclaimed films and documentaries. Such themes include cultural and/or religious conflict, rural vs. urban and migration issues, changing gender and social roles, marginalized peoples, and globalization.

Theory Hours: 15

SPAN 2277 - The Art and Skill of Translation
3 credit hour(s)
Prerequisite: SPAN 2120 or department approval

Introduces the art and profession of translation with a focus on practical translation problems in Spanish. Studies texts from the area of journalism, law, business and literature for translation from Spanish to English and from English to Spanish. This course provides an introduction to the art of translation and an overall view of this field. Students will sharpen their insight on

linguistic issues, vocabulary and grammatical structures of Spanish and English, and they will develop analytical thinking into the nature of translation. This course will examine basic techniques in translation, and will develop student's competence in solving translation problems through practical examples. Throughout the course students will translate numerous text from Spanish to English and English to Spanish from the fields of: journalism, business, law, computer science and medicine.

N**ote(s):**

- Class conducted in Spanish.

Theory Hours: 45

SPAN 2280 - Introduction to Hispanic Literature

3 credit hour(s)
Prerequisite: SPAN 2120 or SPAN 2376 or department approval

Presents selected readings from literature written in Spanish by Spanish and Spanish-American authors.

Theory Hours: 45

SPAN 2375 - Accelerated Beginning Spanish

6 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Combines SPAN 1110 and SPAN 1120 in one term. Recommended for language enthusiasts or those who have had exposure to Spanish either in the home or from previous study. This course is a college-level accelerated introduction to Spanish that promotes language learning in a cultural context. It covers the material of two semesters in one. This course will develop students' communicative language with clear and comprehensive grammatical coverage by the presentation of functional language, role-play, small group and personalized activities. Students will engage in cross-cultural comparisons in reading, writing, listening and interview activities. Students will make connections among discipline areas with document readings, internet research and interview activities.

Theory Hours: 90

SPAN 2376 - Accelerated Intermediate Spanish

6 credit hour(s)
Prerequisite: SPAN 1120 or SPAN 2375 or department approval

Recommended for language enthusiasts or those who have had exposure to Spanish either in the home or from previous study. Designed to meet the need for an accelerated course in Intermediate Spanish, this course covers the material of Spanish 2201 and 2202 in one term. This course will develop students' communicative language with clear and comprehensive grammatical coverage by the presentation of functional language, role-play, small group and personalized activities. Students will engage in cross-cultural comparisons in reading, writing, listening and interview activities. Students will make connections among discipline areas with document readings, internet research and interview activities.

Theory Hours: 90

SPAN 2996 - Special Topics

3 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously SPAN 2096-2996. Read more.

SPAN 2998 - Internship in Spanish

1-3 credit hour(s)

This course requires students to work 45, 90, or 135 hours in an internship, depending on the internship placement. The internship will serve as an applied learning experience by observing, analyzing and participating in a related workplace.

N**ote(s):**

- Previously SPAN 2298.

Internship Hours: 45

Spanish Language Interpreter

SPLI 1101 - Fundamentals of Interpreting

4 credit hour(s)
Prerequisite: Departmental Approval

This introductory course to the program addresses fundamental philosophical, theoretical, and technical knowledge and skills necessary for the provision of professional cross-cultural linguistic services in the healthcare and legal sectors. The course covers the different aspects of interpreting in the legal and medical fields, including the role of the medical and court interpreter, ethical issues and best practices, research skills and job opportunities. The fundamentals of simultaneous, consecutive and sight interpretation will be introduced with an emphasis on legal and medical vocabulary and grammar.

Theory Hours: 60

SPLI 1102 - Language Structure and Technologies in Interpretation and Translation

4 credit hour(s)
Prerequisite: Departmental Approval

This course examines how language works, the nature and structure of language, and aspects of linguistics relevant to the development of competence in the fields of Interpretation and Translation, especially grammatical competence, in English and Spanish. This course covers English and Spanish legal, medical and business translation. It focuses on building upon conceptual knowledge in these specialized contexts as well as language and translation competence in these settings, with the additional intent of guiding students in building their vocabulary in both languages. It introduces students to professional standards of translation practice using authentic materials and contextually meaningful situations.

Students will be introduced to the use of the technological equipment that facilitates the work of the interpreter. Includes computers for transcription/translation, information distribution techniques, file transfer technologies, using the World Wide Web in translation and interpretation, and applied projects.

Theory Hours: 60

SPLI 1103 - Introduction to Medical Interpretation

4 credit hour(s)
Pre- or corequisite: SPLI 1101

Interpreting in a medical context. Includes interpreting in a medical setting, pronunciation of Spanish and English names and medical terms, Spanish and English medical terminology, bicultural medical communication, and regional dialects.

Theory Hours: 60

SPLI 1104 - Introduction to Legal Interpretation

4 credit hour(s)
Pre- or corequisite: SPLI 1101

Includes interpreting in a legal setting, knowledge of legal procedure and ancillary issues related to legal terminology in Spanish and English, bicultural legal communication, and regional differences.

Theory Hours: 60

SPLI 1105 - Ethics and Advocacy in the Profession

3 credit hour(s)
Prerequisite: SPLI 1101

This course provides an overview of human rights and social-justice goals for the provision of equal access and the role that language policies, translation and interpreting services for limited and non-English speaking populations play in attaining those goals. Additionally, this class emphasizes the standards of ethics and best practices in medical, court and community interpreting and translation. This class will also examine how interpreters can practice self-care when providing service to people experiencing trauma.

Theory Hours: 45

SPLI 1106 - Beginning Simultaneous Interpretation

4 credit hour(s)
Prerequisite: SPLI 1102

This course begins the in-depth study of simultaneous interpretation (continued in Advanced Simultaneous Interpretation). Its focus is to build upon conceptual knowledge in the legal, medical, and business contexts as well as language and interpreting competence. Students are introduced to professional, nationally accepted standards of practice and performance using authentic materials and contextually meaningful situations.

Theory Hours: 60

SPLI 1107 - Beginning Consecutive Interpretation

4 credit hour(s)
Prerequisite: SPLI 1102

This course begins the in-depth study of the theory and practice of consecutive interpretation and sight translation (continued in Advanced Consecutive Interpretation). It reviews legal and medical concepts and covers policy and law relevant to interpreter practice, theory, skill development, and special issues in legal, medical, and business settings using authentic materials and contextually meaningful situations.

Theory Hours: 60

SPLI 2206 - Advanced Simultaneous Interpretation

4 credit hour(s)
Prerequisite: SPLI 1106

This course continues the in-depth study (begun in Beginning Simultaneous Interpretation) of simultaneous interpretation. Its focus is building conceptual knowledge in the legal, medical, and business settings as well as advancing language and interpreting proficiency. Students will review professional standards of practice and performance using authentic materials and contextually meaningful situations. Focus is on intensive skill development.

Theory Hours: 60

SPLI 2207 - Advanced Consecutive Interpretation

4 credit hour(s)
Prerequisite: SPLI 1107

This course continues the in-depth study of the theory and practice of consecutive interpretation and sight translation. It focuses on a review of complex legal and medical concepts; policy and law relevant to interpreter practice; theory; skill development; and special issues in interpretation in the legal, medical, and business settings. Focus is on intensive skill development.

Theory Hours: 60

SPLI 2990 - Community Practicum

4 credit hour(s)
Prerequisite: SPLI 1106 or SPLI 1107

Community practicum is essential to skill building and preparation for certification exams. Students may carry out practicum in last term or over two terms for one-credit hour each.

Theory Hours: 30
Practicum Hours: 90

Special Education

SPED 2110 - Introduction to Students with Exceptionalities

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course is an introduction to special education with information regarding characteristics of individuals with exceptionalities, special education terminology, evidence-based instructional strategies, diversity of students with exceptional needs, relationships between personal and cultural perspectives, and legal policies pertaining to exceptional students' rights.

Note(s):

- Previously SPED 2201. Read more.

Theory Hours: 45

SPED 2233 - Twice Exceptional Special Populations of Gifted Learners

3 credit hour(s)
Prerequisite: EDUC 2230

Focuses on special populations of gifted learners possessing unique characteristics and needs. Explores the characteristics, identification, and development of appropriate educational services for twice exceptional and special populations of gifted learners. Designed for those students currently working in education.

Theory Hours: 45

SPED 2250 - Foundations of Special Education

3 credit hour(s)
Prerequisite: Acceptance into the Alternative Teacher Licensure Program.

Examines the historical and legal basis for special education services for students with disabilities. Course competencies are built upon national, state, and professional standards and include understandings of 1) the exceptionality categories included in the Individuals with Disabilities Education Act (IDEA, 2004) and NM State Law; 2) the responsibilities of educators and school systems to students with disabilities, including the role of professional ethics; and 3) the importance of and strategies for collaborating with families and other professionals.

Theory Hours: 45

SPED 2258 - Classroom and Behavior Management for Special Education

3 credit hour(s)
Pre- or corequisite: SPED 2250

Examines positive behavior supports and environmental management of behavior. Course competencies are built upon national, state, and professional standards and focus on the 1) basic procedures for organizing and managing a classroom and 2) identifying and implementing individualized behavioral techniques used to foster successful student behavior in the classroom and school setting, including data collection, functional behavior assessment, and developing effective behavior intervention plans. Requires field experience as part of the course.

Theory Hours: 45

SPED 2260 - Methods and Materials for Special Education

3 credit hour(s)

Prerequisite: EDUC 2285

Examines appropriate teaching strategies and materials in instructional design and delivery, including classroom-based assessment and data collection for students receiving special education services. Course competencies are built upon national, state, and professional standards and focus on 1) clearly identifying student learning goals, 2) developing formative assessments for learning, 3) engaging students in their own learning, and 4) differentiating for individual and diverse student needs including designing instruction based on student strengths, integrating opportunities for addressing IEP goals within content area lessons developed using grade-level standards, and developing evaluation tools for reporting student progress as related to specific learning goals.

Theory Hours: 45

SPED 2272 - Reading for Special Learners

3 credit hour(s)
Prerequisite: EDUC 2260

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, writing development and effective strategies, decoding strategies, and vocabulary acquisition. Field experience is required as part of this course.

Theory Hours: 45

SPED 2390 - Special Education Supervised Field Experience

3 credit hour(s)
Prerequisite: Department approval

Applies learning theory and practices from all previous coursework in an advanced supervised fieldwork experience. Course competencies are built upon national and state standards and focus on planning, developing and implementing curriculum for diverse learners. Students are required to meet competencies as defined by the NM Public Education Department through a minimum of 180 contact hours in an approved special education setting.

N**ote(s):**

- Enrollment in this course requires an application process.

Field Experience Hours: 180

SPED 2996 - Special Topics

1-6 credit hour(s)

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously SPED 2096-2996. Read more.

STEM-Geology

STEM 2998 - STEM Internship

1-3 credit hour(s)
Prerequisite: Departmental approval is required

This course requires students to work 45, 90, or 135 hours, depending on the internship placement. The internship will serve as an applied learning experience by observing, analyzing and participating in a related workplace.

While I chose geology as the discipline, it will actually be for all MSE programs with internship opportunities.

Internship Hours: 45

Sterile Processing Technician

SPT 1010 - Basics of Sterile Processing

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Corequisite: SPT 1092

Course provides instruction on Sterile Processing Technician roles and responsibilities, anatomy & physiology, microbiology, infection control, decontamination, medical terminology, sterilization, sterile storage, preparation packaging & instrumentation, and inventory control.

Theory Hours: 30

SPT 1092 - Sterile Processing Lab

2 credit hour(s)
Corequisite: SPT 1010

Provides opportunity to practice skills and competencies developed in the classroom. Includes processing, maintaining, and dispensing instruments, supplies, and equipment in an operating room or central supply department.

Lab Hours: 90

Surgical Technology

ST 1001 - Introduction to Surgical Technology

2 credit hour(s)
Prerequisite: (ENGL 1110 or ENGL 1110P) + Math Skills 2 Alg

This course is designed to give the student a broad overview of the responsibilities of the Surgical Technologist and the operating room environment. This will prepare the student for entrance into the Surgical Technology program.

Theory Hours: 30

ST 1010 - Beginning Surgical Technology I

3 credit hour(s)
Prerequisite: BIOL 2210 + BIOL 2210L + BIOL 2225 + BIOL 2225L + (ENGL 1110 or ENGL 1110P) + HIT 1020 + ST 1001 + (BPCS 1092 or [NA 1020 + NA 1190 + NA 1093]) + COMM 2120 + Mathematics Requirement)
Pre- or corequisite: HLTH 1001
Corequisite: ST 1092

Includes scope of practice, technologist role, medical ethics and medical terminology, basic principles of aseptic technique and anatomy and physiology applied to surgical procedures.

N**ote(s):**

- Requires a grade of B or higher in ST 1001

Theory Hours: 45

ST 1092 - Surgical Technology Lab I

6 credit hour(s)
Corequisite: ST 1010

Provides opportunity to practice clinical skills and competencies developed in the classroom. Includes surgical technique (setting up the sterile field, scrubbing, gowning and gloving) and standards of practice. Infection prevention and control will be covered plus care of the surgical patient.

Lab Hours: 270

ST 1510 - Beginning Surgical Technology II

3 credit hour(s)
Prerequisite: ST 1010 + ST 1092 + PHIL 2120
Corequisite: ST 1590 + ST 1592

Continues Surgical Technology Theory with a focus on an introduction to surgical procedures with a brief history, relevant anatomy and special considerations for general surgery, obstetrics and gynecological procedures, ophthalmic surgery, otorhinolaryngologic surgery, oral and maxillofacial surgery and plastic and reconstructive surgery.

Theory Hours: 45

ST 1590 - Surgical Technology Clinical I

8 credit hour(s)
Prerequisite: ST 1092
Corequisite: ST 1510 + ST 1592

Applies surgical procedure theory and skills in the clinical setting.

Clinical Hours: 360

ST 1592 - Surgical Technology Lab II

2 credit hour(s)
Prerequisite: ST 1092
Corequisite: ST 1510 + ST 1590

Continue to provide an opportunity to practice clinical skills and put into practice the special considerations for general surgery, obstetrics and gynecological procedures, ophthalmic surgery, otorhinolaryngologic surgery, oral and maxillofacial surgery and plastic and reconstructive surgery.

Lab Hours: 90

ST 2010 - Surgical Technology III

3 credit hour(s)
Prerequisite: ST 1592
Corequisite: ST 2090 + ST 2092

Continues Surgical Technology Theory with a focus on an introduction to surgical procedures with a brief history, relevant anatomy and special consideration for genitourinary procedures and surgery, orthopedic surgery, cardiothoracic surgery, peripheral vascular surgery and neurosurgery.

Theory Hours: 45

ST 2090 - Surgical Technology Clinical II

8 credit hour(s)
Corequisite: ST 2010 + ST 2092

Continues to apply surgical procedure theory and skills in the clinical setting with additional opportunities to include specialty areas such as labor and delivery and GI experience.

Clinical Hours: 360

ST 2092 - Surgical Technology Lab III

2 credit hour(s)
Corequisite: ST 2010 + ST 2090

Continue to provide an opportunity to practice clinical skills and put into practice the special considerations for genitourinary procedures and surgery, orthopedic surgery, cardiothoracic surgery, peripheral vascular surgery and neurosurgery.

Lab Hours: 90

ST 2096-2996 - Special Topics
1-6 credit hour(s)
Prerequisite: ST 1010 + ST 1092

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

Survey of Business, Hospitality & Technology

BHT 1005 - Survey of Business, Hospitality & Technology
3 credit hour(s)

This course will introduce the students to the programs in the School of Business, Hospitality & Technology. Students will explore related careers through research, guest speakers and hands-on experiences in laboratory settings. Strategies to enhance college success will be explored, and critical thinking will be emphasized throughout the course.

Theory Hours: 45

Survey of Health, Wellness, and Public Safety

HWPS 1005 - Survey of Health, Wellness and Public Safety
3 credit hour(s)

This course will introduce the students to the programs in the School of Health, Wellness & Public Safety. Students will explore related careers through research, guest speakers and hands-on experiences in laboratory settings. Strategies to enhance college success will be explored and critical thinking will be emphasized throughout the course.

Theory Hours: 45

Surveying

SUR 1002 - Math for Surveying and Mapping
1 credit hour(s)
Prerequisite: Math Skills 2 Alg + Reading and Writing Skills 2

Covers basic concepts of problem solving, mathematics and trigonometry with an emphasis on land survey and engineering applications and calculator use. Students must provide a full-function scientific calculator with a ten-digit display.

Theory Hours: 15

SUR 1015 - Boundary Survey Concepts
3 credit hour(s)
Pre- or corequisite: SUR 2205

Detailed study of the U.S. Public Land Survey System Instructions with special emphasis on New Mexico. Sectionalized land subdivision, corner restoration and field survey.

Theory Hours: 45

SUR 2096-2996 - Special Topics
1-7 credit hour(s)

Presents various topics.

N**ote(s):**

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

SUR 2098 - Internship
1-7 credit hour(s)
Prerequisite: Department approval

Provides an opportunity for the student to work for one term on an intern basis in an appropriate training program. Position is not paid.

Internship Hours: 45

SUR 2205 - Fundamentals of Land Surveying
3 credit hour(s)
Pre- or corequisite: (MATH 1215 or MATH 1215P or higher) or GIS 1002 or department approval

Introduces basic surveying techniques including the use of automatic levels, total stations, data collectors, and survey grade GPS equipment. Topics include distance and angle measurement, traversing, topography, and construction layout.

Theory Hours: 15
Lab Hours: 90

Sustainability

SUST 1134 - Introduction to Sustainability Studies
3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course provides a broad survey of various aspects of sustainability. Students will explore topics such as climate change, renewable energy, water, agriculture, green building, socially responsible business, micro lending, environmental justice, smart growth and alternative progress indicators. Students will examine both contemporary challenges to sustainable development and examples of successful sustainability initiatives on local, national, and global levels.

Theory Hours: 45

Teaching and Learning Online

TLOL 1010 - Introduction to Teaching and Learning Online
2 credit hour(s)
Prerequisite: Department approval

Intended for higher education faculty or K-12 teachers interested in teaching online. This course provides an introduction to online teaching and learning with a focus on the skills and knowledge needed to actively engage students in an online environment through on-going communication, instructor presence, and high quality instruction. This course is appropriate for all online learning environments and emphasizes best practices in online teaching and learning.

Theory Hours: 30

TLOL 1015 - Online Curriculum Design and Instruction

3 credit hour(s)
Prerequisite: TLOL 1010

Intended for higher education faculty or K-12 teachers interested in online course design and teaching online. This course applies best practices in designing online courses, with a focus on developing course content, learning activities, accessibility, and assessments that achieve alignment with instructional objectives.

Theory Hours: 45

TLOL 1020 - Assessing the Online Learner

2 credit hour(s)
Prerequisite: TLOL 1010

Intended for higher education faculty or K-12 teachers interested in implementing successful techniques for assessing online learners. This course looks at both formative and summative assessment methods with a focus on the alignment of assessment with instruction and learning objectives within the course design.

Theory Hours: 30

TLOL 1025 - Instructional Resources for Teaching Online

1 credit hour(s)
Prerequisite: TLOL 1010

Intended for higher education faculty or K-12 teacher interested in developing best practices using online instructional resources. The course will focus on locating, evaluating, implementing and properly citing online resources in accordance with copyright and fair use regulations. Students will explore best practices with a focus on the alignment of instructional resources within online course content and course development.

Theory Hours: 15

TLOL 1030 - Communication and Engagement in Online Learning

2 credit hour(s)
Prerequisite: TLOL 1010

Intended for higher education faculty or K-12 teachers interested in developing an engaging online learning community. The course will focus on student-to-student, student-to-instructor, and student-to-content interactions. Students will use online tools that allow for synchronous and asynchronous communication and explore new technologies to support learning and instruction in an online environment.

Theory Hours: 30

TLOL 1035 - Universal Design – Elements of Accessibility

1 credit hour(s)
Prerequisite: TLOL 1010

Intended for higher education faculty or K-12 teachers interested in creating an inclusive environment in the online classroom using the foundations of universal design. This course will focus on evaluating and implementing universal design principles in course development and will explore multiple ways to increase accessibility for all students in an online environment.

Theory Hours: 15

Theatre

THEA 1110 - Introduction to Theatre

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

This course provides an introduction to the study of theatre. Students will examine various components that comprise theatre, such as acting, directing, playwriting, dramaturgy, scenic and costume design, stagecraft, spectatorship, history, theory, and criticism.

N**ote(s):**

- Previously THEA 1122. Read more.

Theory Hours: 45

THEA 1220 - Beginning Acting

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2
Recommended: THEA 1110*

This course serves as an introduction to the theory and practice of acting. Students will learn various terms, techniques, and practices of acting and will demonstrate their understanding in class. Through exercises and improvisations, partnered scenes, and group work, students will be better able to appreciate the work of others as they learn techniques of performing.

N**ote(s):**

- Previously THEA 1120. Read more.

Theory Hours: 45

THEA 1310 - Introduction to Costuming

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2 or FYEX 1110

This course introduces students to basic skills generally used in creating costumes for theatre. During the semester students will be introduced to the costume shop, equipment, supplies, and processes. They will learn the process of sewing a garment and running a stage production.

N**ote(s):**

- Typically offered Fall Term only
- Previously THEA 1194. Read more.

Studio Hours: 90

THEA 1320 - Intermediate Costume

3 credit hour(s)
Prerequisite: THEA 1310

Provides students with more advanced training in cutting and sewing techniques, as well as knowledge of fabric. Trains students in building of complex clothing patterns.

N**ote(s):**

- Typically offered Spring Term only
- Previously THEA 1195. Read more.

Studio Hours: 90

THEA 1330 - Advanced Costuming and Sewing

3 credit hour(s)

Prerequisite: THEA 1320
Students who take this class will build upon previous sewing knowledge in order to construct advanced garments. They will learn techniques for building garments with alternative materials.

Lab Hours: 90

THEA 1990 - Theatre Practicum

1 credit hour(s)
Pre- or corequisite: THEA 2310

This course introduces student to the various principles of play production. Students will participate within the elements of on stage or backstage categories: acting, designing, front of house, and/or production staff. Theatre Practicum provides hands-on experience(s) for all elements of theatrical productions.

N**ote(s):**

- Previously THEA 1290. Read more.

Practicum Hours: 45

THEA 2210 - Acting for the Camera

3 credit hour(s)
Prerequisite: THEA 1220

Acting for the Camera introduces students to techniques specific to performing for the camera. Students acquire acting skills that can be used both on the stage and screen. Students develop techniques through various exercises in front of a camera. Covers audition techniques, readings, shot size, eye-line, and industry vocabulary.

N**ote(s):**

- Previously THEA 2222 . Read more.

Theory Hours: 45

THEA 2220 - Intermediate Acting

3 credit hour(s)
Prerequisite: THEA 1220

Provides students with the opportunity to deepen physical, vocal, imaginative, and collaborative skills to which they were exposed in Beginning Acting. During the course of the semester, students will be introduced to techniques for working on script and character analysis, moment-to moment work, physical transformation, breath work, and truthful playing of the scene.

N**ote(s):**

- Previously THEA 1121. Read more.

Theory Hours: 45

THEA 2230 - Ensemble Improvisation

3 credit hour(s)
Prerequisite: THEA 1220 or department approval

Introduces students to the structure and rules of short and long-form improvisation, allowing them to create original ensemble theatrical productions.

N**ote(s):**

- Previously THEA 2226. Read more.

Theory Hours: 45

THEA 2255 - Beginning Screenwriting

3 credit hour(s)
Prerequisite: ENGL 1110 or ENGL 1110P
Recommended: THEA 1110*

Provides the critical ingredients of great dramatic writing that are then adapted to a dramatic form manageable for the emerging screenwriter: the narrative short film.

* THEA 1110 is a foundational course covering theatrical production; awareness of the various aspects of theatre is crucial to successful screenwriting.

N**ote(s):**

- Previously THEA 2258 Read more.

Theory Hours: 45

THEA 2310 - Stagecraft

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 2

Students will explore basic skills for scenic designers and techniques of set construction for the stage, including building scenery, rigging, painting and properties.

N**ote(s):**

- Previously THEA 1119. Read more.

Theory Hours: 45

THEA 2320 - Lighting for Theater

3 credit hour(s)
Pre- or corequisite: THEA 1110

This course is a comprehensive introduction to theatre lighting. Students will explore all areas of stage lighting which include: creating a light plot, hanging, circuiting, focusing, patching, and programming a lighting console.

Theory Hours: 45

THEA 2420 - Voice and Movement

3 credit hour(s)
Prerequisite: THEA 1220 or department approval

Students are introduced to basic techniques which aid in vocal and physical strength, variety, flexibility, and stamina, and gain understanding of harmful or limiting vocal and physical habits in stage acting.

N**ote(s):**

- Previously THEA 2231. Read more.

THEA 2450 - Playwriting

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2

This course provides students with the critical, fundamental ingredients of dramatic writing for the stage. Students will write their own plays as well as learn how to offer constructive criticism for each other's work.

Theory Hours: 45

THEA 2996 - Topics in Theater

1-6 credit hour(s)
Prerequisite: Reading and Writing Skills 2

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 9 credits.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)
- Previously THEA 2096-2996. Read more.

THEA 2998 - Internship in Theatre
1-3 credit hour(s)

Prerequisite: THEA 1110
Theatre Internship credit is offered to students who do a significant amount of work with a professional or local ensemble theatre company in a way that advances the student's theatre education. Agreement must be made with theatre company before enrolling in this course.

Internship Hours: 45

Truck Driving

TRDR 1110 - Truck Driving Owner Operator/ Independent Contractor Skills
3 credit hour(s)

This course will explore different ways of getting into business as an independent or lease truck owner. Skills will include recordkeeping required for truck owners, options for becoming a truck owner-operator, and other skills needed to become a successful owner-operator. Industry guest speakers will be featured.

Note(s):

- Recommended that the student be in process of getting Class A or B CDL or already possess said CDL.

Theory Hours: 45

TRDR 1392 - Advanced Operational Practices
2 credit hour(s)
Prerequisite: TRDR 1220 [Inactive] + TRDR 1120 [Inactive] + department approval

Presents skills needed to cope with hazards of the roadway environment. Course sessions are scheduled during morning, day, and evening hours and include driving on mountain grades, urban and rural roads, interstates and docking facilities. Students will receive a minimum of 15 hours behind-the-wheel time. By the conclusion of TRDR 1392, students will have received instruction and practice in all required Behind-the-wheel units in Federal Entry Level Driver Training standards.

Note(s):

- This course offers a Work Embedded Learning experience.

Lab Hours: 90

TRDR 1420 - Class B Theory and Operational Practices
9 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

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 Class B CDL truck driver. During lab hours this course 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. This course also presents the skills needed to cope with hazards of the roadway environment. Course lab sessions may be scheduled during the day, evening and night hours and include driving on mountain grades, urban and rural roads, interstates and docking facilities during the road training portion of the class. Students will receive a minimum of 20 hours behind-wheel time.

N**ote(s):**

- Standard truck driver requirements apply

Theory Hours: 90
Lab Hours: 135

TRDR 2096-2996 - Special Topics
1-7 credit hour(s)
Prerequisite: Department approval

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

TRDR 2097 - Independent Study
1-7 credit hour(s)

Focuses on a specific problem while working with an instructor.

Unmanned Aircraft Systems

UAS 1010 - Introduction to Unmanned Aircraft Systems
3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

Teaches the basics of Unmanned Aircraft Systems (UAS). From the fundamentals of flight to airframes, applications, and UAS operations and safety, the course shows how UAS/drones are meeting needs and creating opportunities in surveying and mapping, urban planning, construction management, public safety, real estate, criminal justice, archaeology, and countless other professions. The course will focus on the basics of UAS providing you the information you need to know as you integrate this technology into your research, job, and business.

Theory Hours: 30
Lab Hours: 45

UAS 1011 - UAS Standards, Regulations and Law and Exam Prep
1 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

This course introduces the regulatory and legal context for UAS operation in the national airspace. It also prepares students for the FAA Part 107 Exam. This course does not include the FAA exam, but it will provide an introduction to all of the subject areas required for the exam. This course is designed to help you prepare to take the FAA exam to become a registered UAS Pilot. The subjects included on the Part 107 exam are specific to aviation and include many concepts and acronyms with which the average person is unlikely to be familiar. Completion of this course does not guarantee that you

will pass the FAA Exam.

Theory Hours: 15

UAS 1020 - Crew Resource Management for UAS

1 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

Provides students with an introduction to the principles and concepts of crew resource management (CRM). Training encompasses a wide range of knowledge, skills and attitudes including communications, situational awareness, problem solving, decision making and teamwork. CRM is a system that utilizes resources to promote safety within the workplace.

Theory Hours: 15

UAS 1030 - UAS Flight Training I

2 credit hour(s)
Pre- or corequisite: UAS 1010 + UAS 1011 + UAS 1020

This course introduces the skills needed to safely pilot a UAS, as well as providing an opportunity for students to log flight hours. Fixed wing and multi-rotor airframes will be covered. Course fee covers cost of student UAS.

Theory Hours: 15
Lab Hours: 45

UAS 1031 - UAS Flight Training II

2 credit hour(s)
Pre- or corequisite: UAS 1010 + UAS 1011 + UAS 1020

This course introduces the skills needed to safely pilot a UAS, as well as providing an opportunity for students to log additional flight hours. Fixed wing and multi-rotor airframes will be covered.

Theory Hours: 15
Lab Hours: 45

UAS 2010 - UAS for Design and Construction

3 credit hour(s)
R**ecommended:** UAS 1010 + UAS 1011 + UAS 1020

UAS is becoming an important tool in the design and construction fields for construction site monitoring, client content creation, virtual design coordination and property management. This course builds on basic UAS skills and introduces UAS data integration with industry standard software such as BIM, CAD and GIS.

Theory Hours: 30
Lab Hours: 45

UAS 2020 - UAS Data Modeling & 3D Visualization

3 credit hour(s)
Prerequisite: UAS 1010

The use of UAS stems not only from their unique perspective, but also from the diverse camera and sensor systems mounted to the aerial platforms. This course provides basic knowledge of remote sensing and the characteristics and applications of UAS-mounted sensor systems. Students are introduced to both passive and active sensor systems, with an emphasis on data acquisition and processing.

Theory Hours: 30
Lab Hours: 45

UAS 2096-2996 - Special Topics

1-6 credit hour(s)

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (SeeSchedule of Classes.)

Veterinary Technology

VT 1003 - Preparation for Professional Success

1 credit hour(s)
Recommended: BCIS 1110 *

Open to students considering, or preparing to enter, a HWPS Professional Program. Students will explore professional aspects specific to their field of interest, considering various professional attitudes, ethics, and basic client or patient communications. Opportunities will be offered for students to make personal physical or mental adjustments in preparation to succeed in the HWPS Program. (CR/NC)

* VT 1003 is taught almost entirely online. BCIS 1110 is recommended for any student interested in VT 1003 who is not familiar with the online environment.

Theory Hours: 15

VT 1005 - Veterinary Reception Basic Skills

3 credit hour(s)

Prerequisite: Reading and Writing Skills 2 + Math Skills 2 Alg

Presents essential veterinary / animal care receptionist front office skills. Emphasizes customer service and professionalism, and introduces vocabulary applicable to veterinary, agricultural, and retail animal care fields.

Theory Hours: 45

VT 1008 - Applied Mathematics for Veterinary Technicians

1 credit hour(s)
Prerequisite: [(BIOL 1140+ BIOL 1140L) or (BIOL 2110 + BIOL 2110L) + (CHEM 1120 + CHEM 1120L) or (CHEM 1215 + CHEM 1215L)] + Mathematics Requirement + VT 1011
Pre- or corequisite: ENGL 1110 or ENGL 1110P
Corequisite: VT 1012 + VT 1070 + VT 1292

This course 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.

Theory Hours: 15

VT 1011 - Introduction to the Veterinary Profession

3 credit hour(s)
Prerequisite: Reading and Writing Skills 2 + Math

Skills 2 Alg

Introduces veterinary medical team opportunities for the paraprofessional. Includes legal, ethical, and professional topics. Presents veterinary medical terminology including phylogenetic and taxonomic relationships of domestic, laboratory, and exotic animals.

Theory Hours: 45

VT 1012 - Introduction to Animal Care

2 credit hour(s)
Corequisite: VT 1008 + VT 1070 + VT 1292

Provides discussion and presentation of animal handling and restraint, with both on campus procedural laboratory time and field trips to various animal facilities, with opportunities for hands-on experience.

Theory Hours: 15
Lab Hours: 45

VT 1070 - Animal Comparative Anatomy and Physiology

3 credit hour(s)
Corequisite: VT 1008 + VT 1012 + VT 1292

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 and reptile species. Requires hands on laboratory experience including dissection.

Theory Hours: 30
Lab Hours: 45

VT 1192 - Supplemental Lab

1 credit hour(s)
Pre- or corequisite: VT 1008

Provides participation in supervised learning and review of basic, advanced and specialized practices, including topics in Anatomy and Physiology, Therapeutics, Clinical Pathology. Allows students to review in preparation for VT exit examinations.

Lab Hours: 45

VT 1210 - Animal Comparative Anatomy and Physiology II

3 credit hour(s)
Prerequisite: (ENGL 1110 or ENGL 1110P) + VT 1008 + VT 1012 + VT 1070 + VT 1292
Pre- or corequisite: PSYC 1110
Corequisite: VT 1251 + VT 1272 + VT 1293 + VT 2015

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.

Theory Hours: 30
Lab Hours: 45

VT 1251 - Radiology for Veterinary Technicians Lecture

1 credit hour(s)
Corequisite: VT 1210 + VT 1293 + VT 1272 + VT 2015

Presents radiography basics including safety measures, film, film storage, generation and analysis of radiographs, developing solutions and processing, tube rating and exposure charts, control factors, radiographic quality, positioning and contrast media.

Theory Hours: 15

VT 1272 - Surgical Technology for Veterinary Technicians

2 credit hour(s)
Corequisite: VT 1210 + VT 1251 + VT 1293 + VT 2015

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.

Theory Hours: 15
Lab Hours: 45

VT 1292 - Veterinary Office and Hospital Procedures Lab

1 credit hour(s)
Corequisite: VT 1008 + VT 1012 + VT 1070

Introduces veterinary office procedures in a hands-on laboratory experience. Various aspects of facility management will be presented using traditional and electronic media to prepare student to effectively contribute to the professional and efficient operation of a veterinary facility. Emphasis will be on veterinary computer software applications, veterinary online services, telephone skills and role-playing in client communication situations.

Lab Hours: 45

VT 1293 - Radiology for Veterinary Technicians Laboratory

1 credit hour(s)
Corequisite: VT 1210 + VT 1251 + VT 1272 + VT 2015

Introduces exercises and demonstrations related to veterinary radiology. Includes field trips, exercises and demonstrations at veterinary clinics.

Lab Hours: 45

VT 2010 - Clinical Pathology for Veterinary Technicians I

4 credit hour(s)
Prerequisite: PSYC 1110 + VT 1210 + VT 1251 + VT 1272 + VT 1293 + VT 2015
Corequisite: VT 2190 + VT 2674

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.

Theory Hours: 30
Lab Hours: 90

VT 2015 - Non-Infectious and Infectious Diseases for Veterinary Technicians

3 credit hour(s)
Corequisite: VT 1210 + VT 1251 + VT 1272 + VT 1293

Presents overview of common non- infectious and 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.

Theory Hours: 45

VT 2096-2996 - Special Topics

1-6 credit hour(s)
Prerequisite: Department approval

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

VT 2190 - Veterinary Technology Clinical I

4 credit hour(s)
Corequisite: VT 2010 + VT 2674

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.

Theory Hours: 15
Clinical Hours: 135

VT 2592 - Advanced Supplemental Lab for Veterinary Technology (CR/NC)

1 credit hour(s)
Pre- or corequisite: VT 1008

Provides second-year Veterinary Technology students with the opportunity for additional learning and practice of veterinary technology skills in the campus laboratory. Encourages preparation for the VTNE.

Lab Hours: 45

VT 2610 - Clinical Pathology for Veterinary Technicians II

4 credit hour(s)
Prerequisite: VT 2010 + VT 2190 + VT 2674
Corequisite: VT 2651 + VT 2690 + VT 2692

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.

Theory Hours: 30
Lab Hours: 90

VT 2651 - Anesthesiology for Veterinary Technicians Lecture

2 credit hour(s)
Corequisite: VT 2610 + VT 2690 + VT 2692

Studies anesthesia in large and small domestic animals, exotic and laboratory species. Includes preanesthetic evaluation, induction of anesthesia, patient monitoring and recovery, principles of fluid therapy related to anesthesia, dosage calculations, and identification, care, and maintenance of anesthetic machines.

Theory Hours: 30

VT 2674 - Applied Therapeutics and Care for Veterinary Technicians I

2 credit hour(s)
Corequisite: VT 2010 + VT 2190

Presents skills such as venipuncture, medication administration, IV therapy, bandaging and splinting, catheterization techniques, recumbent patient care and blood transfusions.

Theory Hours: 15
Lab Hours: 45

VT 2690 - Veterinary Technology Clinical II

3 credit hour(s)
Corequisite: VT 2610 + VT 2651 + VT 2692

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.

Clinical Intensive Hours: 180

VT 2692 - Anesthesiology for Veterinary Technicians Lab

1 credit hour(s)
Corequisite: VT 2610 + VT 2651 + VT 2690

Introduces exercises and demonstrations related to veterinary anesthesiology. May include field trips, exercises and demonstrations and laboratories at veterinary clinics.

Lab Hours: 45

VT 2790 - Applied Therapeutics II Avian, Laboratory, Exotic, and Large Animals

3 credit hour(s)
Corequisite: VT 2803 + VT 2890 + VT 2892

Presents recognition, restraint, behavior, and basic husbandry of avians, laboratory animals, exotics and reptiles, and equines and livestock. Includes appropriate sites and routes of medication administration for each species, physical examinations, diseases, nursing and surgical requirements, and specimen collection.

Theory Hours: 30
Clinical Intensive Hours: 60

VT 2803 - Pharmacology for Veterinary Technicians

3 credit hour(s)
Prerequisite: VT 2610 + VT 2651 + VT 2690 + VT 2692
Corequisite: VT 2790 + VT 2890 + VT 2892

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.

Theory Hours: 45

VT 2890 - Veterinary Technology Clinical III

3 credit hour(s)

Corequisite: VT 2803 + VT 2790 + VT 2892

Applies theory to practice at veterinary clinics performing duties that include handling, therapeutics and care of laboratory and exotic animals, surgical assisting and hematological exams.

Clinical Intensive Hours: 180

VT 2892 - Dentistry for Veterinary Technicians

1 credit hour(s)
Corequisite: VT 2803 + VT 2790 + VT 2890

Studies prophylactic technique, charting, identification of normal tooth structure, number of teeth in each domestic species, identification of common dental problems, dental radiography and client dental education.

Lab Hours: 45

Welding

WELD 1010 - Safety and Orientation

2 credit hour(s)

Emphasis in the proper and safe use of machines and tools found in the welding industry. Students learn the health concerns and precautions used to minimize exposure during welding and cutting. Orientation prepares individuals for employment and the documentation relating to welding.

Theory Hours: 30

WELD 1030 - Welding Math

3 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Provides instruction in computing math problems that are common in a variety of welding applications. Topics will include welding terminology, common fractions, decimal fractions, metric system, geometric shapes, angular measurements and economical layout.

Theory Hours: 45

WELD 1040 - Welding Technology CAD/CNC

3 credit hour(s)
Prerequisite: WELD 1120 + WELD 1030 + WELD 1125

Presents computer-assisted drafting and computer numerical control as applied in welding technology on hardware typically found in the welding shop.

Theory Hours: 15
Lab Hours: 90

WELD 1110 - Introduction to Welding Fundamentals

3 credit hour(s)
Recommended: AUTC 1240 or DETC 1240 or MATT 1240 or PLMB 2210*

This course focuses on the fundamental techniques employed in the welding field. It is a laboratory approach to understanding and building skills in welding related areas including shop safety, hand and portable power tool usage, and welding.

N**ote(s):**

- Previously WELD 1062. Read more.

Lab Hours: 135

WELD 1120 - Print Reading for Welders

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Provides students with the knowledge to read and interpret prints and welding symbols and transfer this knowledge to the workplace with layout tools and measuring instruments.

N**ote(s):**

- Previously WELD 1005. Read more.

Theory Hours: 15
Lab Hours: 45

WELD 1125 - Thermal Cutting

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1

Emphasis on safety and the fundamentals of thermal cutting processes. Students will cut various materials and thicknesses of metals in all positions.

N**ote(s):**

- Previously WELD 1050. Read more.

Theory Hours: 15
Lab Hours: 45
Additional Lab Hours: 15

WELD 1130 - SMAW (Shielded Metal Arc Welding) I

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: WELD 1125

This course will cover introductory theory and practical applications of structural plate welding, welding safety,handheld torch cutting operations and equipment set up. The development of student skills using the Shielded Metal Arc Welding process in all positions will be stressed. The standards of this course are set by the American Welding Society and utilized in both classroom study and laboratory work.

N**ote(s):**

- Previously WELD 1150. Read more.

Theory Hours: 15
Lab Hours: 45
Additional Lab Hours: 15

WELD 1140 - Gas Metal Arc Welding I

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: WELD 1125

Introduces Gas Metal Arc Welding (GMAW) short circuit welding safety, machine set up and shutdown procedures. Topics include personal protective equipment (PPE), GMAW uses, advantages and disadvantages, constant voltage (CV) power source, polarity, electrode types, shielding gasses, and weld discontinuities and defects identification and corrective practices. Lab excercises will include various joints in all positions.

N**ote(s):**

- Previously WELD 1350. Read more.

Theory Hours: 15

Lab Hours: 45
Additional Lab Hours: 15

WELD 1155 - GTAW (Gas Tungsten Arc Welding) I

2 credit hour(s)
Prerequisite: Reading and Writing Skills 1
Pre- or corequisite: WELD 1125

A basic course designed to provide the student with the ability to setup, maintain and operate Gas Tungsten Arc Welding (GTAW) equipment safely. Develop skills to weld structural joints to bend tests standards utilizing various metals. Weld quality will be measured in accordance with American Welding Society standards.

N**ote(s):**

- Previously WELD 1250. Read more.

Theory Hours: 15
Lab Hours: 45
Additional Lab Hours: 15

WELD 1160 - Advanced SMAW

2 credit hour(s)
Prerequisite: WELD 1120 + WELD 1030 + WELD 1125 + WELD 1130

Presents advanced instruction in shielded metal arc welding (SMAW) with a strong emphasis on safety, work ethics and shop procedures.

N**ote(s):**

- Previously WELD 1292

Theory Hours: 15
Lab Hours: 45
Additional Lab Hours: 15

WELD 1171 - Layout and Fabrication

2 credit hour(s)
Prerequisite: WELD 1120

This class is an introduction to general layout and fabrication techniques as related to structural welding. Emphasis will be on construction of small projects to tolerances using prints. A variety of welding processes will be used in all positions.

N**ote(s):**

- Previously WELD 1025. Read more.

Theory Hours: 15
Lab Hours: 45

WELD 1220 - Pipe Welding I

2 credit hour(s)
Prerequisite: WELD 1120 + WELD 1030
Pre- or corequisite: WELD 1160 + WELD 1260 + WELD 2140

Stresses the theory and practical application of pipe welding in the 1-G and 2-G positions. This course will develop skills in the fit-up and technique of welding pipe, using electrodes and various Welding process.

N**ote(s):**

- Previously WELD 1460. Read more.

Theory Hours: 15
Lab Hours: 45
Additional Lab Hours: 15

WELD 1260 - Advanced GTAW and Fabrication

2 credit hour(s)
Prerequisite: WELD 1120 + WELD 1030 + WELD 1155

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.

N**ote(s):**

- Previously WELD 2292

Theory Hours: 15
Lab Hours: 45
Additional Lab Hours: 15

WELD 1370 - Qualifications for GMAW

3 credit hour(s)
Pre- or corequisite: WELD 1171 + WELD 2140

Provides stimulated qualification procedures for gas metal arc welding (GMAW), in all positions.

N**ote(s):**

- Previously WELD 2092

Theory Hours: 15
Lab Hours: 90

WELD 1580 - Advanced Project and Fabrication Lab

2 credit hour(s)
Prerequisite: WELD 2150

This course covers the use of shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, oxyacetylene and plasma cutting. Students will utilize industrial fabrication and repair problems for assigned projects, possibly including real-world projects, on advanced fabrication equipment. Students will create blueprints for assigned projects. Course also includes training in welding safety and customer relations.

N**ote(s):**

- Previously WELD 279

WELD 2097 - Independent Study

1-7 credit hour(s)
Prerequisite: Department approval

Focuses on a specific problem while working with an instructor.

WELD 2130 - SMAW II

3 credit hour(s)
Prerequisite: WELD 1171 + WELD 1160

Reviews and builds upon SMAW-1 skills. Students will learn joint design and AWS standards for welder qualification testing.

N**ote(s):**

- Previously WELD 1170. Read more.

Theory Hours: 15
Lab Hours: 90

WELD 2140 - GMAW II

2 credit hour(s)
Prerequisite: WELD 1120 + WELD 1030 + WELD

1140

Advanced course in the gas metal arc welding process (GMAW). Instruction includes trouble shooting, and the correct selection and application of consumables. Students practice GMAW of carbon and stainless steel on structural joints in all positions. Preparation of test samples will also be emphasized.

N**ote(s):**

- Previously WELD 1360. Read more.

Theory Hours: 15
Lab Hours: 45
Additional Lab Hours: 15

WELD 2150 - Metal Fabrication II

3 credit hour(s)
Prerequisite: WELD 1171
Pre- or corequisite: WELD 2130 + WELD 2155 + WELD 1370

This course is designed to give students a knowledge of the fabrication process. This course will cover areas of customer interaction, print reading, sketching, job estimation, manufacturing of parts, assembly, welding, and finishing. Students will gain knowledge in the operation and safety practices of equipment used in fabrication, project tolerance, meeting deadlines as well as critical thinking skills.

N**ote(s):**

- Previously WELD 1570. Read more.
- This course offers a Work Embedded Learning experience.

Theory Hours: 15
Lab Hours: 90

WELD 2155 - GTAW II

3 credit hour(s)
Prerequisite: WELD 1171 + WELD 1260

A continuation of GTAW I. This course is designed to provide the student with the ability to setup, maintain and operate Gas Tungsten Arc Welding (GTAW) equipment safely. Develop skills to weld structural joints to bend tests standards utilizing various metals. Weld quality will be measured in accordance with American Welding Society standards.

N**ote(s):**

- Previously WELD 1270. Read more.

Theory Hours: 15
Lab Hours: 90

WELD 2220 - Pipe Welding II

2 credit hour(s)
Prerequisite: WELD 1220 + WELD 2150

Stresses the theory and practical application of 5-G and 6-G pipe welding. This course will develop skills in the technique of pipe welding, using various Welding processes.

N**ote(s):**

- Previously WELD 1480. Read more.

Theory Hours: 15
Lab Hours: 45
Additional Lab Hours: 15

WELD 2996 - Special Topics

1-7 credit hour(s)
Prerequisite: Department approval

Presents various topics.

Note(s):

- All courses ending in 96 are special topics. (See *Schedule of Classes*.)

Womens Studies

GNDR 2110 - Introduction to Women, Gender, and Sexuality Studies

3 credit hour(s)
Pre- or corequisite: Reading and Writing Skills 1

This course introduces students to key concepts, debates, and analytical tools informing Women's, Gender, and Sexuality Studies. As an interdisciplinary field of study, Women's, Gender, and Sexuality Studies employs academic perspectives from a range of disciplines and theoretical approaches. It also incorporates lived experience and social location into its object of analysis.

Though content will vary according to the expertise and focus of the instructor, this course will develop tools through readings and assignments that critically analyze how gender and sexuality are shaped by different networks of power and social relations and demonstrate how the intersections of race, class, disability, national status, and other categories identity and difference are central to their understanding and deployment. In addition to feminist though, areas of focus might include gender and sexuality in relation to social, cultural, political, creative, economic, or scientific discourses. This class is recommended for those with a general interest in the topic area as well as for those seeking a foundational course for further study.

Note(s):

- Previously WMST 1150. Read more.

Theory Hours: 45

What's New!

New Programs:

- Bilingual Transition, Certificate of Completion
  Environmental Science, Certificate of Completion

New Courses:

- ACCT 2265 - Advanced Accounting Techniques
  AFST 2140 - Black Women in the African Diaspora
  ANTH 2224 - Ancient Andes
  ARCH 1125 - Design Fundamentals
  ARCH 2117C - Architectural Visualization II
  ARCH 2315 - Architectural Design I
  ARCH 2325 - Architectural Design II
  BCIS 1115 - Introduction to Computers
  BCIS 1340 - Data Concepts
  BCIS 1350 - Database Analysis and Design
  BCIS 2218 - MS Excel II
  BCIS 2221 - MS Word II
  BIOL 2151 - Medical Imaging Anatomy & Physiology I
  BIOL 2161 - Medical Imaging Anatomy & Physiology II
  CJUS 2580 - Leadership Principles for Public Safety
  COMM 1140 - Introduction to Media Writing
  COS 1192 - Nail Service Lab
  COS 1194 - Skin Service Lab
  COS - 2040 - Advanced Nail Tech Theory I
  COS - 2050 - Advanced Nail Tech Theory II
  COS 2493 - Manicuring/Pedicuring Lab
  COS 2494 - Facials Lab II
  CVS - 1225 - Vascular Sonography I
  ENDT 2040 - Evoked Potentials
  ENDT 2150 - Nerve Conduction & PSG
  ENDT 2250 - Intraoperative Neuromonitoring (IONM)
  ENVS 1110 - Environmental Science I
  ENVS 1110L - Environmental Science I Lab
  ENVS 1210 - Field Methods in Environmental Science
  ESOL 1110 - Composition I for English Learners
  ESOL 1120 - Composition II for English Learners
  ESOL 1210 - Vocabulary and Discourse in Creative and Fine Arts
  ESOL 1220 - Vocabulary and Discourse in Humanities
  ESOL 1230 - Vocabulary and Discourse in Mathematics
  ESOL 1240 - Vocabulary and Discourse in Communications
  ESOL 1250 - Vocabulary and Discourse in Laboratory Science
  ESOL 1260 - Vocabulary and Discourse in Social and Behavioral Science
  FS 1015 - Physical Fitness for Firefighters
  FSTE 2110 - Food Science I
  GESL 0500 - Preparación en artes del lenguaje de equivalencia de escuela secundaria-superior en español
  GESM 0500 - Preparación en matemáticas de HSE en español
  IBEC 0550 - ESL for Bilingual ECED 1115 Health, Safety, and Nutrition
  MATH 1350Q - Introduction to Statistics Support Lab
  MECH 1051 - Lean Manufacturing Principles
  MECH 1120 - Advanced Pneumatics and Hydraulics
  MECH 1205 - Advanced Industrial Control Systems
  OTEC 1301 - Introduction to Practical and Ethical AI Usage
  RT 1093 - Respiratory Therapy Lab I
  RT 1094 - Basic Clinical Preparation Lab
  RT 2094 - Advanced Clinical Prep Lab I
  RT 2493 - Advanced Respiratory Therapy Lab II
  WELD - 1172 - Fabrication Fundamentals

Where's My Course?

Common Course Numbering (CCN)

The New Mexico Higher Education Department (NMHED) has established and will maintain a common course numbering system (NMCCNS) to improve transfer and articulation of courses between New Mexico's public and tribal higher education institutions. The NMCCNS includes all lower division (1000 – and 2000 – level) courses offered in the state. Read more.

The new NMCCNS has resulted in a large number of changes to CNM course prefixes and numbers. If you can't find a course from a previous CNM Catalog you may look up your old course number and find its new CCN here to, access the New Mexico Common Course Numbering Crosswalk and find its new equivalent State assigned CCN. Note: New disciplines, including career technical disciplines, may be added to the CCNS in the future. Please consult with your School or an advisor for more information.

Course Changes

2025-2026 Deactivated Courses	Explanation/Crosswalk
AIML - 1010 - Introduction to Artificial Intelligence (AI)	Course replaced by AIML 1310
AIML - 2010 - Fundamentals of Artificial Intelligence	Course replaced by AIML 1320
AIML - 2110 - Deep Learning	Course replaced by AIML 2310
AIML - 2120 - Natural Language Processing	Course replaced by AIML 2320
ARDR - 2105 - Structural Systems CAD	No longer being offered.
ARDR - 2110 - Structural Systems Analysis	No longer being offered.
ARDR - 2120 - Structural Systems Software Applications	No longer being offered.
ARDR - 2180 - Site Analysis	No longer being offered.
ARDR - 2205 - Mechanical/Electrical/Plumbing Systems CAD	No longer being offered.
ARDR - 2210 - Mechanical/Electrical Systems Analysis	No longer being offered.
ARDR - 2220 - Mechanical/Electrical/Plumbing Systems Software Applications	No longer being offered.
ARTH - 2223 - World Architecture I: History of the Built Environment from Pre-History to 1400 CE	No longer being offered.
ARTH - 2224 - World Architecture II: History of the Built Environment from 1400 CE to the Present	No longer being offered.
ARTS - 2212 - Advanced Portfolio Development	No longer being offered.
BCIS - 2212 - Introduction to MS Access	Course replaced by BCIS 1210
BCIS - 2217 - MS Excel II	Course replaced by BCIS 1215
BCIS - 2220 - MS Word II	Course replaced by BCIS 1220
BCIS - 2320 - Visual Analytics	Course replaced by CIST 2321
BCIS - 2330 - Predictive Analytics	Course replaced by CIST 2331
CARP - 1030 - Construction Methods I	Course replaced by CNST 1170
CARP - 1305 - Furniture Making	Course replaced by CNST 1310
CARP - 1315 - Cabinet Making	Course replaced by CNST 1240
CARP - 1392 - Building Trades I	Course replaced by CNST 1110
CARP - 2030 - Construction Methods II	Course replaced by CNST 1270
CIS - 1220 - Programming Fundamentals	Course replaced by CIST 1213
CIS - 1250 - Computer Programming Fundamentals: Python	Course replaced by CSCI 1220
CIS - 1275 - C++ Programming I	Course replaced by CSCI 1240
CIS - 1280 - .Net I/C#	Course replaced by CIST 2220
CIS - 1410 - IT Essentials: Hardware	Course replaced by CIST 1410
CIS - 1415 - Network Administration Concepts	Course replaced by CIST 1413
CIS - 1425 - Introduction to Networks	Course replaced by CIST 1411
CIS - 1605 - Internet of Things	Course replaced by CIST 1605
CIS - 1610 - IT Essentials: Software	Course replaced by CIST 1610
CIS - 1680 - Linux Essentials	Course replaced by CIST 1680
CIS - 1713 - Web Publishing	Course replaced by CIST 1213
CIS - 1715 - Overview of Web Technologies	Course replaced by CIST 1217
CIS - 1730 - JavaScript Web Programming	Course replaced by CIST 1261
CIS - 1750 - PHP Web Programming	Course replaced by CIST 1263

2025-2026 Deactivated Courses	Explanation/Crosswalk
CIS - 1858 - Introduction to Cyber Security	Course replaced by CIST 1858
CIS - 2011 - Intro to Competitive Robotics	Course replaced by CIST 2616
CIS - 2021 - Advanced Competitive Robotics	Course replaced by CIST 2626
CIS - 2088 - Computer Information System Specialty	Course replaced by CIST 2088
CIS - 2096-2996 - Special Topics	Course replaced by CIST 2996
CIS - 2097 - Independent Study	Course replaced by CIST 2097
CIS - 2235 - Java Programming I	Course replaced by CIST 2235
CIS - 2237 - Android App Dev with Java and Kotlin	Course replaced by CIST 2237
CIS - 2240 - iPhone Programming with Swift	Course replaced by CIST 2215
CIS - 2250 - Game Development	Course replaced by CIST 2225
CIS - 2251 - Python Programming II	Course replaced by CIST 2251
CIS - 2275 - C++ Programming II	Course replaced by CIST 2275
CIS - 2277 - C++ Programming III	Course replaced by CIST 2277
CIS - 2284 - .NET II/C#	Course replaced by CIST 2284
CIS - 2421 - Network Device Configuration	Course replaced by CIST 1412
CIS - 2424 - Enterprise Networking	Course replaced by CIST 2411
CIS - 2427 - Troubleshooting Networks	Course replaced by CIST 2427
CIS - 2428 - Juniper Fundamentals	Course replaced by CIST 2428
CIS - 2450 - Fundamentals of Network Security	Course replaced by CIST 2450
CIS - 2520 - Introduction to SQL (Structured Query Language)	Course replaced by CIST 2210
CIS - 2620 - Windows Server Administration	Course replaced by CIST 2620
CIS - 2636 - Cloud Computing	Course replaced by CIST 2636
CIS - 2640 - PowerShell for SysAdmins	Course replaced by CIST 2640
CIS - 2641 - AWS Solutions Architect Associate	Course replaced by CIST 2641
CIS - 2650 - Advanced Windows Server	Course replaced by CIST 2650
CIS - 2670 - Cybersecurity Fundamentals	Course replaced by CIST 2881
CIS - 2680 - Linux Administration	Course replaced by CIST 2680
CIS - 2763 - Web Programming Framework	Course replaced by CIST 2263
CIS - 2798 - Internship	Course replaced by CIST 2798
CIS - 2801 - Introduction to DevSecOps	Course replaced by CIST 2801
CIS - 2853 - Cyber Defense Basics	Course replaced by CIST 2853
CIS - 2857 - Ethical Hacking	Course replaced by CIST 2887
CIS - 2860 - Digital Forensics and Incident Response	Course replaced by CIST 2860
CIS - 2898 - Internship	Course replaced by CIST 2898
CIS - 2899 - Software Development Capstone	Course replaced by CIST 2899
CIS - 2998 - Internship	Course replaced by CIST 2998
CIS - 2999 - Capstone Course	Course replaced by CIST 2999
CM - 1105 - Construction Drawings	Course replaced by CNST 1120
CM - 1220 - Construction Project Management I	Course replaced by CNST 1220
CM - 1234 - LEED Associate Exam Preparation	No longer being offered.
CM - 2115 - Construction Cost Estimating	Course replaced by CNST 1210
CM - 2220 - Construction Project Management II	Course replaced by CNST 1320
CM - 2225 - BIM for Building Systems Management	No longer being offered.
CM - 2230 - Building Energy Analysis	No longer being offered.
CSCI - 1151 - C Programming	Course replaced by CSCI 1230
CSCI - 1152 - Computer Programming Fundamentals Java I	Course replaced by CSCI 1260
CSCI - 2201 - Discrete Mathematics for Computer Science	Course replaced by CSCI 2310
CSCI - 2251 - Computer Programming Fundamentals: Java 2	Course replaced by CSCI 2260
CULN - 1003 - Safety, Sanitation and Health in the Hospitality Industry	Course replaced by HRTM 1310
DETC - 1250 - Diesel Power and the Environment	No longer being offered.
DMS - 2690 - Clinical Sonography IV	No longer being offered.
ECED - 2150 - Relationships and Reflective Practice in Infant Family Studies	No longer being offered.

2025-2026 Deactivated Courses	Explanation/Crosswalk
ECED - 2151 - Relationships and Reflective Practice in Infant Family Studies Practicum	No longer being offered.
ECED - 2240 - Infant Toddler Growth and Development (Prenatal to 3)	No longer being offered.
ECED - 2241 - Infant Toddler Growth and Development Practicum	No longer being offered.
ECED - 2245 - Effective Principles and Practices in Infant Family Studies	No longer being offered.
ECME - 2241 - Early Childhood Mentorship I	No longer being offered.
ECME - 2242 - Early Childhood Mentorship II	No longer being offered.
ECME - 2996 - Special Topics	No longer being offered.
EDUC - 2240 - Foundations of Career and Technical Education	No longer being offered.
EDUC - 2242 - Curriculum Development for Career Technical Education	No longer being offered.
EDUC - 2244 - Methods and Classroom Design for Career and Technical Education	No longer being offered.
EDUC - 2246 - Supporting Diverse Learners in the CTE Classroom	No longer being offered.
ELTR - 1005 - Electrical Theory I	Course replaced by ELTR 1120
ELTR - 1020 - Electrical AC/DC/L	Course replaced by ELTR 1125
ELTR - 1030 - AC Circ Motors Gen	Course replaced by ELTR 1145
ELTR - 2005 - Electrical Theory III	Course replaced by ELTR 2110
ELTR - 2015 - Elec Motor Control Theory	Course replaced by ELTR 2115
ELTR - 2030 - Indust Power Dist	Course replaced by ELTR 2130
ELTR - 2620 - Photovoltaic Fund/Applications	Course replaced by ELTR 2605
EMS - 2392 - Paramedic Skills and Behavioral Emergencies Lab	No longer being offered.
ENGL - 2110 - Traditional Grammar	No longer being offered.
FILM - 1002 - Introduction to Filmmaking	Course replaced by FDMA 1525
FILM - 1003 - Introduction to Film Technology	Course replaced by FDMA 1150
FILM - 1004 - Shooting Your Story	Course replaced by FDMA 1280
FILM - 1015 - Short Film Production	Course replaced by FDMA 1650
FILM - 1110 - Location Shooting	Course replaced by FDMA 1620
FILM - 1210 - Business of Film	Course replaced by FDMA 2860
FILM - 1220 - Pre-Production Management	Course replaced by FDMA 2144
FILM - 1230 - Film Crew IV	Course replaced by FDMA 2135
FILM - 1240 - Film Crew V	Course replaced by FDMA 2140
FILM - 1315 - Storyboarding	Course replaced by FDMA 2381
FILM - 1325 - Digital Cinematography II	Course replaced by FDMA 2215
FILM - 1335 - Introduction to Post-production Editing	Course replaced by FDMA 1550
FILM - 1345 - Audio Production I	Course replaced by FDMA 1410
FILM - 1390 - Professional Portfolio	Course replaced by FDMA 1994
FILM - 1996 - Topics	Course replaced by FDMA 1996
FILM - 2001 - Fabrication for Film	Course replaced by FDMA 2113
FILM - 2002 - Directing I	Course replaced by FDMA 2610
FILM - 2005 - Editing II	Course replaced by FDMA 2340
FILM - 2097 - Independent Study	Course replaced by FDMA 2997
FILM - 2098 - Film Crew Internship	Course replaced by FDMA 2165
FILM - 2996 - Special Topics	Course replaced by FDMA 2996
FITT - 1096-1996 - Special Topics	No longer being offered.
FITT - 1997 - Independent Study	No longer being offered.
FITT - 2020 - Fundamentals of Yoga Instruction	No longer being offered.
FITT - 2090 - Yoga Instructor Practicum	No longer being offered.
FITT - 2096-2996 - Special Topics	No longer being offered.
FITT - 2210 - Group Exercise Leadership II	No longer being offered.
GEOR - 0100 - General Education Orientation	No longer being offered.
GESP - 0450 - Spanish HSE Math Prep	No longer being offered.
GESP - 0550 - Spanish Language Arts HSE Prep	No longer being offered.

2025-2026 Deactivated Courses	Explanation/Crosswalk
HIT - 1015 - Introduction to Coding	No longer being offered.
HIT - 1090 - Health Information Practicum	No longer being offered.
HIT - 1240 - Principles of Disease	No longer being offered.
HIT - 1250 - Pharmacology and Laboratory Procedures	No longer being offered.
HIT - 2011 - ICD-CM Coding	No longer being offered.
HIT - 2021 - ICD-PCS Coding	No longer being offered.
HIT - 2030 - CPT Coding	No longer being offered.
HIT - 2060 - Reimbursement Methodologies	No longer being offered.
HIT - 2390 - Health Information Coding Practicum	No longer being offered.
HT - 1101 - Introduction to Tourism	Course replaced by HRTM 1120
HT - 2201 - Introduction to Hospitality Management	Course replaced by HRTM 1130
MECH - 1121 - Advanced Pneumatics	Course replaced by MECH 1120
MECH - 1124 - Advanced Hydraulics	Course replaced by MECH 1120
PLMB - 1110 - Plan Reading/Drawing	Course replaced by PLMB 1111
PLMB - 1220 - Plumbing Code	Course replaced by PLMB 2211
PLMB - 1235 - Mechanical Code	Course replaced by PLMB 2210
PLMB - 1320 - Solar Thermal Systems	Course replaced by PLMB 1321
PLMB - 1330 - Energy and Water Conservation Systems	Course replaced by PLMB 1331
RT - 1092 - Respiratory Therapy Lab I	No longer being offered.
WELD - 1005 - Print Reading for Welders	Course replaced by WELD 1120
WELD - 1025 - Layout and Fabrication	Course replaced by WELD 1171
WELD - 1050 - Thermal Cutting	Course replaced by WELD 1125
WELD - 1062 - Introduction to Welding Fundamentals	Course replaced by WELD 1110
WELD - 1150 - SMAW (Shielded Metal Arc Welding) I	Course replaced by WELD 1130
WELD - 1170 - SMAW II	Course replaced by WELD 2130
WELD - 1250 - GTAW (Gas Tungsten Arc Welding) I	Course replaced by WELD 1155
WELD - 1270 - GTAW II	Course replaced by WELD 2155
WELD - 1350 - Gas Metal Arc Welding I	Course replaced by WELD 1140
WELD - 1360 - GMAW II	Course replaced by WELD 2140
WELD - 1460 - Pipe Welding I	Course replaced by WELD 1220
WELD - 1480 - Pipe Welding II	Course replaced by WELD 2220
WELD - 1570 - Metal Fabrication II	Course replaced by WELD 2150
WELD - 2096-2996 - Special Topics	Course replaced by WELD 2996
UAS - 1040 - Basics of UAS Design, Maintenance and Operation	No longer being offered.

Deactivated/Restructured Programs

Business Administration (AAS), Business Analytics Concentration
Environmental Planning and Design, Associate of Arts
Health Information Technology, Associate of Applied Science
Nail Technician, Certificate of Completion