



LOS ALAMOS

CATALOG

2021-2022

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Academic Calendar

Fall 2021

Instruction begins	August 23, Monday
Enrollment Cancellation due to lack of financial commitment	September 3, Friday
Registration ends - last day to add courses or change sections	
16-week term (end of second week)	September 3, Friday
First 8-week term (end of first week of course).....	August 27, Friday
Second 8-week term (end of first week of course)	October 22, Friday
Last day to change grading options in LoboWeb	
16-week term (end of second week)	September 3, Friday
First 8-week term (end of first week of course).....	August 27, Friday
Second 8-week term (end of first week of course).....	October 22, Friday
Labor Day Holiday (no classes) - Campus closed	September 6, Monday
Last day to drop a course with 100% refund without a grade	
16-week term (end of third week)	September 10, Friday
First 8-week term (end of second week of course)	September 3, Friday
Second 8-week term (end of second week of course).....	October 29, Friday
Fall Break (no classes) - Campus open	October 14-15, Monday
Last day to withdraw without approval of Student Services (in LoboWeb)	
16-week term (end of twelfth week)	November 12, Friday
First 8-week term (end of sixth week of course)	October 1, Friday
Second 8-week term (end of sixth week of course)	November 26, Friday
Thanksgiving Break (no classes) - Campus closed	November 25-28, Thursday-Friday
Last day to withdraw with approval of Student Services (with form)	
16-week term (end of term).....	December 10, Friday
First 8-week term (end of course).....	October 15, Saturday
Second 8-week term (end of course)	December 10, Saturday
Last day of instruction	
16-week term	December 11, Saturday
First 8-week term	October 16, Saturday
Second 8-week term	December 11, Saturday
Final examination period	December 13-18
Last day to report removal of incomplete grade	
16-week term	December 17, Friday
Semester ends	
16-week term	December 18, Saturday
First 8-week term	October 16 Saturday
Second 8-week term	December 18, Saturday
Winter Break (no classes) - Campus closed	December 23-31, 2021

Spring 2022 *(subject to change)*

Registration for Spring 2022 opens	November 15, Monday
Martin Luther King Jr. Holiday	January 17, Monday
Instruction begins	January 17, Monday
Enrollment Cancellation due to lack of financial commitment	January 28, Friday
Registration ends - last day to add courses or change sections	
16-week term (end of second week)	January 28, Friday
First 8-week term (end of first week of course).....	January 21, Friday
Second 8-week term (end of first week of course).....	March 25, Friday
Last day to change grading options in LoboWeb	
16-week term (end of second week)	January 28, Friday
First 8-week term (end of first week of course).....	January 21, Friday
Second 8-week term (end of first week of course).....	March 25, Friday
Last day to drop a course with 100% refund without a grade	
16-week term (end of third week)	February 4, Friday
First 8-week term (end of second week of course)	January 26, Friday
Second 8-week term (end of second week of course).....	April 1, Friday
Spring Break (no classes) - Campus open	March 13-20
Last day to withdraw without approval of Student Services (in LoboWeb)	
16-week term (end of thirteenth week)	April 15, Friday
First 8-week term (end of sixth week of course)	February 25, Friday
Second 8-week term (end of sixth week of course).....	April 29, Friday
Last day to withdraw with approval of Student Services (with form)	
16-week term (end of term).....	May 6, Friday
First 8-week term (end of course).....	March 11, Friday
Second 8-week term (end of course)	May 6, Friday
Last day of instruction	
16-week term	May 7, Saturday
First 8-week term	March 2, Saturday
Second 8-week term	May 7, Saturday
Final examination period	May 9-14
Last day to report removal of incomplete grade	
16-week term	May 13, Friday
Semester ends	
16-week term	May 14, Saturday
UNM-Los Alamos Commencement (subject to change)	May 13, Friday
Memorial Day Holiday (no classes) - Campus closed	May 30, Monday

Summer 2022 *(subject to change)*

Instruction begins

8-week term June 6, Monday
First 4-week term June 6, Monday
Second 4-week term July 5, Tuesday

Registration ends - last day to add courses or change sections

8-week term (end of first week)..... June 10, Friday
First 4-week term (second day of course)..... June 7, Tuesday
Second 4-week term (second day of course)..... July 5, Wednesday

Last day to change grading options

8-week term June 10, Friday
First 4-week term (second day of course June 7, Tuesday
Second 4-week term (second day of course)..... July 5, Wednesday

Last day to drop a course with 100% refund without a grade

8-week term (end of second week) June 17, Friday
First 4-week term (end of first week of course)..... June 10, Friday
Second 4-week term (end of first week of course)..... July 8, Friday

Last day to withdraw without approval of Student Services (in LoboWeb)

8-week term (end of sixth week) July 15, Friday
First 4-week term (end of third week of course) June 24, Friday
Second 4-week term (end of third week of course) July 22, Friday

Independence Day Holiday (no classes) - Campus closed

July 4, Monday

Last day to withdraw with approval of Student Services (with form)

8-week term (end of term)..... July 29, Friday
First 4-week term (end of course)..... July 1, Friday
Second 4-week term (end of term) July 29, Friday

Session ends

8-week term July 30, Saturday
First 4-week term July 2, Saturday
Second 4-week term July 30, Saturday

Tentative start date Fall 2022

August 22, 2022

Applicability

These policies apply to outreach, admission, extracurricular activities, housing, facilities, access to course offerings, counseling and testing, financial assistance, and employment.

Anti-Harassment

It is the policy of the institution to prevent and eliminate forms of unlawful harassment in employment and educational settings. The University prohibits harassment of employees by supervisors or co-workers and harassment of students based on race, color, religion, national origin, physical or mental disability, age, sex, sexual preference, ancestry, medical condition, gender identity, or other protected status. The University makes special efforts to eliminate both overt and subtle forms of sexual harassment.

Equal Education Policy

The University of New Mexico is committed to providing equal educational opportunity and forbids unlawful discrimination and/or harassment based on race, color, religion, national origin, physical or mental disability, age, sex, sexual preference, ancestry, gender identity, medical condition, or other protected status. Equal educational opportunities include admission, recruitment, academic endeavors, extracurricular programs and activities, housing, health and insurance services, and athletics. In keeping with this policy of equal educational opportunity, the University is committed to creating and maintaining an atmosphere free from all forms of harassment.

ADA Compliance and Reasonable Accommodation

The University of New Mexico–Los Alamos is committed to providing equal access to educational opportunities for qualified students with disabilities in compliance with the Americans with Disabilities Act of 1990 (ADA). The University provides reasonable academic adjustments to qualified students with disabilities. Students with disabilities are required to adhere to all University policies including conduct and performance. Qualified students with disabilities should contact Student Services for information regarding accommodations in the academic and/or employment setting. If you require an auxiliary aide and/or service, please contact Student Services at 505-662-5919.

Non-Discrimination

If you believe you have been discriminated against and/or harassed on the basis of your race, religion, color, national origin, physical or mental disability, age, sex, sexual preference, ancestry, gender identity, medical condition, or other protected status, you should contact the Student Success Manager who serves as the Coordinator for the Americans with Disabilities Act of 1990 (prohibiting discrimination on the basis of disability) and Title IX of the Education Amendments Act of 1972 (prohibiting discrimination on the basis of sex in federally funded programs). The manager can be reached at (505) 662–5919. You can also access information on the OEO website at <https://oeodm.od.nih.gov/>.

Role and Function of UNM Branch Colleges

The University of New Mexico has established branch colleges to serve the citizens of New Mexico more fully and to provide the highest quality education throughout the state for students in different locations pursuing postsecondary education. Branch colleges respond specifically to the unique needs and multicultural backgrounds of the citizens in the respective communities they serve by offering transfer programs that prepare students for upper-division entry into colleges and universities. In addition, the branches offer associate degree and certificate programs. Branch colleges use resources in the community as well as make educational resources available. Therefore, they also function as an integral part of the community.

The five-member elected UNM–Los Alamos Advisory Board serves as an advisory body to the College and to the University of New Mexico Board of Regents. It approves the annual budget and can call for elections. UNM–Los Alamos continues to benefit from a strong, supportive, and dedicated Advisory Board which is well informed, responsible, and committed to the College and its future. The branch colleges of the University of New Mexico are considered fully integrated component colleges. They are committed to serving the needs of their respective communities as comprehensive community colleges offering a variety of preparatory academic, career, and community service programs. The branch colleges pledge themselves to protect the quality and integrity of all academic curricula. UNM–Albuquerque campus pledges its resources, whenever appropriate and practical, to the fulfillment of the varied missions of the branches. The Provost/Vice President for Academic Affairs at the University of New Mexico has responsibility for the operation of the branch colleges. From a clear understanding

of its role and function, UNM–Los Alamos has developed the following mission statement.

Mission, Vision, Values, and Strategic Goals

Mission

Preparation for Transfer...Pathways for Careers... Passion for Lifelong Learning!

UNM–LA is an innovative, rigorous, and affordable comprehensive branch community college that provides foundations for transfer, leading-edge career programs, and lifelong learning opportunities. We strive to prepare students who are capable, competent, and successful through high-quality instruction and personalized attention.

Vision

UNM–LA is recognized as a premier education provider for Los Alamos and the region by offering unique forward-looking learning opportunities, spanning the sciences and the arts, and building on unique local and regional assets. We aspire to a future in which we are known for the following:

Commitment to Excellence

We are respected for excellence in all academic endeavors, offering traditional and innovative programs.

Success through Collaboration

We are seen as a committed partner supporting education and regional development.

Engagement with Community

We build on the history, geography, and cultures of our region for an improved quality of life for all.

Values

The values that guide UNM–LA are Excellence, Integrity, Diversity, Respect, Collaboration, Innovation, Creativity, and Accessibility.

Strategic Goals

The UNM–LA strategic plan is centered on the following six goals:

Goal 1. Develop and maintain strong ties with constituents and stakeholders, leading to greater participation in higher education within our region and resulting in economic development.

Goal 2. Communicate and demonstrate how our mission, vision, and values are ensuring excellence in UNM–LA programs, services, and opportunities to underscore our position as a premier educational institution.

Goal 3. Staff UNM–LA sufficiently to sustain high instructional standards, enable realistic workloads in providing support services, and create an environment that encourages excellence.

Goal 4. Increase enrollment for the purpose of creating a vibrant campus community and sustainable programs and services.

Goal 5. Create and manage new revenue streams to complement state funding, stabilize support for recurring costs, and enable investments in our educational infrastructure.

Goal 6. Review and revise the strategic and implementation plans each quarter to ensure they serve as the framework for decision-making and continue to serve the UNM–LA community.

and institutional goals. These programs constitute the heart of the institution. Academic transfer programs for credit provide the first two years of high quality university education. UNM–Los Alamos is authorized to offer any freshman or sophomore course that appears in the UNM–Albuquerque campus catalog for which an appropriate instructor and facilities can be obtained. In addition, UNM–Los Alamos may design courses that respond to the needs of its students. Most of these courses carry full UNM residence credit as though they were taken in Albuquerque. Thus students enrolled in academic transfer courses may complete most of and, in many cases, all of the first two years of a baccalaureate degree at UNM–Los Alamos before continuing their studies at UNM or other four-year institutions.

Associate Degrees

Associate of Arts and Associate of Science degrees are offered in the following fields: Computer Science, Emergency Medical Services, Environmental Science, Liberal Arts, Pre-Business Administration, Education, Pre-Engineering, Pre-Professional Health Sciences, Science, and Art Studio. These programs are considered transfer programs because most, or all, of the courses required transfer to other four-year colleges and universities.

Occupational and technical programs are offered for academic credit. Associate of Applied Science Degrees are available in Accounting, Applied Technology with a concentration in Electro-Mechanical Technology, Business with concentrations in Marketing and Management, Fire Science, General Studies, Information Technology with Cybersecurity, Nuclear Enterprise Science and Technology, Public Safety, and Robotics. The Associate of Applied Science Degree in General Studies provides students the opportunity to develop programs of study not available through other UNM–Los Alamos programs. The courses selected may reflect either specialized or broad patterns of educational experience.

Educational Programs

The University of New Mexico–Los Alamos offers a range of educational programs as defined in the Mission Statement

Academic Certificates

Academic Certificates are offered in Accounting, Art Studio Business with Marketing and Management concentrations, Electro-Mechanical Technology, EMT—Basic, EMT—Intermediate, Nuclear Enterprise Science and Technology, Nuclear Waste Operator, Nursing Assistant, Personal Care Attendant, Radiation Control Technology, Robotics, and Welding.

Bachelor's and Graduate Online Programs

For a listing of degree completion programs through UNM and general information about taking online classes, visit <https://online.unm.edu>.

First Year Experience Program

The First Year Experience (FYEX) Program is rooted in the OnCourse principle that the most effective learners are empowered learners who are characterized by self-responsibility, self-motivation, self-management, interdependence, self-awareness, lifelong learning, emotional intelligence, and a strong sense of self. UNM—LA's FYEX program, in conjunction with the Academic Support Center, the UNM—LA Library, and Student Services, is dedicated to empowering learners by expanding educational opportunities for all students, including those who by traditional measures are not expected to succeed in higher education. The program offers students course placement evaluation, Freshman Seminar courses, and a well-designed educational experience, so students have the opportunity for deep, transformational learning and success—academic, personal, and professional.

Adult Basic Education

The Adult Learning Center provides adult basic education (ABE) services to adults who wish to obtain their New Mexico High School Equivalency Credential (HSE), brush up on basic literacy skills, improve workplace skills, or learn English as a Second Language (ESL). For more information, please visit <https://losalamos.unm.edu/adult-learning-center/index.html>.

The Academic Support Center

The Academic Support Center (ASC) offers a range of services to supplement UNM—LA's academic programs. ASC organizes and hosts homework/study groups, review sessions, and workshops, while offering additional course resources and various types of extra help and free tutoring (drop-in, by appointment, and online). Services cover a wide range of academic subjects, and special arrangements can be made for those subjects not currently covered. The ASC is located next to the Student Center, on the top floor of Building 2. For more information, tutor schedules, and access to online tutoring, visit the ASC homepage at <https://losalamos.unm.edu/asc>.

Accreditation

As a Branch College of the University of New Mexico, UNM—Los Alamos is fully accredited by The Higher Learning Commission of the North Central Association of Colleges and Schools.

Student Outcomes Assessment

Student Outcomes Assessment is an essential measure of the institution's effectiveness in achieving its goals as outlined in the UNM—Los Alamos Mission Statement. It is an ongoing process intended to measure student academic achievement and adjust and adopt courses and programs as needed. Faculty have the primary ownership and responsibility for the development, implementation, and monitoring as part of the College Assessment Review Committee (CARC). Specific competencies at the course/program level and the assessment tools used to measure identified competencies are continuously being developed and continuously being implemented. See the current report at <https://losalamos.unm.edu/assessment>.

History of UNM—Los Alamos

The University of New Mexico began its presence in Los Alamos in 1956 with the establishment of the UNM—Los Alamos Center for Graduate Studies. It has a distinguished

history of offering graduate degrees in scientific, engineering, management, and health-related fields. The first significant UNM undergraduate offering in Los Alamos began with the establishment of the University of New Mexico Residence Center in Los Alamos in the fall of 1970. In 1973, the University of New Mexico Northern New Mexico Branch College came into existence, with Los Alamos as one of its campuses. In 1977, as a result of legislative action, the UNM Northern Branch College was absorbed into Northern New Mexico Community College (NNMCC).

In 1980, after a local referendum and Board of Educational Finance and legislative approval, the Los Alamos Branch Community College Campus of the University of New Mexico was founded. It began operations on July 1, 1980, in the Little Valley School on Orange Street. The new Director assumed his duties at that time, and several key NNMCC employees were transferred to the UNM–Los Alamos Branch College, which subsequently assumed the informal title of UNM–Los Alamos.

In October 1980, the campus moved from the Little Valley School to its present site at 4000 University Drive. In January 1981, the staff of UNM–Los Alamos assumed, under a contractual arrangement, the daily operations of the UNM–Los Alamos Center for Graduate Studies from the Training Office of the Los Alamos National Laboratory. The Director of the Graduate Center moved his office to UNM–Los Alamos. During 1982–1983, the facilities were remodeled and expanded and the new UNM–Los Alamos campus was dedicated by then-Governor of New Mexico, Toney Anaya, on January 6, 1984. The campus facilities were further expanded in 1987 to include a fifth classroom building.

During 1988–89, an institutional self-study was conducted and an accreditation visit took place in May 1989 as part of the University of New Mexico decennial accreditation review. In 1988, the Los Alamos Public School Board approved additional space in the Mesa Complex for use by UNM–Los Alamos. In 1996, an extension housing the

Learning Center, the Tutorial Center, and the Adult Basic Education Program was added to the administration building. Additional classroom, laboratory, and office space was obtained in 1997 by negotiation with Los Alamos Public Schools. In 2000 the expanded and renovated Student Center building was opened. It includes a Student Center with a food service area, classrooms, media room, and lecture hall. Business Services support areas including cashiering, accounting, marketing, and facility services are located in the lower level of this building. Additionally, a Facilities Services building, has been added along with a remodel of existing space to create a new lecture hall and new computer labs.

Location

Los Alamos, home of the University of New Mexico–Los Alamos campus, is a community of approximately 18,000. The town is located on the piñon, juniper, and ponderosa-covered red mesas of the Pajarito Plateau at an elevation of 7,300 feet. The Jemez Mountains provide a backdrop for the community that looks east across the Rio Grande Valley to the majestic Sangre de Cristo Mountains.

The setting is ideal for the outdoor enthusiast. There are nearby locations for downhill and cross-country skiing and ice skating in the winter. Summer activities include hiking, picnicking, horseback riding, backpacking, and camping, fishing, and river rafting. In April 1988, the Larry R. Walkup Aquatic Center opened its doors to the citizens of Los Alamos and surrounding area. This facility is open to the public and houses an Olympic-sized swimming pool. There are year-round musical and theatrical events in Los Alamos and numerous other cultural attractions to choose from in Santa Fe, 30 miles away, and in Albuquerque, a 90-mile drive from Los Alamos.

There are also year-round events at the nearby pueblos of San Ildefonso, Santa Clara, Ohkay Owingeh, Pojoaque, Tesuque, Nambe, and Jemez. Located within 15 miles of Los Alamos is the world-famous Bandelier National Monument. The park, home of Native American cliff

dwellings as well as many other ancient treasures, is open year round. Other nationally-recognized sites include the Valles Caldera National Preserve and the Manhattan Project National Historical Park. Students at UNM–Los Alamos are fortunate to be able to draw on the rich tri-cultural heritage of the area and to explore all the area has to offer in terms of history, geology, and archaeology. In addition, UNM–Los Alamos students can take advantage of the outstanding collections of Mesa Public Library and the J. Robert Oppenheimer Study Center at Los Alamos National Laboratory, within two miles of the UNM–Los Alamos campus.

Faculty

The faculty of UNM–Los Alamos is predominately part-time. Many of the faculty enjoy international reputations in their fields, and all are extremely well qualified. Most UNM–Los Alamos faculty are subject to UNM approval through the various departments at the UNM–Albuquerque campus. About one-third of the UNM–Los Alamos faculty consists of a core of continuing faculty. Core Faculty members, in addition to teaching, hold regular office hours, provide academic advisement, and participate in a variety of committee work and special projects. Invited Faculty are encouraged, but not required, to participate in advisement, hold office hours, and attend various faculty development workshops throughout the academic year. Department Chairs for General Studies, Fine Arts, Communications, Math, Science, Engineering, Applied Science, Computer Science, Information Technology, and Business are responsible for the coordination of faculty and instructional issues within each curriculum area. An Associate Dean of Instruction advises the administration on curriculum and academic personnel matters and, with the Dean of Instruction, monitors the quality of teaching through classroom visits. Other means of class evaluation may include a mid-semester evaluation survey, a classroom assessment technique of the teacher's choosing, and a UNM computerized student evaluation survey at the end of the semester.

Operating Agreement and Funding

UNM–Los Alamos was established under the provisions of the Branch College Act, New Mexico Statutes of 1978, implemented in an operating agreement between the Los Alamos Public School Board and the Regents of the University of New Mexico. The UNM–Los Alamos Advisory Board serves as the advisory board to the UNM Board of Regents. This Advisory Board approves an annual budget for UNM–Los Alamos and calls elections for local tax levies and capital outlay general obligation bonds for UNM–Los Alamos. The University of New Mexico retains administrative and academic oversight of UNM–Los Alamos, and the Chancellor of UNM–Los Alamos reports to the Provost of the University. Funding for UNM–Los Alamos comes directly from state appropriations, local tax levies, grants, and tuition and fees paid by students.

Facilities

The UNM–Los Alamos campus consists of 77,689 square feet of leased and owned buildings. The campus includes eight buildings that house classrooms, administrative offices, student services, a library, facilities services, laboratories, lecture halls, and community meeting and student activity space. The facilities at UNM–Los Alamos encompass computer, general science, and electronics laboratories; art studios; general classrooms; and a machine shop/welding area.

Bookstore

UNM–Los Alamos has partnered with MBS Direct, an online textbook vendor, to supply all required books for our programs. It is the student's responsibility to order their own textbooks. The online vendor will make textbooks available for purchase six (6) weeks prior to the start of classes.

Required and optional books for Lower Division, and Community Education classes are listed. Students may purchase their textbooks using a credit card or can charge them to their UNM–LA student account by visiting the Cashier and obtaining a book voucher. Students may access

MBS by clicking on the “Ordering Books” link on the UNM–LA web page or visiting <https://bncvirtual.com/unm>.

Learning Resource Center & Library

The Learning Resource Center, located in Building 7, houses the Library and Testing Center. The mission of the UNM–Los Alamos Library is to provide for the information needs of its students, faculty, and staff, and to contribute to the information resource base of the communities that it serves, through its resources (both traditional and electronic), services, staff, equipment, and facility. The Library is a technologically advanced facility with wireless capability and 10 hardwired public computing stations providing access to the Microsoft Office Suite, the Internet, LIBROS (the online catalog), a variety of academic databases and other online reference sources, and online collections of other libraries. In addition, the library has a variety of laptops and iPads that patrons may check out. The library houses a growing collection of books, periodicals,

pamphlets, maps, instructional videos, and sound recordings. The library provides a pleasant, inviting setting for study, research, and the exchange of ideas. The main floor of the library offers a variety of comfortable study spaces appropriately dispersed throughout the facility, including carrels, study tables, three group study rooms equipped with white boards, computing stations, and a periodical browsing area. An eating area, furnished with comfortable bistro chairs and tables, allows patrons to enjoy a meal or a snack while they read and study.

A loft, upstairs from the main floor of the library, is a pleasant, airy space, which houses a distinctive Southwest Collection and provides a quiet area for study and instruction. The library team is friendly, knowledgeable, and very dedicated to helping library patrons with their information needs.

Changing art and book exhibits in the library contribute to an aesthetically pleasing environment for all library visitors. For more information, visit the library web site at <https://losalamos.unm.edu/library/>.



Admissions

General

The University of New Mexico–Los Alamos admits all eligible applicants from New Mexico, other states, and foreign countries. Because of the great diversity of the University’s students, special application and admission procedures have been created to meet the needs of the different populations. UNM–Los Alamos serves high school students, recent high school graduates, transfer students, non-degree students, returning, and non-traditional students. Admission procedures and requirements vary in each of the categories listed below.

1. Beginning freshman (no previous college work, excluding dual credit coursework)
2. Transfer (last attended another institution)
3. Returning (stopped attending for three or more terms)
4. Dual Credit (high school)
5. Concurrent Enrollment (high school)
6. Non-degree (presently not seeking a degree)
7. International students

For all categories, the University requires full academic disclosure on the application forms. Any student found guilty of non-disclosure or misrepresentation on an application is subject to disciplinary action, including possible dismissal from the University. Transcripts and test scores submitted to UNM–Los Alamos for admission become the property of the University and will not be sent elsewhere or returned to the student.

When to Apply

We strongly encourage students to apply as early as possible. Applications are applicable for three consecutive sessions only. If a student does not take advantage of admission and enroll within that period, a new application is required.

Use of Social Security Numbers

Students’ social security numbers are collected in the initial admission process only. It will not be the primary University identification number. It will not appear on the student identification card. UNM is required to collect a SSN in order to provide full access to services such as financial aid, to ensure an accurate academic record, and for record-keeping purposes. Admission accommodations will be made for students without a SSN. The University will protect the confidentiality of all SSNs as required by law.

Admissions – Beginning Freshman (no previous college)

A student may enroll in one of several associate degree or certificate programs offered by UNM–Los Alamos. The requirement for admission into an Associate Degree is a high school diploma or equivalent. A passing score on the General Education Development (GED) or HiSET exam is accepted in lieu of a high school diploma. The UNM–Los Alamos campus has an open admission policy. Admission is available to all students.

How to Apply

Applications may be submitted online or printed in hard copy at <https://losalamos.unm.edu/admissions/apply-now.html>.

Request that a high school or GED/HiSET testing site send an official transcript directly to the Student Services Office.

Request that each college attended, including colleges through which dual credit courses were taken, send an official transcript directly to the Student Services Office.

Note: Applications will not be processed until all the required items are on file with the Student Services Office.

Admissions – Transfer Students

How to Apply

Complete and return an application for admission to the Student Services Office. Applications can also be submitted online at <https://www.unm.edu/apply/> by selecting Branch Campus Applications and clicking on the link for Los Alamos Campus Application.

Request that each college attended send an official transcript directly to the Student Services Office. A summary on one transcript of work at several colleges is not sufficient. If applying for the next academic session at UNM–Los Alamos while still enrolled at another institution, the official transcript must include a listing of courses in progress, as well as all completed work. After admission, a final transcript is required after completion of any courses in progress at the time of application. (See note below.)

If transferring to UNM–Los Alamos with fewer than 26 semester hours of accepted college work, students are considered a freshman transfer and must submit a complete official transcript of high school work or official GED/HiSet scores.

Note: Applications will not be processed until all the required items are on file with the Student Services Office.

To allow students at other institutions to make definite plans for transfer, a determination of admission status may be made before courses in progress are completed, subject only to receipt of the final transcript. Students permitted to register prior to receipt of their final transcripts may be disenrolled if their transcripts do not reach the Student Services Office within three weeks after the beginning of classes.

Note: The student must indicate on the application all previous college attendance. Applicants may not ignore any

college attendance, even though they did not successfully complete coursework or may prefer to repeat all courses. Students found guilty of non-disclosure or misrepresentation in filling out admission application forms, or who find after admission or enrollment that for academic or other reasons they are ineligible to return to their last institution but fail to report this immediately to the Student Services Office, are subject to disciplinary action, including possible dismissal from the University.

Previous Suspension

A student under academic suspension from another college or university may not enter UNM–Los Alamos during the term of suspension. In cases of unspecified suspension periods, the University’s suspension term will apply. Upon termination of the suspension, the student is eligible to request special consideration for admission to UNM–Los Alamos. In general, students under disciplinary suspension are not admitted to UNM–Los Alamos. However, because the reasons for disciplinary suspension vary among institutions, a student may be suspended from one school for infractions that would not be actionable at another. Therefore, UNM–Los Alamos reviews each case individually and, when justified, makes exceptions and allows the student to be considered for admission.

Transfer of Credits

UNM evaluates all courses from postsecondary institutions that are regionally accredited or are candidates for regional accreditation. Transfer students will receive full credit for course work completed with a minimum grade of “C,” provided the classes are similar or equivalent to courses offered at the University. Transferable courses with grades of “D” from New Mexico state institutions are accepted in transfer but may not be counted toward degree completion. UNM–Los Alamos operates on a semester credit calendar. Therefore, classes from quarter system institutions will be recalculated to semester hours (one quarter hour equals .66 semester hours.)

UNM–Los Alamos does not accept personal development or dogmatic religion courses. Credit is not awarded for work or

life experience, cooperative education, or for courses from out of state in which the grade received was lower than “C.” Grades earned in courses taken at other institutions are not included in calculation of the UNM grade point average. This grade point average will reflect only classes taken at UNM.

Transfer among New Mexico Higher Education Institutions

To facilitate transfer of students and course credits among New Mexico’s colleges and universities, the state’s public institutions of higher education are required to accept transfer courses taken within approved modules of lower division course work and apply them toward degree requirements. A transfer equivalency guide has been developed through collaboration of New Mexico’s public postsecondary institutions, consistent with requirements of state law (21-1B, NMSA 1978). Students enrolling for first-year or second-year study at a New Mexico institution and wishing to prepare for possible transfer into a degree program at another institution are advised to take these courses during their freshman and sophomore years.

In addition, as a branch of UNM, UNM–LA offerings of 1000- and 2000-level courses from the UNM catalog are automatically transferable to UNM–Albuquerque, if graded with a C or better. Students need to see an advisor to see which credits transfer to a program of a particular college, such as the School of Engineering. Planning ahead means that students choose the correct option for the college they intend to transfer to later.

Student Responsibility

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

Transferable Lower-Division General Education

For students enrolled at any public institution in New Mexico, the following courses are guaranteed to transfer to any other New Mexico public college or university and apply toward associate and baccalaureate degree program requirements. Students should consult advisors at their current institution regarding which specific courses fit these categories. Students preparing for careers in engineering, health sciences, or other profession-related fields are advised that specific General Education courses, relative to each degree, should be selected to meet both General Education credits and future baccalaureate degree requirements.

The General Education curriculum empowers students to face a rapidly changing world with the ability to frame questions and solve problems. Complementing the major, General Education courses provide a set of strategies: communication, critical thinking, information analysis, quantitative skills, and responsibility towards local and global communities. Students develop these strategies from different angles by taking one or more courses (usually numbered at the 1000- and 2000-levels) in each of the areas of study of the General Education curriculum. Some General Education courses involve students directly in addressing crucial problems through undergraduate research, race and social justice analysis, global awareness, community engagement, and innovation. By providing a base of knowledge and flexible tools for thinking, General Education courses equip students for success throughout their education and after graduation. See <https://gened.unm.edu> for course listings in each area.

Inter-Institutional Transfer Guides and Catalogs

Students who have selected a field of study and/or the institution where they wish to graduate are advised to consult the transfer guide or catalog for that institution for more current and detailed advice to guide their course selection. An online tool to determine institutional transfer equivalencies, along with a number of published transfer guides are available on the University of New Mexico Admissions Office website at <https://admissions.unm.edu/future-students/transfer>.

Complaint Procedure for Transfer Students

All New Mexico public post-secondary institutions are required to establish policies and practices for receiving and resolving complaints from students or from other complainants regarding the transfer of course work from other public institutions in the state. A copy of the University of New Mexico's complaint policy may be obtained from the New Mexico Higher Education Department, 2048 Galisteo Drive, Santa Fe, NM 87505-2100, (505) 476-8400 or www.hed.state.nm.us.

Evaluation of Credit

The evaluation of credit is ordinarily part of the admissions application procedure for students entering an associate program. It is a two-step process. An Admissions Officer first evaluates credits on a course-by-course basis to determine general transferability to the University, and a transfer evaluation is produced for students who are admitted. (Students who have completed courses in institutions utilizing non-traditional credit or grading systems may be required to provide additional information to facilitate the evaluation.) The student must contact an academic advisor in order to determine how the transferred courses will be applied to a degree.

Admissions – Returning Students

A UNM–Los Alamos degree-seeking student who stops attending for three or more sessions, including a summer, must file an application for readmission. You may also apply online at <https://losalamos.unm.edu/admissions/apply-now.html>.

Complete and return an application for readmission to the Student Services Office.

If a student has attended another institution while on break from UNM–Los Alamos or has taken college-level correspondence or extension courses, he or she must send an official transcript from each college. A summary on one

transcript of work at several colleges is not sufficient. If applying for the next academic semester at UNM–Los Alamos while still enrolled at another institution, the official transcript must include a listing of courses in progress, as well as all completed work. After admission, a final transcript is required after completion of any courses in progress at the time of application.

Note: Applications will not be processed until all the required items are on file with the Student Services Office.

Students who have been suspended or dismissed as the result of disciplinary problems shall not be readmitted to the University without a required interview with the Director of Student Affairs. The University reserves the right to refuse any student readmission on the basis of his or her student history, either academic or disciplinary.

Admissions – Dual Credit (high school students)

The Dual Credit Program allows qualified public, charter, homeschool, and tribal school students to enroll in college-level courses offered by a public postsecondary educational institution that may be academic or career technical but not remedial or developmental, and simultaneously earn credit toward high school graduation and a postsecondary degree or certificate. The program is designed to increase education opportunities, provide a college-level experience, and encourage more high school students to pursue higher education.

Meeting the criteria listed below does not mean that the student will automatically be admitted to the Dual Credit Program. In all cases, the final admission determination will be made by UNM–LA.

The student must have the certification and unconditional recommendation of the high school as well as proof of parental consent prior to participation on the Dual Credit/Concurrent Enrollment application form.

The student must furnish the Student Services Office with a current official high school transcript including their grade point average and STARS number.

A student planning to enroll in English or Math must meet the minimum placement scores determined by UNM–Los Alamos in either the ACT, SAT or ACCUPLACER tests.

A student planning to enroll in any course that has a prerequisite requirement must meet the minimum prerequisite or test score.

Admissions – Concurrent Enrollment (high school students)

UNM–Los Alamos offers a Concurrent Enrollment Program for high school students who only want college credit. The student must have proof of parental consent prior to participation on the Dual Credit/Concurrent Enrollment application packet, which must be submitted with a current official high school transcript.

Admissions – Non-degree Students

The Non-degree credit program allows students to earn academic credit without being admitted into a degree-granting unit. This program accommodates non-traditional students who wish to begin taking academic courses to prepare for graduate studies, career changes or for professional and/or personal development. Non-degree status is recommended for visiting students from other institutions.

Non-Degree Admission Requirements

Applicants must be 21 years of age or older or, if they are under 21:

- High school graduating class must have been out of school for at least one full year;
or

- If the applicant earned a diploma by the GED or HiSET exam, the graduating class must have been out of high school at least one year.

Note: Students in Non-degree status are not eligible to receive financial aid. Contact the Financial Aid Office at (505) 662-0341 for details.

The following students are not eligible for Non-degree status:

- A student who is under disciplinary or academic suspension from UNM–Los Alamos or any other collegiate institution.
- A student who has exhausted his or her eligibility in University College and is not academically eligible to enter a degree-granting college at the University of New Mexico.
- A student planning to receive student financial aid.

Applicants for Non-degree status are required to certify that they are not under suspension from any college or university. Students found guilty of nondisclosure or misrepresentation in filling out the admission application form or who after admission or enrollment at UNM–Los Alamos are found to be ineligible for academic or other reasons to return to the last institution attended and fail to report this immediately to the Student Services Office, will be subject to disciplinary action, including possible dismissal from the University.

Facts about Non-degree Status

No transcripts of previous high school or college work are required for admission.

Note: A transcript may be required to determine fulfillment of prerequisite course work.

There is a 30 credit hour limit in Non-degree for students who have not yet completed a baccalaureate degree. There is no limit for students with a baccalaureate degree.

Credits earned in Non-degree status are recorded on a University of New Mexico permanent record. Credits may be applied to an undergraduate plan of study, if the courses meet specific degree requirements.

Non-degree students applying for undergraduate degree status must follow admission procedures and provide all items required of transfer students (see Admissions—Transfer Students).

Academic Standards

Students in Non-degree status are subject to all University regulations governing registration, attendance, academic standing, and satisfactory completion of prerequisite courses. The Albuquerque campus Non-degree Student Services Office governs academic standing and maintains college records for all Non-degree students, including those at branch campuses and other UNM sites.

Admissions – International Students

The University of New Mexico welcomes applications from international students who have earned distinguished academic records and have demonstrated English proficiency.

International Non-degree Admission

International students wishing to enroll at UNM–Los Alamos in Non-degree status must submit an admission application that includes visa type and country of citizenship information.

Students taking non-academic courses may not be required to provide copies of documentation or proof of English proficiency with the admission application.

Students interested in taking an academic course will be required to obtain instructor approval or provide proof of English proficiency.

Please contact the UNM–Los Alamos Director of Student Affairs at (505) 661-4688 for guidance and more information.

International Undergraduate (Degree-Seeking) Admission Requirements

The Global Education Office (GEO) at UNM–Albuquerque provides services to international students and scholars coming to UNM and wishing to be enrolled into a degree granting program.

The Office of International Admissions within the GEO handles admission of all degree-seeking international students to the University of New Mexico, including to UNM–Los Alamos. To know more about the admission process and requirements for new international students, please contact the Office of International Admissions directly at (505) 277-4032, <https://geo.unm.edu>.

Alternative Credit Programs

UNM–Los Alamos grants college credit for certain outside training, courses, and examinations. In all cases, students must be enrolled in undergraduate degree status. The guidelines for each of these programs are as follows.

Technical Credit

Under special circumstances, students may receive credit for technical courses that are not normally transferable to UNM–Los Alamos. Students who have earned technical credit that they believe may be applicable to their specific degree programs may request a review of that credit by the department chairperson or program director. An interview or demonstration of competence or both may be required before a decision regarding credit is made. Acceptance of technical credit is binding only to the specific department or program recommending the credit.

Training Credit

Credit for non-collegiate training programs is granted based on recommendations of the American Council of

Education's *National Guide to Educational Credit for Training Programs* and institutional policies. Official records must be supplied to the Student Services Office by the appropriate source.

Military Credit

Credit for military service is granted based on recommendations of the American Council of Education's *Guide to the Evaluation of Educational Experiences in the Armed Service* and institutional policies. No credit is granted for Military Occupational Specialty (MOS).

Either way, browsing the course descriptions in areas of study will help you find courses, from large classes to small seminars, that take you to unexpected places. See the current list of courses that meet requirements in each area at <https://gened.unm.edu/>.

U.S. Global Diversity and Inclusion Requirement

The University of New Mexico values learning outcomes related to diversity and inclusion. The stated aim of the U.S. Global Diversity and Inclusion undergraduate degree requirement is to promote a broad-scale understanding of the culture, history or current circumstance of diverse categories of people who have experienced historic and/or contemporary inequitable treatment in the U.S. or in a global context. To satisfy the requirement, students complete a three credit hour course from an approved list of courses that have their primary emphasis (at least 50% content) on one or more of the following areas: gender, race, class, ethnicity, sexual orientation, disability, religion, language, culture, and/or other marginalized category of people. These courses include primary learning outcomes pertaining to the experiences of diverse categories of people and potential solutions to the challenges facing diverse communities. Courses may double count with any other requirements including General Education courses (e.g., Area 6: Foreign Language) or other substantive courses in the General Education requirements. Associate degree programs offered at UNM-Los Alamos may not require a US Global Diversity and Inclusion course.

For a list of approved courses fulfilling this requirement, please visit <https://gened.unm.edu/us-global-diversity-requirement.html>.

General Education Curriculum

As per UNM, <https://gened.unm.edu/>:

The General Education curriculum empowers students to face a rapidly changing world with the ability to frame questions and solve problems. Complementing the major, General Education courses provide a set of strategies: communication, critical thinking, information analysis, quantitative skills, and responsibility towards local and global communities. Students develop these strategies from different angles by taking one or more courses (usually numbered at the 1000- and 2000-levels) in each of the areas of study of the General Education curriculum. Some General Education courses involve students directly in addressing crucial problems through undergraduate research, race and social justice analysis, global awareness, community engagement, and innovation. By providing a base of knowledge and flexible tools for thinking, General Education courses equip students for success throughout their education and after graduation.

Students can choose ten classes (31 credits), or at least one three- or four-credit course in each of eight areas of study.

Exploring different areas in general education can be a great college strategy to find out what really interests you.

Or, if you have a major in mind, your advisor can help you identify some courses to help you prepare for your next steps.

Graduation Requirements

Associate Degrees

Candidates for associate degrees offered by any of the University of New Mexico's colleges or branches must meet the following minimum degree requirements and are subject to the following University limitations:

- A minimum of 60 acceptable semester hours must be earned. Technical work (up to the limit specified below) may be included in these 60 hours, upon approval of the appropriate degree-granting program.
- A minimum of 15 semester hours must be earned in residence at the University of New Mexico, exclusive of extension and correspondence credits. The remainder may be acceptable transfer credits earned at fully accredited institutions of higher learning and/or at regionally accredited technical-vocational institutions (see also Transfer Students for transfer credit regulations).
- Of the 60 hour minimum, no more than 9 semester hours may be earned by extension or correspondence.
- The student must have a cumulative grade point average of at least 2.00.
- Courses numbered below 100 may not be used to satisfy any of the above requirements.

Certificates

Undergraduate certificates offered by any of the University of New Mexico's colleges or branches must meet the following minimum requirements:

- A minimum of 30 acceptable credit hours must be earned. Technical-vocational work (up to the limit specified below) may be included in these 30 credit

hours upon approval of the certificate-granting program. Of the 30 credit hours, a minimum of 15 credit hours must be earned in residence at the University of New Mexico.

- Branch campuses may offer technical-vocational certificates of less than 30 credit hours, provided:
- The proposed curriculum fulfills a recognized professional certification: e.g., Certified Nursing Assistant (CNA), Fire Science Officer (IAFC), and other programs; or
- The proposed curriculum fulfills a specified local workforce need.

Certificates consisting of academic (transferable) coursework require approval of the Office of the Provost and the Faculty Senate. Technical-vocational certificates require approval of the Office of the Provost.

Second Certificate/Associate Degree

A second certificate or a second associate degree will not be granted until a student has earned a minimum of 15 semester hours in residence above the requirements for the first certificate or degree and fulfilled all requirements for the second certificate or degree.

Extension and Independent Study

The University of New Mexico allows credit for independent study, correspondence, and extension courses at the University of New Mexico or through other fully accredited colleges and universities toward degree requirements. Credit for extension and independent study courses completed at institutions not accredited by regional accrediting associations is not accepted for transfer, although a student who has completed such correspondence or extension work in a course comparable to one at the

University of New Mexico may establish credit here by special examination.

The hours earned by independent study or extension from accredited institutions other than the University of New Mexico may be counted toward degree requirements, but the grades will not be included in the student's grade point average (see "Grades," page 36). Courses taken from other institutions must correspond to those offered at the University of New Mexico. Any graduating student who expects to substitute credits earned by independent study toward fulfillment of degree requirements must have prior approval of his or her program's Department Chair. The student is responsible for complying with all regulations.

Cooperative Education

Cooperative Education Credit provides UNM–Los Alamos students in the final semester of their degree program to work in a field related to their major. The work should be a capstone experience that allows students to apply the theories learned in the classroom to real world experiences and earn course credit. Students should contact the Department Chair of their degree program via the Office of Instruction located in Building 6, 505-661-4693, for more information.

Catalog Requirements

Undergraduate students may graduate under the requirements in the catalog issued in effect at the time of their admission into the college or school from which they are seeking a degree. Students may also request to follow the requirements of a more recent catalog, as long as the program name has not changed. If students transfer from one degree-granting college or program to another within the University, they must comply with the catalog requirements in effect at the time of their transfer. Notwithstanding the above, the University of New Mexico–Los Alamos reserves the right to make changes in the curricula and degree requirements as deemed necessary, with the changes being applicable to currently enrolled students.

Readmission and Catalog

Students who interrupt their degree program and are not enrolled for three or more consecutive semesters (including summer), must comply with catalog requirements in effect at the time of re-enrollment.

Responsibility for Requirements

Students are responsible for knowing the rules and regulations concerning graduation requirements and for registering in the courses necessary to meet them. Advisement at the specific department/program level is strongly recommended to assure timely graduation. Students who take more than 10 years to graduate from the date of their original admission must conform to the catalog in effect in the semester in which they intend to graduate.

Commencement

Commencement exercises at UNM–Los Alamos are held once per year at the end of the spring semester. Students whose requirements were completed and degrees conferred in the preceding summer session, fall, or spring semester are invited to attend and encouraged to participate.

Dean's List

UNM–Los Alamos students who demonstrate academic excellence are honored by inclusion in the Dean's List. Students are selected based on the following criteria:

- Part-time students (6-11 hours) must complete a minimum of 6 undergraduate credit hours at UNM-LA with a regular grading option in a given semester;
- Full-time students must complete a minimum of 12 undergraduate credit hours at UNM–LA with a regular grading option in a given semester;
- A semester Grade Point Average (GPA) of 3.5 is required.
- No grade lower than a "C" (not "C-") is acceptable;
- Students in Non-degree or graduate status are ineligible for consideration.

Student Services Information

Records

The Student Services Office is responsible for the maintenance of the educational records at UNM-Los Alamos. The following information refers to some of the policies and procedures for educational records. Please note: proper photo identification (driver's license, Lobo ID Card, passport or other state-issued identification) is required for all in-person transactions.

Use of Social Security Numbers

The Social Security Number (SSN) is not used as the primary University identification number. UNM is required to collect SSNs in order to provide full access to services such as financial aid, to ensure an accurate academic record, and for record-keeping purposes. The University protects the confidentiality of SSNs as required by law.

UNM–Pathfinder

The UNM Pathfinder is the most comprehensive handbook of student services at the University of New Mexico. It is published annually by the Student Activities Center. The UNM Pathfinder gives general information, including office locations and telephone numbers, about academic support and cultural programs, athletics and recreation, student organizations, entertainment, financial services, food, health and medical assistance, housing, and the University of New Mexico policies affecting students, commuting and parking, and other services and programs. The Pathfinder is available online at <https://pathfinder.unm.edu/>.

UNM Lobo ID Card

Each UNM–Los Alamos student will be issued an official UNM Lobo ID Card. The card will contain a non-transferable photograph, the student's name, and the student's UNM ID number. At the time of request for a Lobo ID Card, the student must present proof of identification, including at least one other identification card

with picture. Students will be required to present the Lobo ID Card to Student Services when requesting transcripts or any other services containing personal information, conducting any financial transactions with the Cashier/Bursar, and checking out materials from the UNM–Los Alamos Library. The ID card initially issued to the student will be at no cost to the student. A first replacement will cost the student \$15.00, a second or subsequent replacement will cost the student \$25.00. Please ask in the Library to obtain a Lobo ID Card.

Access to and Confidentiality of Student Records

*Family Educational Rights and Privacy Act (FERPA)
November 19, 1974*

Student Record Policy

Approved by the University President 4/93. Amended 3/20/96.

Introduction

Under the Family Educational Rights and Privacy Act of 1974 (FERPA), students have the right to inspect and review most education records maintained about them by the University of New Mexico, and, in many cases, decide if a third person can obtain information from them. Nine categories of information, however, are public (or directory information) unless a student asks that some or all of that information be withheld. It is the policy of the University to comply fully and fairly with the provisions of the Act, Federal Regulations and this policy.

Limitations on Access to Student Records

No one inside or outside the University shall have access to, nor will the contents of students' education records be

disclosed without the written consent of the students except as provided by the Act and Regulations. Exceptions in the Act and Regulations include but are not limited to the following: personnel within the institution determined by the institution to have a legitimate educational interest, officials of other institutions in which students seek to enroll or are enrolled, persons or organizations providing student financial aid, accrediting agencies carrying out their accreditation function, persons in compliance with judicial orders and persons in an emergency when necessary to protect the health or safety of students or other persons.

Students' Right of Access to Review Their Records

A student has the right to inspect and review all education records about him or her except:

- Personal notes (available only to writer or substitute) of University staff and faculty.
- Certain student employment records.
- Counseling records used solely for treatment.
- Certain records of the University Police.
- Parents' financial records.
- Confidential letters and statements of recommendation placed in the records before January 1, 1975.
- Confidential letters and statements of recommendation for admission, employment, or honorary recognition placed in the records after January 1, 1975, which students have waived the right to inspect and review.

Informing Students of Their Rights

This policy will be published in the *UNM Pathfinder* or its successor.

Location of Student Records

Student records are not maintained in a central location. Instead, these records are maintained by each office with

which a student has contact while enrolled at the University.

A partial list of places where educational records are maintained by various University offices is listed below.

- Admissions Office, Director of Admissions, Student Support and Services Center
- Career Counseling and Placement, Director, Career Counseling and Placement, University Advisement and Enrichment Center
- Cashiers and Student Accounting, Bursar, John and June Perovich Business Center
- Center College and Department Offices, Academic Dean, or see individual college listing in the course schedule
- Dean of Students Office, Dean of Students, University Advisement and Enrichment Center
- Graduate Studies, Dean, Graduate Studies, Humanities Building
- Housing Services, SRC Commons
- Records and Registration Office, Registrar, Student Support and Services Center
- Student Financial Aid, Director, Student Financial Aid, Student Support and Services Center

Records Excluded from the Definition "Education" or "Student" Records

The following categories of records are not included in the term "education records" or "student records" under the Act:

- Records of instructional, supervisory, administrative and certain educational personnel which are in the sole possession of the maker and are not revealed to any other individual (except a substitute who performs on a temporary basis the duties of the person who made the record).
- Records of the University Police. These records are maintained and created by the University Police Department for the purpose of law enforcement. Their disclosure is subject to rules and regulations

of the University Police, consistent with applicable law.

- Records relating to individuals who are employed by the University which are made and maintained in the normal course of business, relate exclusively to individuals in their capacity as employees and are not available for use for any other purpose. However, it should be noted that records of individuals in attendance at the University who are employed as a result of their status as students are education records and as such may be inspected by the student.
- Records which contain only information about a person after that person is no longer a student at the institution, e.g., information gathered on the accomplishments of alumni.

Review Policies and Procedures

Requests to inspect and review records must be made, in writing, to the office that keeps the records. Although it is the University's policy that requests to inspect records be honored as promptly as possible, the offices have up to 45 days to honor such requests.

It is the policy of the University to provide the student upon request with photocopies of her or his records where that will help the student in inspection and review of the records unless: (1) the record to be copied is an examination, in which case permission of the faculty member is necessary, or (2) where a student's record is being withheld because of an outstanding financial obligation to the University. Fees for photocopies of materials in the records are the same as University offices charge for photocopies of other materials. At its option, an office may furnish copies at no charge, or take the materials to a copy/duplicating center on campus, where the current rate for cash work will be charged.

Release Policies and Procedures, University Employees and Agents

The University will not disclose personally identifiable information from a student's education record without the student's written consent, except when it is permitted by the Act and Regulations. As permitted by the Act and Regulations, information will be disclosed without the student's consent to University officials with a legitimate educational interest. These officials or their agents, and their interests, include:

- Any University employee who needs the information to fulfill job responsibilities.
- University collection agents only for the purposes of collecting debts owed to the University.
- Legal counsel advising or representing the University.
- National Collegiate Athletic Association and the Mountain West Athletic Conference only for the purposes of conforming to eligibility rules for athletic competition.
- Contractors, such as data processing, only for the purposes of performing work under contract for the University.
- Honorary societies, and other chartered student organizations, only for determining membership eligibility/requirements, when the societies and/or organizations do not unlawfully discriminate on the basis of race/ethnicity, national origin, ancestry, serious medical condition, physical or mental disability, pregnancy, age, religion, sex, sexual orientation, gender identity, spousal affiliation, veteran status, genetic information, or other characteristics protected by applicable law.
- University researchers, including students doing research under the supervision of a faculty member, if there are safeguards to protect the security of personally identifiable data and if it will

not be possible to ascertain the identity of any student in any dissemination of the data or research results.

- Officials of cooperating universities in which the student is enrolled or has applied.

Release to Alleged Victims of Crimes of Violence

The results of any disciplinary proceeding conducted by the University in response to allegations of a crime of violence allegedly committed by a student shall be disclosed upon request to the alleged victim(s) of such crime of violence.

Directory or Public Information Categories

The University, in accord with the Act, has designated categories of information about students as “directory information” which is public unless a student asks to have all of it withheld. These categories are:

- Name
- Major field of study
- Enrollment Status
- Dates of attendance (matriculation and withdrawal dates)
- Degrees and awards received (type of degree and date granted)
- Participation in officially recognized activities and sports, and weight and height of members of athletic teams.

A student wishing to keep confidential the “directory information” listed above must file a written request with the Office of the Registrar. This request may be submitted in person, by mail or fax. Once a confidential privacy flag has been placed on a student’s record the directory/public information will not be released to individuals, companies or third party entities outside the University of New Mexico. The confidential privacy flag will not automatically be removed upon graduation from the University of New Mexico. If you have requested a confidential privacy flag, your name will

not appear in the University of New Mexico Commencement Program.

The removal of the confidential privacy flag may be requested in person and in writing by fax or mail. The address is: Records and Registration Office, MSC11 6325, 1 University of New Mexico, Albuquerque, NM 87131-0001. The fax number is (505) 277-6809. The following information is needed to process the request by fax or mail: student name, Social Security number and signature.

Requests for Disclosure

University offices will maintain a record of disclosures and requests for disclosure of personally identifiable information from a student’s record except when the request for disclosure is directory information, pursuant to the student’s consent, or is to a school official described in this policy. It is the policy of the University to permit the student to inspect this record of disclosures and requests for disclosure pertaining to his or her records. All disclosures (except for disclosures to the student or disclosures of directory information) shall be made on the condition that the information shall not be further disclosed without the student’s consent.

Right to Challenge Information in Student Records

It is the policy of the University that a student may challenge any information in his or her education records which he or she believes to be inaccurate, misleading or in violation of privacy. This right does not extend to reviewing grades unless the grade assigned by a professor was inaccurately recorded in the records. A student may also insert a statement in the records explaining any such material from his or her point of view. If a student wishes to challenge information in the file, he or she must make a written request for a hearing to the dean, director, or chairperson of the office which maintains the record. In most cases, the

decision of the dean, director or chairperson will be final. However, a student may appeal in writing to the Associate Provost or the Vice President for Health Sciences or their designee, as the case may be, who will review the decision only if a significant question of policy or compliance with the law appears to be raised by the case.

Waiver of Rights Not Required

It is the policy of the University that students not be required to waive their rights under the Act before receiving University services or benefits.

Assistance with Problems or Questions about

Compliance

- If a student has questions about the provisions of the Act, he or she may contact the Office of the Registrar.
- If a student believes that the University has not complied with the Act, he or she should direct comments concerning this to the Office of the Registrar.
- If a student believes that the University has not complied with the Act, written complaints may be filed with the Family Educational Rights and Privacy Act Office (FERPA), U.S. Department of Education, 400 Maryland Avenue, SW., Washington, D.C. 20202-4605, telephone (202) 732-1807.
- The Registrar shall either resolve the issue or shall refer it to the appropriate University body for resolution.
- Copies of and information about the Rights and Privacy Act are available in the Records and Registration Office, Student Support and Services Center.

Change of Name

Students who need to process a change of name for their academic records must bring appropriate documentation to the Student Services Office. The appropriate documentation includes proper photo identification (valid driver's license, Military or Federal ID, including Permanent Resident and Employment Authorization cards, passport, or other state-issued identification) and the social security card showing the new name. No other type of documentation will be accepted.

Change of Address or Phone Number

Current students who need to process a change of address or phone number for their academic records may do so using LoboWeb, Personal Information, Personal Information View/Update.

Transcripts

The Student Services Office of UNM–LA issues unofficial and advisement copies of the University of New Mexico student records. Official transcript information and request forms are available online at <https://registrar.unm.edu>. Students may also request an unofficial transcript of their academic record in Building 1, by mail, or by fax. The address is UNM-Los Alamos Student Services, 4000 University Drive, Los Alamos, NM 87544. The fax number is (505) 661-4698.

The following information is needed in order to process a request by mail or fax: student name (all names used while at the University of New Mexico), UNM ID number, date of birth, and date of request. The student's signature is required to authorize the release of any transcript. Proper photo identification (driver's license, Lobo ID Card, passport, or other state-issued identification) is required to obtain an unofficial transcript in person.

Transcripts from other institutions that are sent to the University of New Mexico for purposes of admission are not copied or returned to the student.

E-mail requests cannot be honored. Another person may not request or pick up a student's transcripts without specific, written authorization from that student. The University of New Mexico does not provide copies of test scores or transcripts of academic work from other institutions. The original institution must be contacted for such information.

Transcript Holds

Transcripts may be held for financial and non-financial reasons. No official transcripts will be released until the student's outstanding obligations to the University have been paid or until satisfactory arrangements have been made.

Grade Notification

Semester grades are available on LoboWeb from the Registration & Records menu. If a hard copy is required, it can be obtained from Student Services, Building 1.

Non-Resident Students

The student is responsible for obtaining the correct residency classification prior to the end of the second week of the semester. A student not classified as a New Mexico resident for tuition purposes is charged tuition as a non-resident. Refer to the Residency section below.

Residency

Summary of Regulations for New Mexico Residency for Tuition Purposes

A student who enters and remains in this State principally to obtain an education is presumed to continue to reside outside this state, and such presumption continues in effect until rebutted by clear and convincing evidence of bona fide residence. A student determined to be financially dependent on an out-of-state parent or guardian also assumes the residency of that parent or guardian. The burden of proof is on the student. The student must secure and file the residency petition with the appropriate documents of evidence in the manner described herein. All documents

submitted for this purpose are kept confidential. Residency petitions are accepted until the second Friday of each Fall and Spring semester in Student Services, Building 1.

To become a legal resident of the State of New Mexico for tuition purposes, each student must individually meet the four basic requirements below.

The 12-Month Consecutive Presence Requirement

A student must physically reside in the state for 12 consecutive months immediately preceding the term for which the student submits a petition.

The Financial Independence Requirement

A student who is financially dependent on parents or legal guardians who are not residents of New Mexico cannot be approved for residency. At the time the student petitions for residency (if under 23 years of age), a copy of the parents' or guardians' 1040 or 1040A U.S. income tax form for the previous year must be submitted with the petition. If shown to be a dependent on that tax form, the student is not eligible to establish residency apart from the parents or guardians.

The Written Declaration of Intent

The student must sign a written declaration of intent to relinquish residency in another state and to establish it in New Mexico (included in residency petition).

The Overt Act Requirement

Overt acts are required to evidence support of the written declaration of intent to establish permanent residency in New Mexico. Documentation of two of the following is required:

- If the applicant is financially dependent, a copy of the parents' or guardians' previous year income tax form showing the applicant as a dependent and the parents' address as New Mexico;
- A New Mexico high school transcript issued in the past year confirming attendance at a New Mexico public or private high school within the past 12 months;

- A transcript from an online high school showing a New Mexico address confirming attendance within the past 12 months;
- A New Mexico driver's license or ID card with an original date of issue or a renewal date issued prior to the first day of the term or semester;
- Proof of payment of New Mexico state income tax for the previous year;
- Evidence of employment within the state of New Mexico;
- New Mexico vehicle registration;
- Voter registration in New Mexico;
- Proof of residential property ownership in New Mexico;
- A rental agreement within New Mexico;
- Utility bills showing the applicant's name and a New Mexico address;
- Other evidence which would reasonably support the individual's intent to establish and maintain New Mexico residency.

Any act considered inconsistent with being a New Mexico resident will cause the request for resident classification to be denied. As such, other relevant factors may be considered in addition to the items listed above.

Notes:

A person who has moved to New Mexico and has obtained permanent full-time employment (sufficient documentation is required) and his/her spouse and dependent children shall not be required to complete the 12-month durational requirement. However, all other requirements must be satisfied.

Active duty military members stationed in New Mexico, their spouses, and dependents are eligible for waivers of non-resident tuition. Members of the National Guard, their spouses and dependents are also eligible for waivers of non-resident tuition. A form must be submitted to the Office of the Registrar by the second Friday of the term to obtain these waivers.

According to the University of New Mexico's tuition policy:

Non-resident, degree-seeking, graduate students enrolled for six or fewer credit hours in their first two semesters are charged resident tuition rates.

Students enrolling for the summer session are charged resident tuition rates regardless of residency classification (except those in the College of Nursing).

The residency petition and a brochure that explains requirements for establishing New Mexico residency for tuition purposes and special tuition status waivers are available from Student Services, Building 1, or online at <https://registrar.unm.edu>.

Western Undergraduate Exchange

The Western Undergraduate Exchange (WUE) is a program of the Western Interstate Commission for Higher Education (WICHE). Through WUE, students in western states may enroll in many two-year and four-year college programs at a reduced tuition level: 150 percent of the institution's regular resident tuition. Additional award levels may be available for selected beginning freshman. WUE tuition rates are considerably lower than the nonresident tuition rate.

Requirements for WUE Enrollment

New freshmen and undergraduate transfer applicants are considered for the WUE tuition waiver program upon admission to UNM. No additional application is necessary. Qualified new students are notified of their eligibility and the tuition offer. Students offered the WUE tuition waiver must accept the offer by the deadline indicated in the offer letter.

All UNM programs are open to WUE students. Access to the WUE program is selective.

Academic Advisement

Each semester, advisement holds are placed on the accounts of all students in degree and certificate programs. During the semester advisement meetings, advisors lift the holds, and students are then able to register for classes. Students are strongly encouraged to meet with an advisor early and before registration opens for the next term. The purpose of the meeting is to review program requirements, course scheduling, and to make sure that the student is on the best track to graduate or transfer. In addition, the advisor can provide support and resources in order to help the student be successful. Students can schedule an advising appointment online through LoboAchieve, by contacting Student Services in Building 1, or calling (505) 662-5919.

New Student Orientation

New Student Orientation is an exciting event that facilitates students' successful transition to the UNM–Los Alamos campus. The mandatory orientation includes a campus tour; introductions to faculty, staff, and other new students; information about academic advisement, registration, policies and procedures; and strategies for college success. Student Services, located in Building 1, 505-662-5919, holds New Student Orientation prior to each fall semester. Students who cannot attend in person may participate in NSO Online. Find the orientation information for each semester at <https://losalamos.unm.edu/students/new-student-orientation/index.html>.

Registration Procedures

The registration process is outlined online on the UNM–Los Alamos website. Under the “Student” tab, click on “Registration and Records.” Links are also available with information about registration errors and registration forms. Find the steps listed at <https://losalamos.unm.edu/students/registration-and-records/index.html>.

Payment of Tuition and Fees

Payment of tuition and fees is required to complete registration. For specific information regarding tuition, fees, payment, and payment deadline dates, refer to the Financial Information section of the current Class Schedule or on the Tuition and Fees page under the Students menu at <https://losalamos.unm.edu>.

Enrollment Limit

Students may not take more than 18 hours during a semester and 9 hours during the summer session, except with approval from an academic advisor.

Enrollment Certification

Enrollment Certifications are requested by individuals, institutions, or organizations for information related to a student's past or current enrollment. Information requested often includes validation of confirmed degrees, dates of attendance, or a student's part- or full-time enrollment status.

The National Clearinghouse is now the University of New Mexico's authorized agent for providing enrollment and degree verifications. If an employer or background screening firm requests this information, please have them contact the National Student Clearinghouse at (703) 742-4200 or visit their website www.studentclearinghouse.org.

Verification forms from financial lenders should be sent directly to the National Student Clearinghouse for fastest response.

The University of New Mexico will produce an Enrollment Certificate validating a student's status for the current semester or a pre-registered (one week prior to start of classes) semester. If students wish to have their entire academic history certified or semesters not covered by the certification process, the students must request a transcript. The University of New Mexico does not certify expected graduation date.

Course Load Guidelines

Undergraduates/Non-degree

Fall/Spring Semesters

Full-time: 12 or more credit hours

Half-time: 6–11 credit hours

Less than half-time: 5 or fewer credit hours

Summer Session

Full-time: 6 or more credit hours

Half-time: 3–5 credit hours

Less than half-time: 1 or 2 credit hours

Changes in Enrollment

Once registered, students may process schedule changes through the drop/add procedures in LoboWeb or by paper forms submitted to Student Services Office during appropriate periods.

Summer Session and Short Courses

Deadlines for processing drops, adds, withdrawals, and grade options for summer and short courses vary according to the length of the course. Consult the Class Schedule for specific dates at

<https://losalamos.unm.edu/academics/class-schedule.html>.

For 16-week courses, the following rules apply:

Add. Students may add courses or change sections through the second week of the semester.

Drop. A student may drop a course or courses without a grade during the first three weeks of the semester.

Withdrawal from a Course

After the third week, a student may withdraw from a course until the end of the 12th week of the semester and is subject to a grade of “W.” After the 12th week, course withdrawals are only accepted with approval from Student Services. No withdrawals are accepted after the last day of instruction of the semester, prior to final exam week.

Note: Faculty are not responsible for dropping students who do not attend. It is the students’ responsibility to check the accuracy of their course schedule. As a consequence, students may earn a failing in a grade in a class they stop attending but did not officially drop.

Change in Grading Option. Changes in grading option (including audit, pass/-fail or Credit/No Credit, letter grade, or graduate credit option) in any course may be made through the second week of the semester. It is the student’s responsibility to make certain that they are registered in any course for the proper grading option.

Completion of Courses. Students are responsible for completion of all courses in which they are enrolled at the University. Changes in enrollment, drops, or withdrawals must be officially processed. A student not following proper course or University withdrawal procedures may be given a failing grade and will be responsible for tuition charges associated with the course.

Withdrawal from the University

Students can withdraw from all courses through the end of the 12th week if no holds exist on their account by using LoboWeb. At the beginning of the 13th week, a student who is withdrawing from all courses must have approval from Student Services. Students may contact the Student Services Office, (505) 662-5919, for advisement on withdrawal from all courses.

Students who withdraw during the first three weeks (regular full semester) of classes do not receive a grade notation on their academic records.

University withdrawals initiated after the 3rd week (regular full semester) of classes are subject to a grade of “W.” All withdrawal grades are assigned by the instructor during the regular grading period. The notation on a student’s record is “Withdrew” followed by the date, along with the course name and grade assigned. Grades assigned a “W” are not factored into a student’s GPA calculation.

Summer Session and Short Courses. Deadlines for processing withdrawals for summer and short courses vary according to the length of the course. Consult the Academic Calendar for specific dates at <https://losalamos.unm.edu/academics/academic-calendar.html>.

Students leaving the University during a semester without withdrawing according to this regulation are subject to faculty assigned grades.

Students are responsible for all outstanding financial obligations when withdrawing.

Policy on Military Withdrawals

Under faculty regulations, students who formally withdraw from the University before the end of the 12th week of the semester due to military obligations are entitled to a grade of “W” in each course in which they are enrolled. Military orders or evidence of enlistment must be made available to the UNM–Los Alamos Registrar. A student who withdraws due to military obligations after completing 12 weeks of instruction receives full credit for each enrolled course provided the instructor certifies a grade of “C” or better for the course at the date of formal withdrawal. If the instructor certifies a grade of less than “C,” the student receives a grade of “W.” The student must opt for either a tuition refund or for a grade assignment after the 12th week. A final semester senior who has satisfactorily completed at least half of the work for enrolled courses, provided these would complete degree requirements, may be certified for graduation by the faculty of their college. Visit <http://dos.unm.edu> and click on “Request For Military Withdrawal>Services>Military Withdrawals” for a form in order to initiate the military withdrawal process.

Student Attendance/Class Absences

Students must attend all class meetings for the courses in which they are enrolled. If a student is ill or scheduled to miss class due to an authorized University activity such as a field trip or athletic trip, the student must contact his/her instructor(s) prior to class. If a student is unable to contact

his/her instructor(s), the student should leave a message with the Office of Instruction at (505) 661-4693. Even though a student has reported the absence, he/she is still responsible for all missed work. The student must take the initiative to arrange with the instructor(s) to make up all missed work, and it is expected the faculty member(s) will make reasonable arrangements with the student. Verification (such as doctor’s note, hospital billing, military orders, death notices) of a student’s absence should be provided as requested, both to the instructor and to the Student Services Office in Building 1, (505) 662-5919.

Publications

Class Schedule

The Class Schedule is an official publication of the University. The publication includes course offerings, dates, times, and places. The schedule can be found online at <https://losalamos.unm.edu/academics/class-schedule.html>.

UNM–LA Website

The campus website contains the most current information about UNM–LA, including updated class schedules, the UNM–Los Alamos Academic Catalog, and information about campus events and other news. The website can be found at <https://losalamos.unm.edu>.

UNM Pathfinder: The Student Handbook

The *UNM Pathfinder* is the most comprehensive handbook of student services at the University of New Mexico. The *UNM Pathfinder* gives general information, including office locations and telephone numbers, about academic support and cultural programs, athletics and recreation, student organizations, entertainment, financial services, food, health and medical assistance, housing, the University of New Mexico policies affecting students, commuting and parking and other services and programs. Find the current UNM Pathfinder at <https://pathfinder.unm.edu/>.

Emergency Contact Service

The Emergency Contact Service is provided to deliver messages to students for emergency purposes. When an emergency arises, call the Student Services Office at (505)

662-5919. If appropriate, the staff may access the student's schedule from the database file and determine if it is possible to reach the student in class. A staff member then may initiate contact with the student if necessary.



General Academic Regulations

Students are responsible for complying with all regulations of the University, their respective colleges, and the departments from which they take courses, as well as for fulfilling all degree requirements. Students are responsible for knowing and complying with all academic regulations.

Change of College

Undergraduate students who desire to gain admission to a degree-granting unit or to change their enrollment from one degree program to another within the University must meet with an advisor. A change in degree program after the third week of the semester will not be effective until the following semester.

Class Hours and Credit Hours

For all methods of instruction, UNM's assignment and award of credit hours conforms to commonly accepted practices in higher education in accordance with federal regulations 34 CFR 602.24(f).

The minimum requirements for assigning one (1) semester credit hour consists of one (1) 50-minute period of classroom or direct faculty instruction and a minimum of two (2) hours of out-of-class student work each week of the semester, or at least an equivalent amount of work as established by the degree granting college.

Course Numbering System

The University of New Mexico began the transition to a four-alpha, four-number (e.g., ENGL 2310) Common Core Course Number effective Fall 2019, in compliance with 5.55.5 NMAC. This transition will not affect all course numbers at once.

Courses offered at the University are numbered from 001 through 999:

- 001 to 100 courses may or may not carry credit, but are not applicable to a baccalaureate degree.
- 101 to 199 and 1001 to 1999 courses are lower-division, and are normally open to freshmen.
- 200 to 299 and 2001 to 2999 courses are lower-division, and are normally open to sophomores.
- 300 to 499 courses are upper-division, and are normally open to juniors, seniors and graduates.
- 500 to 999 are graduate and professional level, and are normally open only to students enrolled in graduate degree programs, School of Law, College of Pharmacy, or the Doctor of Medicine program.

NOTE: Undergraduate or non-degree students without a degree may not enroll in any graduate problems courses for undergraduate credit. Technical, vocational or special courses are applicable for baccalaureate credit only upon petition to and approval from the University of New Mexico degree granting unit. Courses numbered 300 and above are not open to lower-division students (freshmen and sophomores) except in rare instances, and then only with the approval of the college dean. When appropriate, students may be disenrolled from courses numbered 200 and above. See the individual college sections of this Catalog for specific regulations.

Grades

Semester grades are available via LoboWeb. Grades are posted nightly as they are entered by the instructor. Final semester GPA calculations, Dean's List determinations and probation/suspension decisions are processed after the last official day of the semester.

UNM-Los Alamos uses a fractionated grading system. Following are the allowable grades and associated grade points:

A+	4.33
A	4.00
A-	3.67
B+	3.33
B	3.00
B-	2.67
C+	2.33
C	2.00
C-	1.67
D+	1.33
D	1.00
D-	0.67
F	0.00

CR Credit. Results in credit for the course, but is not computed into the grade point average. CR is the equivalent of at least a grade of C. At the graduate level, CR is used to report completion of a master's thesis or doctoral dissertation. See the following pages for specific information concerning pass/fail (CR/NC) option grading.

NC No Credit. Not computed into the grade point average. At the graduate level NC is also used to report unsatisfactory completion of a master's thesis or doctoral dissertation. Certain workshops and courses may be offered under CR and NC as defined above.

NR Not Reported. If a grade has not been received by the end of the grading period, an NR is assigned. A grade of NR is not computed into the grade point average. After two years, the remaining NR grades are converted to W grades.

I Incomplete. Given only when circumstances beyond the student's control have prevented completion of the work of a course within the official dates of a session. (See the policy on Removal of Incomplete.)

AUD Audit. Recorded for completion of enrollment in an audited course. No credit is earned for an audit grade option.

W Withdrawal. Used for withdrawals after the grade required deadline beginning in Fall 2012, and for approved administrative withdrawals at the end of a semester. Examples of administrative withdrawals include: determination by the instructor that the student never attended the class, processing errors, catastrophic illness of the student or other reasons beyond the student's control.

Grade Point Average

An undergraduate student's grade point average is calculated by dividing the total number of quality grade points earned at the University of New Mexico by the total number of credit hours attempted, and truncated by two decimals. These credit hours must be attempted in courses with letter grades and the courses must be numbered 100 or above. Courses for undergraduate students given a grade of W, WP, WNC, CR, NC, PR, AUD, or I are excluded in the grade point average calculation. For graduate students, the Graduate Studies office, internally for their record keeping processes, calculates a grade of "I" as a 2.0 until replaced by another letter grade.

Beginning Fall 2006 the academic transcript reflects a level GPA. The courses a student takes become a part of the level to which the student has been admitted. If a student is in an associate degree program, the level is associate degree, and all the courses taken in that level are reflected in the associate GPA. Courses that are not remedial or technical are also calculated into the undergraduate GPA. If the student is in a bachelor's degree program, the courses taken in that status are calculated in the undergraduate GPA. The various levels are Associate, Undergraduate, Graduate, Non-Degree Undergraduate and Non-Degree Graduate. Each level has a GPA.

NOTE: This is a general University of New Mexico grade point calculation. Schools and colleges within the University may compute the grade point average differently.

Grades earned in courses taken at other institutions are not included in calculation of the University of New Mexico

grade point average. The UNM transcript is the official record of the student's grade point average at UNM, and reflects only courses taken at the University of New Mexico.

Grade Options

Pass/Fail (CR/NC) Option

This grading option is open to students enrolling in courses that do not apply to their major.

A student is permitted to enroll in a maximum of 4 credit hours per semester under the pass/fail (CR/NC) grading option.

CR (credit) is the equivalent of at least a grade of “C.” Students who do not satisfactorily complete a course under pass/fail (CR/NC) grading will receive “NC” (no credit).

A course may be changed to the pass/fail (CR/NC) grade option. See current Academic Calendar for deadlines at <http://losalamos.unm.edu/academics/academic-calendar.html>.

A maximum of 24 credit hours graded pass/fail (CR) will be allowed toward a baccalaureate degree. Graduate students may not count more than 6 hours of course work in which a “C” (2.0), “C+” (2.33) or “CR” was earned.

Courses that are specifically approved for pass/fail (CR/NC) are not included in the 24 credit hour maximum allowed toward degree requirements.

The following may not be taken under the pass/fail (CR/NC) option:

- Courses in the University Honors Program and the Undergraduate Seminar Program.
- Courses that are part of the student's major (as defined by the major department) with the exception of those courses especially approved for use of pass/ fail (CR/NC) grading.
- Courses that are part of the student's minor (see specific college and departmental requirements).

- Correspondence courses.
- Courses the student is repeating after first having taken the course under the regular grading system.

Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of “Credit” to “C” and “No Credit” to “F” when computing grade point averages or may otherwise penalize students who use this option.

Note: Students may not be penalized by a department if, when selecting or changing a major field, they have taken a course in their major on a pass/fail (CR/NC) option basis.

Audit

A student may register to audit a course, with written permission of the instructor. A student who fails to attend class may be dropped at the instructor's request. The fee for audited courses is the same as for credit courses.

Audit enrollment receives no credit and is not included in the student's total course load for purposes of enrollment certification and financial aid enrollment requirements. Audited courses appear on the academic record. Courses taken for Audit may be repeated for credit.

Incomplete (I) Grade

According to academic policy, incomplete grades must be completed before a student is eligible to graduate from the University of New Mexico–Los Alamos. The grade of “I” is given only when circumstances beyond the student's control have prevented completion of the coursework within the official dates of a semester/session. Students should not re-enroll or re-register (for credit) in a course in which an incomplete has been received in order to resolve the “I” (incomplete) grade. If an instructor requires the student to repeat the class in order to resolve the Incomplete, the student must register for the course on an Audit basis. The fee for an audited course is the same as for credit courses.

Grade changes to Incomplete grades must be received no later than one year (twelve months) from the published end

day of the term in which the grade was assigned. Incomplete grades not resolved within the time frame stated in this policy are automatically converted to an F (Failure) grade.

Students who resolve Incompletes in the term of graduation must have the process completed (including the reporting of the grade to the Records and Registration Office, before the start of the new semester). Students are responsible for informing instructors that they are graduating and the grade(s) must be reported by the appropriate deadline. Failure to complete the process as described could result in the postponement of graduation until the following term.

The instructor of record reports the final grade for the course in which the Incomplete was assigned to the Records and Registration Office. Graduate students should consult the section on the *Graduate Program* section of this Catalog related to this policy.

Extension of Incomplete

A student may apply for an extension of the time allowed to complete the required course work removing the “I” grade. The request for extension may be submitted to the Student Services Office. A student who re-enrolls in residence may be granted a one-semester extension. If an extension is granted, it is the student’s responsibility to ensure the I grade is removed by the date indicated. Graduate students are required to obtain the additional signature of the Dean of Graduate Studies. The Extension of Incomplete form must be submitted no later than the last day of the term.

Repetition of a Course

A student may repeat any course but will receive credit only once unless otherwise noted in this Catalog. ALL ATTEMPTS and ALL GRADES are computed in the student’s grade point average. A grade replacement policy is available for repeated course work as described below.

Grade Replacement Policy

The course repeat policy was revised by the Faculty Senate to include a grade replacement option effective Spring 1991. Under this policy only undergraduate students may repeat a

course for a higher grade and have the lower grade removed from the grade point average. This revision is an option for students who meet the criteria outlined below. Repeated courses for students who do not meet the criteria or who choose not to make use of the option automatically fall under the existing policy as described under “Repetition of a Course.”

The following outlines the procedure for the implementation of this course repeat (grade replacement) option. NO EXCEPTIONS WILL BE MADE TO THIS POLICY.

The Grade Replacement Policy is effective as of Spring 1991 and affects only the University of New Mexico coursework from Spring 1991 forward. This means that the first attempt in a course cannot have been prior to Spring semester 1991. The policy is not retroactive to any semester prior to Spring 1991.

NOTE: A student who fails a course at the University of New Mexico and repeats the same course with a grade of “C” or better at another college or university may have the credit accepted for transfer, but the grade received at the University of New Mexico will continue to be computed in the grade point average.

Students in undergraduate status are eligible to use this policy, and only coursework that applies to an undergraduate degree is considered for a grade replacement.

A repeated course must result in an improved grade in order to replace the other grade (e.g., a “D” cannot replace a “D”). The higher grade removes the lower grade from the grade point average and earned credit hours. Grades of “CR”, “NC”, “PR”, “AUD”, “WP”, and “W” are not replaceable grades because they do not affect the grade point average.

The process is not automatic. Students must initiate the process by completing the online form at <https://registrar.unm.edu>. The course numbers and titles must be identical, except where equivalencies or a change has been noted in the University of New Mexico Catalog.

Substitute courses are not acceptable. Forms are accepted after the second attempt in the course has been completed.

A grade replacement may be applied only to 12 hours of repeated course work. Only one grade replacement is allowed for each course, regardless of the number of times the course has been repeated.

Once a grade replacement has been approved, the process cannot be reversed or changed.

No grade may be replaced after a degree has been awarded.

All grades remain on the record. An “E” appears on the transcript next to the course that has been replaced.

Students registering for a late starting course cannot use the Grade Replacement Policy to replace a grade within that same semester.

Note: This policy applies only to courses taken and repeated at the University of New Mexico or one of its branches.

Change of Grade

The instructor of a course is responsible for any grade reported. Once a grade has been reported, the instructor may change it by using the Instructor Initiated Grade Change and Incomplete Removal process through LoboWeb. Only the instructor who issued the original grade (instructor of record) may submit a change. Grade changes submitted more than 30 days after end of semester are reported to the offering College Dean. Any change in grade must be reported within 12 months after the original grade was issued and prior to graduation. Grade changes may be referred to the Admissions and Registration Committee of the Faculty Senate for approval.

Grade Petition Procedure

A student seeking retroactive withdrawal, enrollment, or a grade option change; or further academic record changes involving exceptions to the rules governing registration and academic records, may submit petitions to the Records and

Registration Office in the Mesa Vista North One-Stop or the Student Support and Services Center. This petition process does not cover disputes involving academic judgment (Refer to the UNM Pathfinder, “Student Grievance Procedure,” Article 2, Academic Disputes).

The petition must state the nature of the request, specify the semester involved, the course and section number, the student’s name, identification number, mailing address and telephone number. It must include documentation of extenuating circumstances, such as medical, family or employment needs. The petition must be typed and signed.

A student may only petition grades up to one year after an instructor and dean grade change form can be utilized to change a grade. (Effective as of April 2005 as approved by Faculty Senate Operations Committee.) This means no grade change can be petitioned after two years in which the course(s) was/were taken.

Upon receipt of student’s petition, the instructor(s) involved is contacted for a statement concerning the request.

The petition (along with instructor comments) is forwarded to the Grade Petition Subcommittee of the Faculty Senate Admission and Records Committee for review and decision. If the petition is approved, appropriate modifications are made to the student record.

The student is notified in writing of the outcome of the petition. The decision of the subcommittee is final.

The student is responsible for tuition and fees incurred.

Academic Renewal Policy

Academic Renewal applies to students seeking undergraduate degrees who have been readmitted to UNM- Los Alamos after an absence of five years or more. The procedure allows a currently enrolled student to request his/her academic record be reviewed for the purpose of evaluating previously earned UNM credits and recalculating the student’s grade point average from the point of

readmission. The student may obtain a petition from the Student Services Office, Building 1. If all criteria are satisfied, the petition will be approved and the academic record appropriately noted.

NO EXCEPTIONS ARE MADE TO THIS POLICY.

Academic Renewal Guidelines

Note: Non-degree, second undergraduate degree, and graduate students are not eligible for Academic Renewal.

Academic Renewal may be applied only once and is not reversible.

An absence of five or more years must have elapsed between readmission and the last enrollment at UNM.

The student must be currently enrolled in an undergraduate degree program. Additionally, college entrance requirements such as minimum hours and grade point average must still be met after Academic Renewal has been applied.

After readmission to UNM, at least 12 credit hours, but no more than 36 credit hours, must be completed in good standing (2.00 GPA or better) before Academic Renewal can be applied.

Note: If the degree-granting unit has placed the student on probationary status, it is not automatically changed by Academic Renewal.

All graduation requirements must be satisfied after Academic Renewal (i.e., minimum earned credit, residence credit requirement, cumulative grade point average, etc.).

Note: Credit earned prior to Academic Renewal will not count toward satisfying the residence credit requirements.

All courses taken prior to Academic Renewal will remain unaltered on the record. An appropriate notation will be added to the record to indicate Academic Renewal. Courses

with a grade of “C” or “CR” or better taken prior to Academic Renewal will be carried forward as earned credits. Acceptability of these credits towards a degree will be determined by the degree-granting unit.

Courses with a grade of “C-” or below taken prior to Academic Renewal will be noted and will not count for earned credits or for satisfying any graduation requirements.

Academic Renewal, when applied, will be effective as of the date of the readmission following the five-year absence.

The cumulative grade point average after Academic Renewal will be calculated on the basis of courses taken since the readmission following the five-year absence.

Classroom Conduct

The instructor is responsible for classroom conduct, behavior, and discipline. Any action that would disrupt or obstruct an academic activity is prohibited. The instructor may refer situations involving classroom misconduct to the Dean of Instruction or Director of Student Affairs for additional action under the “Student Code of Conduct” as published in The Pathfinder-UNM Student Handbook.

Use of classrooms or other facilities during scheduled activities is limited to enrolled students and University personnel. Use of these facilities during non-scheduled periods should be arranged with the appropriate department or other division of the University. Eating, and drinking are prohibited in all classrooms and teaching laboratories, including seminars, unless permitted by the instructor. Smoking and vaping are prohibited on UNM-LA property and in all UNM-LA buildings.

Dishonesty in Academic Matters

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, including dismissal, against any student

who is found responsible for academic dishonesty. Any student who has been judged to have engaged in academic dishonesty in coursework may receive a reduced or failing grade for the work in question and/or for the course.

Academic dishonesty includes, but is not limited to the following: dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; and

misrepresenting academic or professional qualifications within or outside the University.

Misrepresentation

Non-disclosure or misrepresentation in filling out applications or other University records will make a student liable for disciplinary action, including possible dismissal from the University.



Scholastic Regulations

Attendance

Policies regarding student attendance at class meetings are set by each instructor. Students should not assume that non-attendance will lead to being dropped from class. It is the student's responsibility to initiate drops or complete withdrawals.

UNM-Los Alamos makes reasonable accommodations for religious observances and national origin and heritage practices of the student.

Absences

The Student Services Office, as a service to faculty and students, will send absence notifications to the respective faculty member should an absence be longer than five (5) days. This service will only be used when an absence is for a family/student medical issue, death of a family member, military leave, or a university-sponsored activity. However, when requested by a faculty member, this office may assist in verifying absences that are five days or fewer on a case-by-case basis, should this be requested by a faculty member. This office will encourage the student to speak directly with the faculty member to work out absences that are fewer than six days. The absence notification process is only meant as a notification and not meant to excuse the absence. Excusing an absence is entirely up to the respective faculty member of the course. It is the student's responsibility to contact the Student Services Office about any absences and provide appropriate documentation when possible.

Dismissal

Students are subject to dismissal from a college or a degree program based on minimum requirements set by that college's core program. Please refer to each college section

in the UNM Catalog and the program section of this catalog for specific requirements. Dismissal from a college or degree program is not the same as suspension but may preclude the student from enrolling at the University.

Probation

Probationary status serves as a warning to students that they are no longer in good academic standing and that they may be suspended. Undergraduate students who have 30 or fewer attempted hours must have a cumulative grade point average of at least 1.70 to be in good standing. Thereafter, the cumulative grade point average to remain in good standing is at least a 2.00. Undergraduate students are placed on probation at the end of any semester (or summer session) for which their cumulative grade point average falls below these minimum requirements. Special requirements outlined in an individual probation contract may be placed on students who are on probation. Failure to complete the contract and/or improve cumulative grade point average will result in academic suspension.

Degree-Granting Programs and Non-degree Status

Students in degree-granting programs or in non-degree status may be placed on academic probation at the end of any semester if they fail to meet the minimum cumulative grade point average required to remain in good standing in their program. The minimum grade point average is at least a 2.00 but it is higher in some programs. Students must familiarize themselves with the academic regulations of their program.

Suspension

Students on suspension may not enroll for classes at UNM-Los Alamos until their suspension period has been completed.

Degree-Granting Programs and Non-Degree Status

Students are eligible for suspension after a semester on probation if their cumulative grade point average remains below the minimum required to be in good standing in their college.

Suspension Period

Students suspended for the first time may not enroll for classes at the University of New Mexico–Los Alamos for a period of one semester from the date of the suspension.

Students suspended for the second time may not enroll for classes for a period of one academic year from the date of the suspension. Students suspended for the third time may not enroll for classes for a period of five academic years from the date of the suspension.

Note:

Summer sessions are counted with the following fall semester for purposes of this policy; e.g., a student

suspended at the end of a spring semester may not attend either the following summer session or fall semester.

Students absent from the University for a year or more, for suspension or any other reason, must reapply for admission to the University.

Students who are accepted for readmission after suspension will be readmitted on probation in the accepting college.

Student Services advisors may specify the number of hours for which a student may enroll following a suspension. They may also require students to drop hours or courses that seem beyond their abilities.

Attendance at another institution during suspension must be indicated on the student's application for readmission, and an official transcript must be sent to the Student Services Office as part of the reapplication.



Student Financial Aid

A college education is an investment in your future. It is an investment that will pay increasing dividends in earning power in future careers and in the quality of your life. The basic premise underlying student financial aid is that the primary responsibility for a student's education rests with his or her family. When the resources of the family are not sufficient to meet college costs, the student may be eligible to receive financial assistance. This aid may come in the form of scholarships, grants, work-study programs, and/or student loans.

If students feel they may need financial help to pay for college expenses, they should apply for financial aid to determine their eligibility. The following information will explain the application process and answer questions about costs to attend and financial aid at UNM–Los Alamos. To maximize the opportunity for funding, student applications must be received by the first Friday in January for the following academic year. They must also respond to any request for additional verification information in a timely fashion. Pell Grants and Direct Student Loans remain available to eligible students who submit applications after the January priority date.

The Free Application for Federal Student Aid (FAFSA) is used to apply for all types of federal and state need-based aid. Students apply for financial aid online at <https://www.fafsa.ed.gov>. UNM–Los Alamos' Federal School Code is 002663. All prospective students must be admitted to UNM–Los Alamos to receive an offer of financial aid.

The estimated costs of attending UNM–Los Alamos may include the following: (1) tuition and fees; (2) room and board; (3) books and supplies; (4) transportation; (5) personal expenses; and (6) child care costs, if applicable.

To be considered for financial aid, students must apply every year. Students can complete a free FAFSA starting October 1.

For additional information regarding costs and financial aid at UNM–Los Alamos, please access the webpage at <https://losalamos.unm.edu/students/tuition-and-fees.html>.

Satisfactory Academic Progress

To retain eligibility for financial aid, students must reestablish their need for funds by submitting the FAFSA application each year, and they must meet a minimum standard of academic performance in their coursework and progression toward a degree. All students will have their academic progress monitored each semester to determine continued eligibility for assistance. There are three major components to UNM–Los Alamos' Satisfactory Academic Progress Policy.

Grade Point Average: Students are required to maintain a grade point average consistent with graduation requirements for their major as follows:

While completing the first 30 credit hours as an undergraduate, a student must attain a minimum 1.7 GPA.

Students with more than 30 credit hours must sustain a minimum 2.0 GPA.

Graduate students must sustain a minimum 3.0 GPA.

Completion Rate. Students must successfully complete at least 67% of the total credit hours they attempt. Classes in which grades of "A", "B", "C", "D" or "CR" are earned will be considered completed. Repeated courses were already counted as completed and will not be counted twice. All attempted credit hours from any college (including non-degree hours) are counted whether or not financial aid was

received. This calculation includes all hours in which a student is registered at the time of withdrawal. Remedial classes and English as a Second Language (ESL) classes are also counted as attempted credit hours. Courses taken for Audit are not counted in the student's total course load for purposes of financial aid eligibility. For graduate students, 1000- and 2000-level classes count as hours attempted, but not hours earned, because they will not count toward the completion of a graduate degree.

Maximum Time Frame. Undergraduate students must complete their program of study within 150% of the published length of the program, measured in credit hours attempted. Example: if the published length of the academic program is 60 credits, the maximum time frame for completion is 90 attempted credits. All attempted credit hours from any college, including non-degree hours, and hours attempted in completing a prior certificate or degree will count toward the maximum allowable credits regardless of whether financial aid was received. Courses with assigned grades of "F", "WF", "W", "WP", "I", "NC" and repeated courses all count as attempted credit hours. In addition, remedial classes and ESL classes are counted in this calculation, even though these classes do not count toward the student's graduation requirements. To receive financial aid, graduate students must complete their degree within the maximum time frame allowed by their graduate program.

The student is responsible for meeting minimum enrollment requirements. Students knowingly receiving aid to which they are not entitled may be in violation of University policy and state or federal laws. If you have any questions, please contact the Financial Aid Office, (505) 662-0341.

Enrollment Requirements

Undergraduate Students

Full-time 12 hours

Half-time 6 hours

Non-resident Students

The student is responsible for obtaining the correct residency classification prior to the end of the second week of the semester. A student not classified as a New Mexico resident will be charged tuition as a non-resident. Please refer to the "Residency" section in this catalog.

Federal Student Loans

The main loan program offered at UNM is the William D. Ford Direct Loan program. Students wishing to receive loans must have a current FAFSA, a complete financial aid file, and submit a loan request form to the UNM-LA Financial Aid Office. Please see the Financial Aid officer for more information.

Enrollment Requirements for Financial Aid

To receive financial aid, students must generally be enrolled at least half-time as a regular student in an eligible program. Scholarships generally require full-time enrollment. Courses taken as audit are not included toward financial aid enrollment requirements. Award amounts are generally prorated according to enrollment status.

Typical Sources of Financial Aid

Program	Per Academic Year	Award Amount
Federal Pell Grant*	Maximum	\$6,345
Federal Supplemental Ed. Opportunity Grant	Maximum	\$1,500
State Student Incentive Grant	(Based on 2014-2015)	\$1,500
UNM-LA Bridge to Success Scholarship	First Fall Only, Portion of Tuition Amount** depending on HED allowance	
UNM Lottery Scholarship	\$574/semester	Up to 3 consecutive Semesters**
Federal /State College Work-study	Undergraduate	\$6,000 maximum
Federal Perkins Loan	Maximum	\$2,000
Federal Stafford Loan:		
(Subsidized)	Freshman	\$3,500
	Sophomore	\$4,500
	Junior/Senior	\$5,500
Plus Loans (Parent loan for undergrad students awarded)	Dependent Students	Cost of education minus fin aid
Federal Stafford Loan:		
(Unsubsidized)	Freshman	\$2,000-\$6,000*
	Sophomore	\$2,000-\$6,000*
	Junior/Senior	\$7,000*

*Conditions Apply

**Subject to Change

Student Employment

Students seeking part-time employment while attending UNM-Los Alamos may apply for a work-study position. Students must first complete a FAFSA online and indicate their interest in work-study. Then visit <http://stuemp.unm.edu> to see what positions are available. Students must submit all applications online.

Payment by Financial Aid

Financial aid disbursement is done during the first week of class, unless otherwise specified in the financial aid section of the UNM-LA website. Registered students should use

LoboWeb to obtain information as to required payment and anticipated financial aid.

Student charges for any services, sales, or fines will be collected from the first available source of financial aid (grants, scholarships, or loans) even if due date is later than aid release date.

Students must be registered full time prior to receiving aid or have the Financial Aid Office adjust required number of hours to be eligible for aid. It is their responsibility to visit the Financial Aid Office to be certain that aid will be available and they will not be disenrolled.

If a delay in receipt of your financial aid occurs, you may wish to pay the first installment and any processing fees at the Cashier's Office to avoid disenrollment. Work-study awards will not be considered in arranging for payment. Refer to the academic calendar for the applicable Enrollment Cancellation date.

If tuition has been deferred based on financial aid, and a student decides not to attend the University of New Mexico–Los Alamos, he or she must officially withdraw through <https://registrar.unm.edu> prior to the 100% refund deadlines online in the Academic Calendar at <https://losalamos.unm.edu/academics/academic-calendar.html>. If a student drops or disenrolls after this date, he or she may owe aid back to UNM.

Crediting Financial Assistance to a Student's Account

Students who are receiving financial assistance through programs detailed below will have their awards automatically credited to their accounts beginning on the Friday before classes if financial aid has been approved and awarded.

These programs include

PELL Grant

- Supplemental Educational Opportunity Grant (SEOG)
- State Student Incentive Grant (SSIG)
- Federal Perkins Loan
- Other Grants and Scholarships
- FFELP Loans/LINK Loans
- Federal Direct Loans

Financial assistance awards will not be credited to a student's account until the student has registered for the required number of hours and has met all respective financial assistance source program requirements. Students will receive any remaining balance after deductions of current and past due charges through direct deposit by visiting <https://my.unm.edu>. If not signed up for direct deposit, students will receive funds in a refund check sent to their mailing address of record. Students who are eligible for and will be receiving funds from external scholarships will not have those funds automatically credited to their accounts but must visit the Financial Aid Office to have scholarships applied to their account and/or receive any surplus funding.



Student Organizations

Student Government

The purpose of the Student Government is to represent the interests and concerns of the student body of the University of New Mexico–Los Alamos, to seek student input on issues. Additionally, the Student Government will assume the responsibilities of participatory governance on behalf of students in mutual relationship with the faculty, staff, administration, and the Advisory Board of the University of New Mexico–Los Alamos. By completing these tasks, the Student Government will be fulfilling its mission to represent the concerns and serve the needs of the student body of the University of New Mexico–Los Alamos. To speak with the Student Government advisor, please contact Student Services. For more information, see the Student Government webpage at <https://losalamos.unm.edu/student-government>.

Phi Theta Kappa

Membership in Phi Theta Kappa International Honor Society will open new doors for a student’s academic journey. To be eligible for membership:

Students must be enrolled in a regionally accredited institution offering an associate degree program

Students must have completed at least 12 hours of coursework leading to an associate degree program (part-time students may be eligible)

Students must generally have a grade point average of 3.5
Students must enjoy full rights of citizenship in his or her country

Visit the Phi Theta Kappa website for more information at <https://losalamos.unm.edu/campus-life/student-activities/ptk.html>. Advisor contact information is available online and through Student Services.

New Clubs/Chartered Student Organizations

Any UNM–Los Alamos student or group wishing to start a recognized Chartered Student Organization (CSO) may do so. Chartered Student Organizations are formed to further the common interest of the members of the group and the University community. Chartering a student organization leads to official recognition of the student organization by The University of New Mexico–Los Alamos, potential funding through Student Government, and authorized use of UNM–Los Alamos facilities. Contact Student Government via Student Services, Building 1, (505) 662-5919, for more information.



Adult and Community Education

Adult Learning Center

The Adult Learning Center at UNM–Los Alamos provides College and Career Readiness services to adults who wish to obtain their New Mexico High School Equivalency Credential (HSE), brush up on their basic literacy and math skills, improve their workplace skills, or learn English as a Second Language (ESL). Classes are offered in the areas of reading, writing, math, and ESL. HSE instruction will prepare students to take either the GED or HiSet exam. Both tests lead to a New Mexico HSE credential. Students under the age of 18 must submit a completed Underage Permission Form to the Adult Learning Center prior to enrollment in classes. The form must be signed by a parent or guardian and by the superintendent of their local school district or home school operator. The Underage Permission Form is available at the following link: <https://nmsua.edu/files/uploads/ged-upf-form.pdf>. Books, materials, and individualized tutoring services are free, and there is no charge or fee for classes. Contact (505) 662-0338 or janec181@unm.edu for more information.

Community Education

UNM–Los Alamos offers non-credit courses in a broad range of areas, including professional development, personal enrichment, and workforce training. Our offerings emphasize short term classes aligned with community needs and interests. Community education classes do not require enrollment in the University and are open to anyone wishing to attend.

Personal Enrichment

These classes are designed for those wanting to learn a new skill, pursue an interest, or develop their passion. From simmer sauces to science fiction, Pilates to Plato, these

courses are designed to engage, stimulate, and cultivate the mind, body, and spirit. Most offerings are short term. Classes are delivered in a variety of formats, including seminars, lectures, cultural field trips, hands-on, art-based workshops, and outdoor activities. Classes vary from semester to semester; please check the schedule and website for current offerings at <https://losalamos.unm.edu/community-education/index.html>, or contact the Community Education Office at (505) 662-0346.

Enrichment Classes for Younger Students

Community Education offers classes for younger students as part of the Summer Program for Youth. Students in the 1st-12th grades take classes in subjects ranging from poetry to robotics, taught by professional educators, college faculty, and community experts. For more information about this program for younger students, contact the Community Education Office at (505) 662-0346 or the Office of Instruction at (505) 661-4693.

Workforce Training and Professional Development

Whether students are new to the job market, changing careers, or simply wanting to add to their repertoire of skills, workforce training and professional development courses can help them develop the skills they need. UNM–Los Alamos offers high quality classes and certificate programs, as well as specialized courses for professional development and workforce training, including computer training and paralegal training. In addition, the Small Business Development Center offers training and counseling for new or developing businesses.

Custom Training

The Customized Training program at UNM–Los Alamos works with area businesses to design low-cost, specialized

training that meets employers' needs and fits work schedules. Using local, state, and national resources, UNM-Los Alamos can design, develop, and deliver classes and certificate programs for the unique training needs of businesses, nonprofits, or government agencies, on-site or on campus. Custom training is a cost-effective way to target and increase organizational effectiveness, and to enhance job skills and performance. The Custom Training program also offers training through the New Mexico State Workforce Training Initiative. For information please contact (505) 662-0337. CEUs are available for many courses.

that provides training and counseling services for small and start-up businesses. The UNM-Los Alamos SBDC offers a no-charge business assistance to any existing or aspiring small business in the community, including not-for-profits. Business counseling and most of the training classes occur off campus at the Los Alamos Small Business Center. The SBDC currently serves about 180-200 counseling clients each year. Typical areas of assistance include business start-up and registration, planning and business planning development, customer service, marketing, business financing, incorporation, proposal preparation, employee issues, business computing, record keeping, regulatory issues, quality management, productivity issues, and trade name searches. A student can register online at <https://nmsbdc.ecenterdirect.com/signup>. To schedule an appointment, call (505) 662-0346.

Small Business Development Center

The UNM-Los Alamos Small Business Development Center (SBDC) is part of a national and statewide network



Introduction

UNM offers bachelor and graduate level degree completion programs via online format for students who cannot relocate to UNM's main campus in Albuquerque, making it convenient for students to complete a degree from their home community.

Online Courses

UNM Online offers two types of online courses:

Synchronous Online, also known as "Remote Scheduled," has fixed meeting times. Students log in at a scheduled time, often weekly, to participate in the course.

Asynchronous Online, also known as "Remote Arranged," has no required meeting times. Students log in and participate as their schedule permits while adhering to instructor's deadlines.

In both types of online course, UNM faculty have the discretion to require face-to-face meetings, such as for exams or lab work.

Online courses are regular, UNM, for-credit, academic courses taught by UNM faculty. They follow the normal semester and term start and end dates and are charged UNM-Albuquerque tuition rates, plus an additional online course fee.

Student Support and Services

UNM Online provides assistance through a centralized online student support service. Students are able to receive assistance for admissions, enrollment, and academic support.

Technical Support for Online Courses

Online courses at UNM are delivered through the University's learning management system, UNM Learn. UNM Learn offers technical support within each course through a ticketing system and provides 24/7 phone support.

Academic Information

Students should apply for admission to UNM as a graduate or undergraduate student. For admissions details, visit <https://apply.unm.edu>.

Tuition, fees, and academic deadlines are available online through the Registrar's website at <https://registrar.unm.edu>.

Contact

For complete information about UNM Online classes and for a list of degree completion options, visit the website at <https://online.unm.edu>. Students may email questions to online@unm.edu or call toll free at 1-866-869-6040.

Associate Degrees and Certificates

Program Requirements

For a degree and/or certificate to be granted by UNM–Los Alamos, students must complete the following requirements:

- Complete the number of credit hours and specific course requirements as outlined for the degree or certificate
- Earn a minimum of 15 credit hours for the degree and/or 9 credit hours for the certificate in residence at a UNM campus
- Complete all required coursework for the degree or certificate with a minimum of 2.0 cumulative grade point average (GPA), except as noted for specific programs

No basic skills courses (e.g., ENGL 099, 100; MATH 011, 021, etc.) are accepted toward the number of credit hours required for graduation

All students planning to apply their courses to a degree are expected to earn a “C” or higher in all technical, required courses.

Individual departments may require a higher grade on specific courses.

If a student is interested in transferring General Education Curriculum courses to another institution or another degree, a “C” or better in each course is required.

Associate Degrees

The Associate of Arts and Associate of Science degrees are designed for students who intend to transfer to a four-year college or university, with the transfer of credits subject to the receiving institution’s policies. Generally, institutions

within the state have articulated courses and programs to effect an easy transition.

The Associate of Applied Science degree is designed to provide employment skills for the student. While not usually intended for transfer, specific courses within the degree may transfer depending on the receiving institution and intended baccalaureate degree. Students planning to transfer to a four-year institution should confer with an academic advisor regarding transferability. The University of New Mexico has adopted a General Education (Gen Ed) Curriculum, which all students must complete as part of a UNM baccalaureate program. The Gen Ed consists of approximately 31 hours of courses under eight general headings, with some noted exceptions. Students may apply AP or CLEP credit to the Gen Ed requirements.

Departments and colleges may restrict student choices within the Gen Ed to meet departmental and college degree requirements. A grade of C (not C-) in each course is generally required to fulfill the requirements of the General Education Curriculum.

General Education Requirements

Associate degree curricula require a variety of courses to broaden students’ understanding of the world as well as prepare students for employment or advanced study in their fields. Curricula therefore stress the student’s major subject, but also include General Education courses under eight general headings:

1. Communication
2. Mathematics and Statistics
3. Physical and Natural Sciences
4. Social and Behavioral Sciences
5. Humanities
6. Second Language
7. Arts and Design
8. Student Choice

Departments and colleges may restrict student choices within the Gen Ed to meet departmental and baccalaureate degree requirements. Please follow the appropriate recommendations for degree programs. Advisors can assist students with their selections.

All degrees offered by UNM–Los Alamos are listed below. This list may not be complete because this catalog and program development is ongoing. Students should check with an academic advisor, Department Chair, or Associate Dean for program changes.

Associate of Arts

Art Studio
Liberal Arts
Pre-Business Administration

Associate of Science

Computer Science
Emergency Medical Services
Environmental Science
Pre-Engineering
Pre-Professional Health Sciences

Includes courses needed in preparation for various pre-professional medical sciences degrees. See page 70 for details.

Science

Associate of Applied Science

Accounting
Applied Technologies
Electro-Mechanical Concentration
Business
Marketing Concentration
Management Concentration
Fire Science
General Studies

Information Technology with Cybersecurity
Nuclear Enterprise Science and Technology
Public Safety
Emergency Management Concentration
Homeland Security Concentration
Police Science Concentration
Robotics

Academic Certificates

Certificates in many programs are designed primarily for students not currently pursuing an associate degree. Courses taken as part of a certificate program may be accepted toward an associate degree in that field, as long as the grade earned is a C or better.

Certificates offered by UNM–Los Alamos are listed below. Program development is ongoing. Students should check with an academic advisor, Department Chair, or Associate Dean for program changes.

Certificates

Accounting
Art Studio
Business
Marketing Concentration
Management Concentration
Electro-Mechanical Technology
Emergency Medical Technician-Basic (EMT-B)
Emergency Medical Technician-Intermediate (EMT-I)
Nuclear Enterprise Science and Technology (NEST)
Nuclear Waste Operator
Nurse Assistant (CNA)
Personal Care Attendant (PCA)
Radiation Control Technology (RCT)
Robotics
Welding

ASSOCIATE OF ARTS

Art Studio

About the Program

This program provides students with the first two years of study toward a Bachelor's degree in Fine Arts (BFA) at UNM Albuquerque campus. These introductory courses emphasize concepts basic to the entire discipline of art studio. Courses and course sequences are designed to encourage the student's power of observation and aesthetic awareness. The Associate of Arts degree program enables students to prepare for advanced study, gallery employment, studio assistant or a career as an individual artist. Other options such as teaching, curatorial work in a museum, free-lance design and management positions are generally achieved with a Bachelor's or Master's degree.

A minimum of 60 credit hours are required with a minimum grade point average of 2.5 overall. At least 15 of these 60 hours must be UNM catalog credit courses taken in residence with a minimum grade point average of 3.0 in Art Studio/Art History courses.

**Note: Students planning to transfer to a four-year institution should check grade point requirements at that institution.*

General Education Requirements (31 CREDIT HOURS)

COMMUNICATION (6 CREDIT HOURS)

Select six credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES (4 CREDIT HOURS)

Select four credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

SECOND LANGUAGE (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (6 CREDIT HOURS)

Select two additional General Education courses from two different Areas (1-7). Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.



Technical Core Requirements (21 CREDIT HOURS)

ART HISTORY (6 CREDIT HOURS)

- ARTH 2110: History of Art I (3)
- ARTH 2120: History of Art II (3)

or

- ARTH 2130: Modern Art (3)

ART STUDIO CORE COURSES (15 CREDIT HOURS)

- ARTS 1610: Drawing I (3)
- ARTS 1220: Art Practices I (3)
- ARTS 1230: Art Practices II (3)
- ARTS 1310: Introduction to Ceramics (3)
- ARTS 1630: Painting I (3)

TOTAL TECHNICAL CORE REQUIREMENTS

21 CREDIT HOURS

Electives (8 CREDIT HOURS)

Select 8 credit hours from the following:

- ARTS 2610: Drawing II (3)
- ARTS 2630: Painting II (3)
- ARTS 2340: Raku (3)
- ARTS 1320: Ceramics I (3)
- ARTH 1120: Introduction to Art (3)
- FA 284: Experiencing the Arts (3)
- MUSC 1130: Music Appreciation: Western Music (3)
- MUSC 1120: Music Appreciation: Rock and Roll (3)

Courses in Music or Film are recommended to fulfill the Fine Arts elective requirements for a BFA.

TOTAL ELECTIVES

8 CREDIT HOURS

TOTAL CREDIT HOURS

60 CREDIT HOURS

ASSOCIATE OF ARTS

Liberal Arts

About the Program

The Associate of Arts in Liberal Arts is a degree program for students who desire a broad background and comprehensive grounding in the Arts and Humanities. As a terminal degree, it will provide students with a basic educational framework of value in a variety of fields including the arts, education, research, and business. As a transfer degree, its earned credits are the equivalent of the first two years of course work in the College of Arts and Sciences, preparing students to choose a major field.

A minimum of 60 credit hours with a minimum grade point average of 2.0. At least 15 of these 60 hours must be UNM catalog credit courses taken in residence. At least 20 of these 60 hours must be at the 200- or 2000-level.

Note: Not all courses transfer. Students transferring to another school should check with their advisor (at UNM–LA or at their transfer school) for transferability of any course.

Note: No math class lower than Math 1220 (except its problem section Math 107) may count towards the degree.

General Education Requirements (31 CREDIT HOURS)

COMMUNICATION (6 CREDIT HOURS)

Select six credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES (4 CREDIT HOURS)

Select four credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

SECOND LANGUAGE (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (6 CREDIT HOURS)

Select two additional General Education courses from two different Areas (1-7). Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

**Technical Core Requirements (29 CREDIT HOURS)**

GENERAL ELECTIVES (29 CREDIT HOURS)

Must complete 29 credit hours of academic electives number 101 or higher. Students are encouraged to consult with an academic advisor regarding selections.

Note: Electives should be chosen in consultation with a UNM-LA academic advisor to develop a program for transferring to upper division programs. Not all courses transfer. Students transferring to another school should check with their advisor (at UNM-LA or their transfer school) for transferability of any course.

TOTAL TECHNICAL CORE REQUIREMENTS	29 CREDIT HOURS
TOTAL ELECTIVES	29 CREDIT HOURS
TOTAL CREDIT HOURS	60 CREDIT HOURS

ASSOCIATE OF ARTS

Pre-Business Administration

About the Program

This degree program is designed to introduce students to the field of Business Administration/Management and to provide the first two years of the Bachelor of Business Administration program offered by the Robert O. Anderson Schools of Management at UNM Albuquerque Campus. All of the required courses for this associate degree program transfer to that BBA program, and students will be admitted to junior status if the following conditions are met:

The student has a 2.0 cumulative GPA overall (see below), has a minimum grade of C (not C-) in each course listed under the Specific Requirements show in the pre-admission course work, is eligible to enroll at UNM-Albuquerque.

There are no waivers or substitutions in the printed curriculum of the Associate of Arts in Pre-Business Administration.

A minimum of 60 credit hours with a minimum grade point average of 2.0 in the UNM/ASM Core Curriculum areas. At least 15 of these 60 hours must be UNM catalog credit courses taken in residence.

General Education Requirements (31 CREDIT HOURS)

COMMUNICATION (6 CREDIT HOURS)

Select six credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES (4 CREDIT HOURS)

Select four credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

SECOND LANGUAGE (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (6 CREDIT HOURS)

Select two additional General Education courses from two different Areas (1-7). Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (24 CREDIT HOURS)

- Additional 3 credit hours in Communications not taken as General Education requirement
- Additional 3 credit hours in Mathematics not taken as General Education requirement
- Additional 3 credit hours in Physical and natural Sciences not taken as General Education requirement
- Additional 3 credit hours in Social and Behavioral Sciences not taken as General Education requirement
- Additional 3 credit hours in Humanities not taken as General Education requirement

COMPUTER SCIENCE (3 CREDIT HOURS)

- BCIS 1110: Introduction to Information Systems (3)

MANAGEMENT (6 CREDIT HOURS)

- ACCT 2110: Principles of Accounting I (3)
- MATH 1350: Introduction to Statistics (3)

TOTAL TECHNICAL CORE REQUIREMENTS

24 CREDIT HOURS

Electives (5 CREDIT HOURS)*Select 5 credit hours from the following suggestions:*

- BUSA 1110: Introduction to Business (3)
- MGMT 158: Ethics in Organizations (3)
- MGMT 190: Special Topics in Management (3-6)
- MKTG 2110: Principles of Marketing (3)
- ECON 2130: Personal Investing (3)

Note: Courses counted in this degree program may not include Introductory Studies courses or Physical Education courses. Students planning to transfer to the Anderson Schools of Management on the Albuquerque campus should be familiar with and must meet the UNM/ASM GenEd Curriculum Requirements.

TOTAL ELECTIVES

5 CREDIT HOURS

TOTAL CREDIT HOURS

60 CREDIT HOURS

ASSOCIATE OF SCIENCE

Computer Science

About the Program

This transfer degree program is designed for students interested in pursuing a baccalaureate degree in computer science. Program content is based upon the computer science baccalaureate degree offered at UNM Albuquerque campus in the School of Engineering.

A minimum of 62 credit hours with a minimum cumulative grade point average of 2.0. At least 15 of these 62 hours must be UNM catalog credit courses taken in residence. ENG 130L or CS 152 must be completed with a B- or better. All other computer science component courses must be completed with a minimum grade of C or better. MATH 1512 must be completed with a grade of B- or better. All other courses used for this degree must be completed with a minimum grade of C or better. It is strongly recommended that the student check the specific requirements for the B.S. or B.A. of interest if planning to transfer in order to make the best choices among the optional courses below.

Students with limited experience or coursework in Computer Science are strongly encouraged to take CS 101 prior to enrolling in CS 152L.

General Education Requirements (31 CREDIT HOURS)**COMMUNICATION (6 CREDIT HOURS)**

Select six credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES (4 CREDIT HOURS)

Select four credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

SECOND LANGUAGE (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (6 CREDIT HOURS)

Select two additional General Education courses from two different Areas (1-7). Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (31 CREDIT HOURS)

COMPUTER SCIENCE (17 CREDIT HOURS)

- ENG 130L: Introduction to Engineering Computing (3), or
- CS 152L: Computer Programming Fundamentals (3) (recommended) (with a grade of B- or better)
- CS 241L: Data Organization (3)
- CS 251L: Intermediate Programming (3)
- CS 261: Mathematical Foundations of Computer Science (3)
- CS 293: Social and Ethical Computing (1)
- ECE 238L: Computer Logic Design (4)

MATHEMATICS (8 CREDIT HOURS)

- MATH 1512: Calculus I (4) (with a grade of B- or better)
- MATH 1522: Calculus II (4)

PHYSICAL AND NATURAL SCIENCES (6 CREDIT HOURS)

- Additional 6 credit hours of Physical and Natural Sciences not already taken as part of the General Education requirement.

TOTAL TECHNICAL CORE REQUIREMENTS	31 CREDIT HOURS
TOTAL CREDIT HOURS	62 CREDIT HOURS

ASSOCIATE OF SCIENCE

Emergency Medical Services

About the Program

The Associate of Science in Emergency Medical Services is a specialized degree program designed to build a workforce that is customized to the expected needs of towns, cities and counties in Northern New Mexico and beyond. Students in the program will receive basic academic and specialized hands on training needed to meet the professional educational needs of pre-hospital care providers. The program is designed to meet the National EMS Education Standards for the respective licensure levels and incorporates New Mexico requirements and EMT scope of practice. Upon successful completion of degree requirements with a minimum GPA of 2.33, graduates will be qualified for New Mexico and National Registry testing and will have completed the core curriculum requirements for the UNM-Emergency Medical Services Academy B.S. in Emergency Medical Services, with the exception of BIOL 2225. It is recommended that students applying to the UNM EMS Academy take BIOL 2225 in addition to the required courses for the degree. The UNM EMS Academy requires a minimum of 2.5 GPA for admission. For transfer to other four-year institutions, students should be aware that core curriculum requirements are not necessarily met upon the completion of this degree.

A minimum of 60 credit hours with a minimum grade of 2.33 are required. At least 15 of these 60 credit hours must be UNM catalog credit courses taken in residence. A grade of C or better is required in all courses used to fulfill the requirements of the core curriculum. A minimum of C is also required in each Technical Core course.

General Education Requirements (31 CREDIT HOURS)**COMMUNICATION (6 CREDIT HOURS)**

Select six credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES (4 CREDIT HOURS)

Select four credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

SECOND LANGUAGE (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (6 CREDIT HOURS)

Select two additional General Education courses from two different Areas (1-7). Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (29 CREDIT HOURS)

TECHNICAL CORE REQUIREMENTS (29 CREDIT HOURS)

- BIOL 2210: Human Anatomy and Physiology I (3) and
- BIOL 2210LL: Human Anatomy and Physiology I Lab (1)
- CHEM 1215: General Chemistry I for STEM Majors (3) and
- CHEM 1215L: General Chemistry for STEM Majors Lab (1)
- EMS 113: EMT-Basic (8)
- EMS 142: EMT-Basic Lab (2)
- EMS 120: Introduction to EMS System (3)
- EMS 143: EMT-Intermediate Lab (1)
- EMS 151: EMT-Intermediate Clinical and Field Experience (2)
- EMS 180: EMT-Intermediate (5)

SUGGESTED ADDITIONAL COURSES (4 CREDIT HOURS)

Although not required for the Associates Degree, students applying to the UNM EMS Academy should also complete BIOL 2210. This may be taken as part of the flexible credit hours in general education or taken in addition to other requirements.

- BIOL 2225: Human Anatomy and Physiology II (3)
- BIOL 2225L: Human Anatomy and Physiology II Lab (1)

TOTAL TECHNICAL CORE REQUIREMENTS	29 CREDIT HOURS
TOTAL CREDIT HOURS	60 CREDIT HOURS

ASSOCIATE OF SCIENCE

Environmental Science

About the Program

This program provides students with the first two years of study toward a Bachelor's degree in Environmental Science or Earth and Planetary Science at UNM Albuquerque Campus or other four-year institutions. As a terminal degree, it is sufficient preparation for certain technician jobs in areas such as environmental testing and remediation.

A minimum of 60 credit hours with a minimum grade point average of 2.0. At least 15 of these 60 hours must be UNM catalog credit courses taken in residence. It is strongly recommended that the student check the specific requirements for the B.S. or B.A. of interest if planning to transfer in order to make the best choices among the optional courses below.

General Education Requirements (31 CREDIT HOURS)

COMMUNICATION (6 CREDIT HOURS)

Select six credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES (4 CREDIT HOURS)

Select four credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

SECOND LANGUAGE (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (6 CREDIT HOURS)

Select two additional General Education courses from two different Areas (1-7). Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (29 CREDIT HOURS)

ADDITIONAL MATHEMATICS (5-13 CREDIT HOURS):

Check the specifics B.S. or B.A. degree of interest, as well as the prerequisites of the science courses chosen from the list below,

to determine the best additional math courses.

- MATH 1230: Trigonometry (3)
- MATH 1250: Trigonometry and Pre-Calculus (5)
- MATH 1512: Calculus I (4)
- MATH 1522: Calculus II (4)

ADDITIONAL PHYSICAL AND NATURAL SCIENCES (16-24 CREDIT HOURS):

Check GEOL advisor for the specific B.S. or B.A. degree of interest to determine the best additional science courses. BIOL 1140 is generally required for a B.S. in GEOL, as is ENG 130L or CS 152L. ENG 130L and CS 152L should not BOTH be taken. Environmental Science & Earth and Planetary Science are interdisciplinary fields, and students may follow unique paths to B.A. or B.S. degrees. Other science courses besides those listed below (such as chemistry above 1225, physics above 1320, biology above 1140, astronomy 2110 or above) might be approved, as well as courses in geography, engineering, or anthropology. Guidance from a GEOL advisor is essential. To prepare for a Bachelor's Degree in Biology with a concentration in Conservation Biology or a B.S. in Physics with an EPS concentration, see the A.S. in Science program requirements. PHYS 1231, 1311, and 1321 are optional but strongly recommended practice problem-solving sections associated with PHYS 1230, 1310, and 1320 respectively.

- BIOL 1140: Biology for Health Related Sciences and Non-Majors (3)
- BIOL 1140L: Biology for Health Related Sciences and Non-Majors Lab (1)
- CHEM 1225: General Chemistry II for STEM Majors (3)
- CHEM 1225L: General Chemistry II for STEM Majors Lab (1)
- GEOL 2110C: Historical Geology Lecture and Laboratory (4)
- PHYS 1230: Algebra-Based Physics I (3)
- PHYS 1231: Problems in Algebra-Based Physics I (1)
- PHYS 1310: Calculus-Based Physics I (3)
- PHYS 1320: Calculus-Based Physics II (3)
- PHYS 1311: Problems in Calculus-Based Physics I (1)
- PHYS 1321: Problems in Calculus-Based Physics II (1)
- ENG 130L: Introduction to Engineering Computing (3)
- CS 152L: Computer Programming Fundamentals (3)

TOTAL TECHNICAL CORE REQUIREMENTS

29 CREDIT HOURS

TOTAL CREDIT HOURS

60 CREDIT HOURS

ASSOCIATE OF SCIENCE

Pre-Engineering

About the Program

This program represents the course work for the first two years of the baccalaureate degree at UNM Albuquerque Campus and is in compliance with the New Mexico Pre-Engineering Transfer Module. The courses are pertinent to all fields of engineering: mechanical, chemical, nuclear, civil, construction and computer. Students with this degree are qualified to enter the work force as technicians in various engineering fields or to continue their studies to the baccalaureate level.

A minimum of 60 credit hours with a minimum grade point average of 2.2 overall, with a grade of 2.5 or better in any specifically required course. At least 15 of these 60 hours must be UNM catalog credit courses taken in residence. It is strongly recommended that the student check the specific requirements for the BS in the particular area of engineering of interest (chemical and nuclear, civil, electrical and computer, mechanical etc.) in order to make the best choices among the optional courses.

General Education Requirements (31 CREDIT HOURS)

COMMUNICATION (6 CREDIT HOURS)

Select six credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES (4 CREDIT HOURS)

Select four credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

SECOND LANGUAGE (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (6 CREDIT HOURS)

Select two additional General Education courses from two different Areas (1-7). Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (18 CREDIT HOURS)

- MATH 1512: Calculus I (4)
- MATH 1522: Calculus II (4)
- MATH 2531: Calculus III (4)

Select 6 credit hours from the ECE or ME sequence below

- ECE 131 : Programming Fundamentals (3)
- ECE 203: Circuit Analysis I (3)

Or

- ME 160L: Mechanical Engineering Design I (3)
- ME 260L: Mechanical Engineering Design II (3)

TOTAL TECHNICAL CORE REQUIREMENTS

18 CREDIT HOURS

Electives (11 CREDIT HOURS)

Select 11 credit hours from the choices below

- CHEM 1215: General Chemistry I for STEM Majors (3)
- CHEM 1215L: General Chemistry I for STEM Majors Lab (3)
- PHYS 1310: Calculus-Based Physics I (3)
- PHYS 1310L: Calculus-Based Physics I Laboratory (1)
- PHYS 1320: Calculus-Based Physics II (3)
- PHYS 1320L: Calculus-Based Physics II Laboratory (1)
- CHEM 1225: General Chemistry II for STEM Majors (3)
- CHEM 1225L: General Chemistry II for STEM Majors Lab (1)
- PHYS 1311: Problems in Calculus-Based Physics I (1)
- PHYS 1321: Problems in Calculus-Based Physics II (1)
- ENG 130L: Introduction to Engineering Computing (3)
- ME 217: Energy, Environment & Society (3)
- ECE 238L: Computer Logic Design (4)
- CE 202: Engineering Statics (3)

TOTAL ELECTIVES

11 CREDIT HOURS

TOTAL CREDIT HOURS

60 CREDIT HOURS

ASSOCIATE OF SCIENCE

Pre-Professional Health Sciences

About the Program

This is a transfer degree program designed for students pursuing a career in the health sciences, such as nursing, dental hygiene, radiologic sciences, physical therapy, physician's assistant, medical laboratory science, occupational therapy, and pharmacy. Completion of this degree will fulfill the pre-admission requirements for most medical professional programs and enable students to transfer to a baccalaureate or higher degree program in one of these fields.

A minimum of 60 credit hours with a minimum C (not C-) grade or better in all courses and overall grade point average of 2.5 or higher. (Degree programs in some fields require an overall grade point average of 3.0 or better on prerequisites.) At least 15 of these 60 hours must be UNM catalog credit courses taken in residence. It is strongly recommended that the student check the specific requirements for the health sciences degree program of interest at UNM or other four-year institution before registering for courses in this degree program.

General Education Requirements (31 CREDIT HOURS)

COMMUNICATION (6 CREDIT HOURS)

Select six credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES (4 CREDIT HOURS)

Select four credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

SECOND LANGUAGE (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (6 CREDIT HOURS)

Select two additional General Education courses from two different Areas (1-7). Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (23 CREDIT HOURS)**ADDITIONAL MATHEMATICS AND STATISTICS (3 CREDIT HOURS)**

Select an additional Mathematics Course, not applied to general education requirements.

Choose the appropriate additional science and/or mathematics courses based on the requirements of your degree of choice

- MATH 1350: Introduction to Statistics (3)
- MATH 1220: College Algebra (3)
- MATH 1230: Trigonometry (3)
- MATH 1430: Applications of Calculus I (3)
- MATH 1440: Applications of Calculus II (3)

Note: MATH 1350 is a requirement for almost all health science programs (nursing, dental hygiene, medical laboratory science, physician's assistant, physical therapy, occupational therapy.) MATH 1220 is specifically suggested for some programs (medical laboratory science, radiologic sciences). Other 100-level core curriculum math courses may also work. Students should contact a 4 year institution of their choice to check the specific mathematics requirements for the degree program of interest. MATH 1430 is a requirement for UNM's degree in Pharmacy.

ADDITIONAL SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select one additional course in this area, not applied to general education requirements. For some health science programs any choices are accepted. Other degree programs may require one or more of the following:

- PSYC 1110: Introduction to Psychology (3)
- SOCI 1110: Introduction to Sociology (3)
- ECON 2120: Microeconomic Principles (3)
- PSYC 2120: Developmental Psychology (3)

Note: PSYC 1110 is currently required for UNM's nursing, dental hygiene, and radiologic sciences programs. SOCI 1110 is required for the UNM B.S. in Dental Hygiene. ECON 2120 is required for UNM's Pharm D degree. PSYC 2120 or another course in developmental psychology is recommended for UNM's programs in physical therapy and occupational therapy.

ADDITIONAL HUMANITIES (3 CREDIT HOURS)

Select one additional course in this area, not applied to general education requirements.

Note: For many health science programs any choices are accepted. The UNM Pharmacy degree program suggests the following: PHIL 1115: Introduction to Philosophy (3).

ADDITIONAL PHYSICAL AND NATURAL SCIENCES (14 CREDIT HOURS)

Select 14 credit hours of science not previously applied toward degree program.

Choose the appropriate additional courses based on the requirements of your degree of choice.

- BIOL 2210: Human Anatomy and Physiology I (3)

- BIOL 2225: Human Anatomy and Physiology II (3)
- BIOL 1140: Biology for Health Sciences (3)
- BIOL 1140L: Biology for Health Sciences Lab (1)
- BIOL 2110C: Principles of Biology: Cellular and Molecular Lecture and Laboratory (4)
- BIOL 2410C: Principles of Biology: Genetics Lecture and Laboratory (4)
- BIOL 2210L: Human Anatomy and Physiology I Laboratory (1)
- BIOL 2225L: Human Anatomy and Physiology II Laboratory (1)
- BIOL 2305: Microbiology for Health Sciences (4)
- CHEM 1120C: Introduction to Chemistry for Non-Majors Lecture and Laboratory (4)
- CHEM 1215: General Chemistry I for STEM Majors (3)
- CHEM 1215L: General Chemistry I for STEM Majors Lab (1)
- CHEM 1225: General Chemistry II for STEM Majors (3)
- CHEM 1225L: General Chemistry II for STEM Majors Lab (1)
- CHEM 2120: Integrated Organic Chemistry and Biochemistry (4)
- PHYS 1230: Algebra-Based Physics I (3)
- PHYS 1230L: Algebra-Based Physics I Laboratory (1)
- PHYS 1240: Algebra-Based Physics II (3)
- PHYS 1240L: Algebra-Based Physics II Laboratory (1)

Note: *Many but not all health science programs require the UNM-ABQ human cadaver labs associated with BIOL 2210 and 2225. These are not available at UNM-LA, but the cat-based dissection labs at UNM-LA are extremely helpful courses that can accompany the requirements and they will provide credit toward the AS in Pre- Professional Health Sciences at UNM-LA.*

Choose the appropriate additional science and/or mathematics courses based on the requirements of your degree of choice. Most degrees in nursing, dental hygiene, or radiologic sciences require:

- BIOL 1140: Biology for Health Sciences (3)
- BIOL 1140L: Biology for Health Sciences Lab (1)
- CHEM 1120C: Introduction to Chemistry for Non-Majors Lecture and Laboratory (4)

Note: *BIOL 1140 and CHEM 1120 may be taken in either order. There is a mathematics prerequisite for CHEM 1120C of MATH 103 or higher. There is no official prerequisite for BIOL 1140 but facility with basic math skills is assumed (e.g. decimals, percents, significant figures, graphing).*

Most degrees in medical laboratory science, physical therapy, physician's assistant, and pharmacy require:

- CHEM 1215: General Chemistry I for STEM Majors (3)
- CHEM 1215L: General Chemistry I for STEM Majors Laboratory (1)
- CHEM 1225: General Chemistry II for STEM Majors (3)
- CHEM 1225L: General Chemistry II for STEM Majors Laboratory (1)

Note: *BIOL 2110 and 2410 are required by UNM's Pharmacy degree program. BIOL 2110 is also a useful prerequisite for BIOL 2210 if BIOL 1140 has not been taken. BIOL 2410 or another genetics course is recommended for UNM's Physical Therapy program, and it has a prerequisite of BIOL 2110. BIOL 2305 (lecture plus lab) is required for nursing, dental hygiene, and pharmacy. It is recommended for physician's assistant and medical laboratory science programs.*

Note: *CHEM 2120 is required for UNM's Dental Hygiene degree program, and it is recommended for the Physician's Assistant and Medical Laboratory Science programs.*

Note: *Either the PHYS 1230-1240 series or the PHYS 1310-1320 series is required for UNM's pharmacy degree and physical therapy program. The physical therapy program requires the associated labs but pharmacy does not. The "Problems" courses PHYS 1231 and 1241 (which go with 1230-1240) and 1311 and 1321 (which go with 1310-1320) are not required but highly recommended practice problem-solving sections.*

TOTAL TECHNICAL CORE REQUIREMENTS

23 CREDIT HOURS

Electives (6 CREDIT HOURS)

Select six credit hours of electives not previously applied toward degree program. Choose the appropriate additional courses based on the requirements of your degree of choice. See Advisor notes below.

Physical and Natural Sciences

- BIOL 2210L: Human Anatomy and Physiology I Laboratory (1)
- BIOL 2225L: Human Anatomy and Physiology II Laboratory (1)
- BIOL 1140: Biology for Health Sciences (3)
- BIOL 1140L: Biology for Health Sciences Lab (1)
- BIOL 2110C: Principles of Biology: Cellular and Molecular Lecture and Laboratory (4)
- BIOL 2410C: Principles of Biology: Genetics Lecture and Laboratory (4)
- BIOL 2305: Microbiology for Health Sciences (4)
- CHEM 1120C: Introduction to Chemistry for Non-Majors Lecture and Laboratory (4)
- CHEM 1215: General Chemistry I for STEM Majors (3)
- CHEM 1215L: General Chemistry I for STEM Majors Laboratory (1)
- CHEM 1225: General Chemistry II for STEM Majors (3)
- CHEM 1225L: General Chemistry II for STEM Majors Laboratory (1)
- CHEM 2120: Integrated Organic Chemistry and Biochemistry (4)
- PHYS 1230: Algebra-Based Physics I (3)
- PHYS 1230L: Algebra-Based Physics I Laboratory (1)
- PHYS 1240: Algebra-Based Physics II (3)
- PHYS 1240L: Algebra-Based Physics II Laboratory (1)

Mathematics and Statistics

- MATH 1220: College Algebra (3) and MATH 107: Problems in College Algebra (1)
- MATH 1230: Trigonometry (3)
- MATH 1240: Pre-Calculus (3)
- MATH 1430: Applications of Calculus I (3) and MATH 110: Problems in Applications of Calculus I (1)
- MATH 1512: Calculus I (4)*
- MATH 1350: Introduction to Statistics (3)
- MATH 1440: Applications of Calculus II (3)*

Note: *These courses emphasize critical thinking and problem-solving.*

Business Computer and Information Systems

- BCIS 1110: Introduction to Information Systems (3)*

Note: BCIS 1110 is required for UNM's degree programs in radiologic sciences and medical laboratory science.

Communication

- ENGL 2210: Professional and Technical Communication (3)
- ENGL 2120: Intermediate Composition (3)
- COMM 1130: Public Speaking (3)
- COMM 2120: Interpersonal Communication (3)*

Note: COMM 2120 is not part of UNM's GenEd Curriculum, but it is a requirement or an option for UNM degrees in dental hygiene, radiologic sciences, medical laboratory science, and pharmacy. Please check the degree program of choice.

Nutrition

- NUTR 2110: Human Nutrition (3)*
- NUTR 1110: Nutrition for Health (3)

Note: NUTR 2110 is required for UNM's Nursing and Dental Hygiene programs. A nutrition course is recommended for the Physician's Assistant program.

Business Administration

- BUSA 1110: Introduction to Business (3)*

Note: BUSA 1110 is required for UNM's degree program in medical laboratory science

TOTAL ELECTIVES	6 CREDIT HOURS
TOTAL CREDIT HOURS	60 CREDIT HOURS

ASSOCIATE OF SCIENCE

Science

About the Program

This program represents the first two years of course work in general science with an emphasis on physics, chemistry, and biology. Completion of this degree will enable students to transfer to a four-year institution for additional studies leading to a bachelor's degree. It will also provide background studies for students wishing to enter the work force as technicians in science.

A minimum of 60 credit hours with a minimum grade point average of 2.0. At least 15 of these 60 hours must be UNM catalog credit courses taken in residence. It is strongly recommended that the student check the specific requirements for the B.S. or B.A. in the particular area of interest in science (biology, biochemistry, chemistry, physics) in order to make the best choices among the optional courses below.

General Education Requirements (31 CREDIT HOURS)

COMMUNICATION (6 CREDIT HOURS)

Select six credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES (4 CREDIT HOURS)

Select four credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

SECOND LANGUAGE (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (6 CREDIT HOURS)

Select two additional General Education courses from two different Areas (1-7). Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (29 CREDIT HOURS)

ADDITIONAL MATHEMATICS

Additional 8-12 credit hours in Mathematics not already taken as General Education core requirement.

Check the specific B.S. or B.A. degree of interest, as well as the prerequisites of the science courses chosen from the list below, to determine the best additional mathematics courses. Most science degrees require two semesters of 100-level calculus. MATH 2531 is required for a B.S. in chemistry or physics, or a B.A. in physics and astrophysics. MATH 1350 (or BCIS 1110) can substitute for second-semester calculus for a B.A. in biology.

ADDITIONAL SCIENCE

Additional 17-21 credit hours in Physical and Natural Sciences not already taken as General Education core requirement.

Check the specific B.S. or B.A. degree of interest to determine the best additional science courses. All UNM B.A. and B.S. degrees in biology, biochemistry, chemistry, and physics require PHYS course of some kind. Labs may or may not be required. PHYS 1231, 1241, 1311, 1321, and 2311 are optional, but strongly recommended practice problem-solving sections associated with PHYS 1230, 1240, 1310, 1320, and 2310 respectively. The four BIOL courses listed (including associated labs) are needed for B.A. or B.S. degrees in biology as well as the B.S. in physics with a biophysics concentration (and the first two are needed for a B.S. in biochemistry). The remaining courses are options in a few science degree programs. To prepare for a bachelor's degree in GEOL, EPS or ENVS, see the A.S. in Environmental Science Program requirements.

TOTAL TECHNICAL CORE REQUIREMENTS

29 CREDIT HOURS

TOTAL CREDIT HOURS

60 CREDIT HOURS

ASSOCIATE OF APPLIED SCIENCE

Accounting

About the Program

This degree program is designed to help students prepare for entry into the accounting field as accounting clerks or technicians. The core courses in general education combined with computer applications provide the necessary skills for success in today's changing business world. Students will become proficient in basic accounting principles: manual and computerized journals; posting; adjustments; monthly statements; payroll; bank reconciliations; cash flow reports; invoices; and the basics of taxes. Some, but not all, of the required courses will transfer to a BBA program at UNM Albuquerque Campus. Students planning to seek a four-year degree in accounting or another business field should pursue an Associate of Arts in Pre-Business Administration.

A minimum of 60 credits with a minimum grade point average of 2.0. At least 15 of these 60 hours must be UNM catalog credit courses taken in residence.

General Education Requirements (15 CREDIT HOURS)

COMMUNICATION (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES AND SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES AND ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (3 CREDIT HOURS)

Select one additional General Education course from Areas 1-7. Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (21 CREDIT HOURS)

BUSINESS, MANAGEMENT, AND TECHNOLOGY (35 CREDIT HOURS)

- BSTC 202: Microcomputer Accounting (3)
- BSTC 203: Business Communication (3)
- BSTC 218: Business Law (3)
- BSTC 212: Introduction to Income Tax (3)
- BSTC 220: Management Accounting (3)
- BCIS 1110: Introduction to Information Systems (3)

- CT 202: Applications of Spreadsheets (3)
- ACCT 2110X: Principles of Accounting IA (3)
- ACCT 1125: Supplemental Instruction to Financial Accounting (1)
- ACCT 2110Y: Principles of Accounting IB (3)
- ACCT 1125: Supplemental Instruction (1)
- BUSA 1110: Introduction to Business (3)
- MGMT 158: Ethics in Organizations (3)

TOTAL TECHNICAL CORE REQUIREMENTS

35 CREDIT HOURS

Electives (10 CREDIT HOURS)

TECHNICAL ELECTIVES OR COOPERATIVE EDUCATION WORK PHASES (10 CREDIT HOURS)

Choose from the following courses:

- BSTC 113: Introduction to Project Management (1)
- BSTC 114: Customer Service and Relations (1)
- BSTC 115: Time Management (1)
- BSTC 116: Stress Management for the Workplace (1)
- BSTC 117: Organization Skills for the Workplace (1)
- BSTC 118: Conflict Resolution for the Workplace (1)
- BSTC 204: Human Relations in Business (3)
- BSTC 193: Topics (1-4)
- BSTC 293: Topics (1-4)
- BSTC 296: Business Cooperative Work Phase 1, 2, or 3 (1-3)
- ECON 2130: Personal Investing (3)
- MGMT 105: Management Coop (3)
- MKTG 2110: Principles of Marketing (3)
- FYEX 1110: First-Year Seminar (2)

Note that various Topics courses will be offered and students may receive credit for taking multiple Topics courses.

TOTAL ELECTIVES

10 CREDIT HOURS

TOTAL CREDIT HOURS

60 CREDIT HOURS

ASSOCIATE OF APPLIED SCIENCE

Applied Technologies

About the Program

This program is designed to develop skills that will assist students in gaining employment as entry level technicians. Program content is intended to provide a balance of performance skills in electro-mechanical technology and solar technology. Students will be provided with quality training and career pathways in modern applied technologies. Students will learn to use the techniques, skills, and modern applied science tools necessary for professional practice in their chosen area of concentration.

About the Electro-Mechanical Concentration

Building on the basic technical core courses, students in the Electro-Mechanical Concentration will learn the basic elements of DC circuits, AC electronic components, and electronic devices. Students will also be introduced to fundamental mechanical systems (vacuum, cryogenic, and hydraulic systems) and their design, assembly, and operation.

A minimum of 60 credit hours with a minimum grade point average of 2.0. At least 15 of these 60 hours must be UNM catalog credit courses taken in residence. Minimum grade of C (not C-) in each Technical Core course.

General Education Requirements (15 CREDIT HOURS)

COMMUNICATION (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES AND ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (3 CREDIT HOURS)

Select one additional General Education course from Areas 1-7. Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (44 CREDIT HOURS)

- CHEM 1120C: Introduction to Chemistry for Non-Majors Lecture and Laboratory (4)
- PHYS 1115: Survey of Physics (3)
- PHYC 1115L: Survey of Physics Laboratory (1)
- Additional MATH credits not already taken as part of the General Education Core requirement (3)
- DRFT 103: Introduction to Drafting (3)

- DRFT 119: Blueprint Reading (3)
- ELCT 105L: Industrial Shop Practice (3)
- MCHT 101L: Basic Welding (4)

ELECTRO-MECHANICAL TECHNOLOGY (20 CREDIT HOURS)

- ELCT 101L: DC Circuit Analysis (4)
- ELCT 102L: AC Circuit Analysis (4)
- ELCT 103: Mechanical Systems (3)
- ELCT 137: Digital Electronics I (Combinational Logic) (3)
- ELCT 203: Electronic Devices (4)
- ELCT 204L: Electronics Lab (2)

TOTAL TECHNICAL CORE REQUIREMENTS	44 CREDIT HOURS
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Electives (1 CREDIT HOURS)

Select 1 credit hour from the following:

FYEX 1110 (2), BSTC 111 (1), BSTC 113 (1), BSTC 114 (1), BSTC 115 (1), BSTC 116 (1), BSTC 117 (1), BSTC 118 (1), CS 102 (1), CS 103 (1), FDMA 1545 (1)

TOTAL ELECTIVES	1 CREDIT HOURS
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TOTAL CREDIT HOURS	60 CREDIT HOURS
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ASSOCIATE OF APPLIED SCIENCE

Business

About the Program

The Associate of Applied Science in Business has two concentrations, one in Management and one in Marketing. This program is designed for students preparing for a career in business. The broad-based curriculum includes the use of microcomputers and their applications and focuses on the fundamentals of business, with the opportunity to focus on either management or marketing as a concentration.

About the Management Concentration

Building on the General Education requirements of this degree, the students in the management concentration will focus on management issues, taking courses in management, human relations, business law, and management accounting.

About the Marketing Concentration

Building on the General Education requirements of this degree, the students in the marketing concentration will focus on marketing issues, taking courses in marketing and digital media arts.

A minimum of 60 credits with a minimum grade point average of 2.0. At least 15 of these 60 hours must be UNM catalog credit courses taken in residence.

General Education Requirements (15 CREDIT HOURS)

COMMUNICATION (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES AND SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES AND ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (3 CREDIT HOURS)

Select one additional General Education course from Areas 1-7. Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (30 CREDIT HOURS)

TECHNICAL COURSES COMMON TO BOTH CONCENTRATIONS (17 CREDIT HOURS)

- BSTC 203: Business Communication (3)
- BCIS 1110: Introduction to Information Systems (3)

- ACCT 2110X: Principles of Accounting IA (3)
- ACCT 1125: Supplemental Instruction to Financial Accounting (1)
- ACCT 2110Y: Principles of Accounting IB (3)
- ACCT 1125: Supplemental Instruction (1)
- MGMT 158: Ethics in Organizations (3)

MANAGEMENT CONCENTRATION ADDITIONAL TECHNICAL REQUIREMENTS (13 CREDIT HOURS)

- BSTC 113: Introduction to Project Management (1)
- BSTC 204: Human Relations in Business (3)
- BSTC 218: Business Law (3)
- BSTC 220: Management Accounting (3)
- BUSA 1110: Introduction to Business (3)

MARKETING CONCENTRATION ADDITIONAL TECHNICAL REQUIREMENTS (13 CREDIT HOURS)

- CT 165: Introduction to Web Authoring (3)
- DMA 101*: Introduction to Digital Imaging and Scanning (1)
- DMA 165: Introduction to Digital Media Arts (Photoshop) (3)
- DMA 203: Introduction to Desktop Publishing (3)
- MKTG 2110: Principles of Marketing (3)

TOTAL TECHNICAL CORE REQUIREMENTS 30 CREDIT HOURS

Electives (15 CREDIT HOURS)

MANAGEMENT CONCENTRATION TECHNICAL ELECTIVES (15 CREDIT HOURS)

Select 15 credit hours from:

- BSTC 111, BSTC 114, BSTC115, BSTC116, BSTC117, BSTC 118, BSTC 202, BSTC 212, BSTC 193, BSTC 293, BSTC 296, CT 165, CT 202, FDMA 1545, FDMA 1515, FDMA 1120, ECON 2130, MGMT 105, BUSA 1996, MKTG 2110, FYEX 1110

MARKETING CONCENTRATION TECHNICAL ELECTIVES (15 CREDIT HOURS)

Select 15 credit hours from:

- BSTC 111, BSTC 113, BSTC 114, BSTC115, BSTC116, BSTC117, BSTC 118, BSTC 193, BSTC 202, BSTC 204, BSTC 212, BSTC 218, BSTC 220, BSTC 293, COMM 1150, FDMA 1535, DMA 175, DMA 250, ECON 2130, BSTC 296, CT 202, BUSA 110, MGMT 105, BUSA 1996, FYEX 1110

TOTAL ELECTIVES 15 CREDIT HOURS

TOTAL CREDIT HOURS 60 CREDIT HOURS

ASSOCIATE OF APPLIED SCIENCE**Fire Science****About the Program**

This program is designed to develop skills that will assist a student in gaining employment in various fire science and emergency medical services career fields. Graduates may expect to find employment opportunities with public fire departments, insurance companies, industrial firms, governmental agencies, educational organizations, ambulance services and fire protection manufacturing and research groups. This degree program will help enable persons currently employed in fire service to prepare themselves for advancement in their careers or begin a pathway to becoming an EMT. It will provide the student new to fire science and emergency medical services with the general education and technical training to succeed as a Fire Science professional. Program content is based on the national Fire and Emergency Services Higher Education (FESHE) curriculum.

A student must earn a minimum of 60 credit hours with a minimum grade point average of 2.5. At least 15 of these 60 credit hours must be UNM catalog credit courses taken in residence. The students must have a minimum of C (not C-) in each Technical Core course.

General Education Requirements (15 CREDIT HOURS)**COMMUNICATION (3 CREDIT HOURS)**

Select three credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES AND ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (3 CREDIT HOURS)

Select one additional General Education course from Areas 1-7. Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (42 CREDIT HOURS)

- BIOL 1140: Biology for Health Sciences (3)
- BIOL 1140L: Biology for Health Sciences Lab (1)
- CHEM 1120C: Introduction to Chemistry for Non-Majors Lecture and Laboratory (4)
or
- CHEM 1215: General Chemistry I for STEM Majors (3)

- CHEM 1215L: General Chemistry I for STEM Majors Laboratory (1)
- GEOL 1110: Physical Geology (3)
- GEOL 1110L: Physical Geology Lab (1)
- FISC 101: Principles of Emergency Services (3)
- FISC 102: Fire Prevention (3)
- FISC 105: Principles of Fire and Emergency Services Safety & Survival (3)
- FISC 106: Fire Behavior and Combustion (3)
- FISC 201: Fire Protection Systems (3)
- FISC 212: Building Construction for Fire Prevention (3)
- FISC 103: Hazardous Materials (3)
- FISC 210: Incident Safety Officer (3)
- FISC 220: Fire Protection Hydraulics and Water Supply (3)
- FISC 225: Strategy and Tactics (3)

TOTAL TECHNICAL CORE REQUIREMENTS

42 CREDIT HOURS

Electives (3 CREDIT HOURS)*Select 3 credit hours from the following:*

- FISC 104: Wildland Firefighting (3)
- FISC 202: Fire Administration I (3)
- BCIS 1110: Introduction to Information Systems (3)
- FYEX 1110: First-Year Seminar (2)
- EMS 113: EMT-Basic (8)
- EMS 142: EMT-Basic Lab (2)
- EMS 180: EMT-Intermediate (5)
- EMS 143: EMT-Intermediate Lab (1)
- EMS 151: EMT-I Clinical and Field Experience (2)

TOTAL ELECTIVES

3 CREDIT HOURS

TOTAL CREDIT HOURS

60 CREDIT HOURS

ASSOCIATE OF APPLIED SCIENCE

General Studies

About the Program

The Associate of Applied Science in General Studies is designed to provide students with the opportunity to develop programs of study not available through other UNM - Los Alamos programs. A student's program may reflect either specialized or broad patterns of educational experience. Most general education courses will articulate to four-year college programs. Note: Students planning to pursue a particular baccalaureate degree should familiarize themselves with the requirements of the transfer institution and select courses accordingly.

A minimum of 60 credits with a minimum grade point average of 2.0. At least 15 of these 60 hours must be UNM catalog credit courses taken in residence.

General Education Requirements (15 CREDIT HOURS)

COMMUNICATION (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES AND SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES AND ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (3 CREDIT HOURS)

Select one additional General Education course from Areas 1-7. Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (3 CREDIT HOURS)

COMPUTER SCIENCE/COMPUTER TECHNOLOGY/INFORMATION TECHNOLOGY (3 CREDIT HOURS)

Select any course in this area.

TOTAL TECHNICAL CORE REQUIREMENTS

3 CREDIT HOURS

Electives (42 CREDIT HOURS)

GENERAL EDUCATION ELECTIVES (42 CREDIT HOURS)

Students must complete 42 credit hours of electives numbered 101 or higher, except MATH 118.

TOTAL ELECTIVES

42 CREDIT HOURS

TOTAL CREDIT HOURS

60 CREDIT HOURS

ASSOCIATE OF APPLIED SCIENCE

Information Technology with Cybersecurity

About the Program

This program is designed to develop skills that will assist a student in gaining entry-level employment in an information technology field such as computer security technician, technical support, and network administration.

A minimum of 60 credit hours with a minimum cumulative grade point average of 2.5. At least 15 of these 60 credit hours must be UNM catalog credit courses taken in residence. Information technology with cybersecurity emphasis component courses must be completed with a minimum grade of C or better. All other courses below used for this degree must be completed with a grade of C- or better.

General Education Requirements (15 CREDIT HOURS)

COMMUNICATION (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES AND ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (3 CREDIT HOURS)

Select one additional General Education course from Areas 1-7. Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (40 CREDIT HOURS)

- CS 101: Introduction to Computing Science (4)
- ENG 130L: Introduction to Engineering Computing (3) or CS 152L: Computer Programming Fundamentals (3)
- CT 102: Introduction to Microcomputers on the PC (4)
- CS 293: Social and Ethical Computing (1)
- IT 119: Networking Core Concepts (3)
- IT 130: Microcomputer Operating systems (3)

- IT 141: Technical Support (3)
- IT 231: Systems Administration (3)
- IT 250: Web Fundamentals (3)
- IT 260: Information Assurance and Security (3)
- IT 262: Scripting for Network Defense (3)
- IT 265: Computer Forensics and Incident Response (3)
- IT 271: Databases and Information Management (4)

TOTAL TECHNICAL CORE REQUIREMENTS

40 CREDIT HOURS

Electives (5 CREDIT HOURS)

Select 5 credit hours from the following:

FYEX 1110 (2), BSTC 111 (1), BSTC 113 (1), BSTC 114 (1), BSTC 115 (1), BSTC 116 (1), BSTC 117 (1), BSTC 118 (1), CS 102 (1), CS 103 (1), CS 241L (3), IT 109 (3), IT 293 (1-4), CT 202 (3), CS 261 (3), ECE 238L (4)

TOTAL ELECTIVES

5 CREDIT HOURS

TOTAL CREDIT HOURS

60 CREDIT HOURS

ASSOCIATE OF APPLIED SCIENCE

Nuclear Enterprise Science and Technology

About the Program

The AAS in Nuclear Enterprise Science and Technology program is designed to provide students with the skills and experience to qualify for entry-level positions in nuclear facilities, in positions such as Fissionable Material Handlers, Glovebox Operators, and Materials Management Technicians. This degree will also allow students wishing to pursue further education to ladder their credentials with additional coursework to acquire a Bachelor's Degree in Engineering Technology or related field. The goal of the program is to provide for a technically qualified workforce who can execute a variety of programmatic work in modern nuclear materials handling and processing facilities, and to expand participants' reasoning skills, communication skills and critical thinking skills to not just understand what to do on the job, but to understand the chemical, physical and biological implications of action and inaction related to their job duties. The degree has concentrations in both Nuclear Materials Handling Technology and Hazardous Materials Management and Waste Technology. Students select a concentration based upon current employment, previous coursework, and work experience. Participants in the program must be able to obtain a security clearance through the Department Of Energy and have instructor permission to enroll in the technical courses.

The program requires a minimum of 60-credit hours with a combination of General Education requirements, technical coursework and laboratory experiences of on-the-job training (OJT) with subject matter experts from Los Alamos National Laboratory and N3B. Technical program curriculum is based upon various Department of Energy (DOE) documents that address glovebox use and the handling of fissionable materials and waste operator qualification, and DOE Radiation Control Technician requirements. Additional course work includes physics, chemistry and biology courses. Students completing the program are prepared to take the DOE certification exams and will be prepared to work in nuclear facilities throughout New Mexico.

General Education Requirements (15 CREDIT HOURS)

COMMUNICATION (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES AND ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (3 CREDIT HOURS)

Select one additional General Education course from Areas 1-7. Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (38 CREDIT HOURS)

TECHNICAL COURSES COMMON TO BOTH CONCENTRATIONS (18 CREDIT HOURS)

- NFFW 1110: Nuclear Facility Fundamentals (5)*
- ASFD 1110: Introduction to Actinide Science (5)*
- CHEM 1215: General Chemistry I for STEM Majors (3)
- CHEM 1225L: General Chemistry II for STEM Majors Laboratory (1)
- PHYS 1115: Survey of Physics (3)
- PHYS 1115L: Survey of Physics Laboratory (1)

HAZARDOUS MATERIALS MANAGEMENT AND WASTE TECHNOLOGY TECHNICIAN CONCENTRATION ADDITIONAL TECHNICAL REQUIREMENTS (20 CREDIT HOURS)

- BIOL 1140: Biology for Health Sciences (3)
 - BIOL 1140L: Biology for Sciences Laboratory (1)
 - GEOL 1120: Environmental Geology (3)
 - GEOL 1120L: Environmental Geology Laboratory (1)
 - BSTC 113: Introduction to Project Management (1)
 - BSTC 118: Conflict Resolution for the Workplace (1)
 - RCTB 1110: Radiation Control Technician (9)*
- and*
- RCTB 1110 L: Radiation Control Technician Laboratory (1)*

OR

- NWOB 1110: Nuclear Waste Operator (9)*
- and*
- NWOB 1110L: Nuclear Waste Operator Laboratory (1) *

*INSTRUCTOR PERMISSION REQUIRED FOR ENTRY INTO THESE COURSES

NUCLEAR MATERIALS HANDLER TECHNICIAN CONCENTRATION ADDITIONAL TECHNICAL REQUIREMENTS (20 CREDIT HOURS)

- NFFW 1120: Fissionable Material Handler (5)*
- NFFW 1120L: Nuclear Facility Lab (5)*
- ASFD 1120: Nuclear Materials Process Techniques (5)*
- ASFD 1120L: Nuclear Materials Processing Lab (5)*

*INSTRUCTOR PERMISSION REQUIRED FOR ENTRY INTO THESE COURSES.

TOTAL TECHNICAL CORE REQUIREMENTS

38 CREDIT HOURS

Electives (7 CREDIT HOURS)

TECHNICAL ELECTIVES FOR BOTH CONCENTRATIONS (7 CREDIT HOURS)

Please consult with your concentration advisor to determine which courses are most appropriate.

Select 7 credit hours not previously applied to the degree from:

- FYEX 1110, BIOL 2110C, BSTC 113, BSTC 114, BSTC 115, BSTC 116, BSTC 117, BSTC 118, BSTC 218, CHEM 1225, CHEM 1225L, COMM 1130, CT 102, CT 111, DRFT 103, ELCT 101L, ELCT 102L, ELCT 137, ELCT 162, ELCT 163, ENG 116, MGMT 158, PBST 120, PBST 109, PHYS 1115, PHYS 1115L, PHYS 1230, PHYS 1230L, PSYC 2120

TOTAL ELECTIVES 7 CREDIT HOURS

TOTAL CREDIT HOURS 60 CREDIT HOURS

ASSOCIATE OF APPLIED SCIENCE

Public Safety

About the Program

The Associate of Applied Science in Public Safety with Concentrations in Police Science, Emergency Management, and Homeland Security is a specialized degree program designed to build a workforce that is customized to the expected needs of Police departments, Emergency Management groups, and Homeland Security departments in Northern New Mexico and beyond. The program will provide training and formal education for those entering the areas of Police operations, Emergency Management operations, and Homeland Security operations.

The student must earn a minimum of 60 credit hours with an overall GPA of 2.0 or higher; the student must earn a minimum grade of C (not C-) in each Technical course. At least 15 of these 60 hours must be UNM catalog credit courses taken in residence.

General Education Requirements (15 CREDIT HOURS)

COMMUNICATION (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

PHYSICAL AND NATURAL SCIENCES AND SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES AND ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (3 CREDIT HOURS)

Select one additional General Education course from Areas 1-7. Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (21 CREDIT HOURS)

TECHNICAL CORE COURSES COMMON TO ALL CONCENTRATIONS (30 CREDIT HOURS)

- BCIS 1110: Introduction to Information Systems (3)
- PBST 101: Introduction to Homeland Security (3)
- PBST 102: Principals of Emergency Management (3)
- PBST 105: Incident Command (3)
- PBST 109: Public Safety Interview and Report Writing (3)
- PBST 110: Basic Police Operations (3)

- PBST 204: Constitutional Law for Public Safety Personnel (3)
- COMM 1115: Intro to Communication (3)
- CJUS 1120: Criminal Law (3)
- CJUS 2130: Police and Society (3)

Additional Technical Courses by Concentration (6 CREDIT HOURS)

POLICE SCIENCE CONCENTRATION (6 CREDIT HOURS)

- CJUS 2140: Criminal Investigations (3)
- PBST 119: Traffic Accident Investigation (3)

EMERGENCY MANAGEMENT CONCENTRATION (6 CREDIT HOURS)

- PBST 120: Emergency Management Planning (3)
- PBST 121: Introduction to Security (3)

HOMELAND SECURITY CONCENTRATION (6 CREDIT HOURS)

- PBST 106: Terrorism and Public Safety (3)
- PBST 131: Transportation Security (3)

TOTAL TECHNICAL CORE REQUIREMENTS

35 CREDIT HOURS

Electives (9 CREDIT HOURS)

TECHNICAL ELECTIVES FOR ALL CONCENTRATIONS (9 CREDIT HOURS)

Please consult with your concentration advisor to determine which courses are most appropriate.

- CRJS 260: Juvenile Justice and Delinquency (3)
- IT 193: Topics in Cybersecurity (3)
- BUSA 1110: Introduction to Business (3)
- BSTC 116: Stress Management for the Workplace (1)
- BSTC 117: Organization Skills for the Workplace (1)
- BSTC 118: Conflict Resolution for the Workplace (1)
- PBST 193: Topics in Public Safety (1-3) May be repeated for credit up to 6 credit hours
- PSYC 2110: Social Psychology (3)
- SOCI 2120: Introduction to Criminal Justice Systems (3)
- FYEX 1110: First-Year Seminar (2)

TOTAL ELECTIVES

9 CREDIT HOURS

TOTAL CREDIT HOURS

60 CREDIT HOURS

ASSOCIATE OF APPLIED SCIENCE**Robotics****About the Program**

This program is designed to develop skills that will assist students in gaining employment in various robotics career fields. Graduates may expect to find employment opportunities with manufacturing and industrial firms, government agencies, medical facilities, educational organizations, emergency responding agencies, security and surveillance firms, and research & development groups. This degree program will enable students to become employable with a secure future in 21st century advanced technology jobs. This degree program will provide students with the general education and technical training to succeed as robotics professionals. Program content is based on industrial robotics certification modules through FANUC Robotics, the world's largest manufacturer of robotic equipment and software.

A minimum of 60 credit hours with a minimum grade point average of 2.5. At least 15 of these 60 hours must be UNM catalog credit courses taken in residence. A minimum grade of C (not C-) in each technical course is required.

General Education Requirements (15 CREDIT HOURS)**COMMUNICATION (3 CREDIT HOURS)**

Select three credit hours from UNM GenEd Curriculum courses in this area.

MATHEMATICS AND STATISTICS (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

SOCIAL AND BEHAVIORAL SCIENCES (3 CREDIT HOURS)

Select three credit hours from UNM GenEd Curriculum courses in this area.

HUMANITIES AND ARTS AND DESIGN (3 CREDIT HOURS)

Select three hours from UNM GenEd Curriculum courses in this area.

STUDENT CHOICE (3 CREDIT HOURS)

Select one additional General Education course from Areas 1-7. Students who do not place into English 1120 may apply the credit hours from the prerequisite English 1110 (or the equivalent English 1110Y or English 1110Z) to help fulfill Area 8 requirements.

Technical Core Requirements (42 CREDIT HOURS)

- CHEM 1120C: Introduction to Chemistry for Non-Majors Lecture and Laboratory (4)
- PHYS 1115: Survey of Physics (3)
- PHYC 1115L: Survey of Physics Laboratory (1)
- DRFT 103: Introduction to Drafting (3)
- CT 111: Introduction to Computer Aided Drafting and Design (3)
- ELCT 103: Mechanical Systems (3)
- ELCT 105L: Industrial Shop Practice (3)

- MCHT 101L: Basic Welding (4)
- ELCT 162: Robotics (3)
- ELCT 163: Advanced Robotics (3)
- ROBO 201: Industrial Robotics Operations (3)
- ROBO 202: Advanced Industrial Robotics (3)
- ROBO 204: Programmable Logic Controllers (3)
- ROBO 290: Robotics Synthesis (3)

TOTAL TECHNICAL CORE REQUIREMENTS 42 CREDIT HOURS

Electives (3 CREDIT HOURS)

Select 3 credit hour from the following:

FYEX 1110 (2), BSTC 111 (1), BSTC 113 (1), BSTC 114 (1), BSTC 115 (1), BSTC 116 (1), BSTC 117 (1), BSTC 118 (1), MCHT 120 (3)

TOTAL ELECTIVES 3 CREDIT HOURS

TOTAL CREDIT HOURS 60 CREDIT HOURS

CERTIFICATE

Accounting

This certificate represents completion of a course of studies related to the field of Accounting. It may be used as a terminal certificate with subsequent entrance into the work force, or it may form the basis for additional course work leading to an associate's degree in other fields.

A minimum of 30 credit hours with a minimum grade point average of 2.0. At least 15 of these 30 hours must be University of New Mexico catalog credit courses taken in residence.

General Education Requirements

WRITING AND SPEAKING (3 CREDIT HOURS)

- ENGL 1110: Composition I (3) *or* ENGL 1110Y: Composition I: Stretch II (3) *or* ENGL 1110Z: Enhanced Composition (4)

MATHEMATICS (3 CREDIT HOURS)

- MATH 1220: College Algebra (3) *or*
- MATH 1130: Survey of Mathematics (3) *or*
- MATH 1350: Introduction to Statistics (3)

TECHNICAL CORE COURSES (17 CREDIT HOURS)

- BSTC 202: Microcomputer Accounting (3)
- BCIS 1110: Introduction to Information Systems (3)
- ACCT 2110X: Principles of Accounting IA (3)
- ACCT 1125: Supplemental Instruction to Financial Accounting (1)
- ACCT 2110Y: Principles of Accounting IB (3)
- ACCT 1125: Supplemental Instruction (1)
- BUSA 1110: Introduction to Business (3)

TECHNICAL ELECTIVE (7 CREDIT HOURS)

Choose from the following courses:

- BSTC 113: Project Management (1)
- BSTC 114: Customer Service & Relations (1)
- BSTC 115: Time Management for Professionals (1)
- BSTC 116: Stress Management for the Workplace (1)
- BSTC 117: Organization Skills for the Workplace (1)
- BSTC 118: Conflict Resolution for the Workplace (1)
- BSTC 193: Topics (1-4)

- BSTC 293: Topics (1-4)
- BSTC 203: Business Communication (3)
- BSTC 204: Human Relations in Business (3)
- BSTC 212: Introduction to Income Tax (3)
- BSTC 220: Management Accounting (3)
- CT 202: Applications of Spreadsheets (3)
- MGMT 105: Management Coop (3)
- MGMT 158: Ethics in Organizations (3)
- BUSA 1996: Special Topics in Management (3)

(Note that various topics courses will be offered and students may receive credit for taking multiple topics courses)

TOTAL TECHNICAL CORE CREDIT HOURS

24 CREDIT HOURS

TOTAL CREDIT HOURS

30 CREDIT HOURS

CERTIFICATE

Art Studio

The Art Studio Certificate program enables students to concentrate on specific areas of study within this field. Students are required to take both academic and art studio classes to fulfill the certificate requirements. Like the Associate of Arts in Art Studio, courses and course sequences are designed to encourage the student's power of observation and aesthetic awareness. Simultaneously students are taught technique and craft to use these powers creatively.

A minimum of 30 credit hours with a cumulative grade point average of 2.5. At least 15 of these 30 hours must be UNM-LA catalog credit courses taken in the UNM system.

General Education Requirements

WRITING AND SPEAKING (3 CREDIT HOURS)

- ENGL 1110: Composition I (3) or ENGL 1110Y: Composition I: Stretch II (3) or ENGL 1110Z: Enhanced Composition (4)
- ENGL 1120: Composition II (3)
- ENGL 2120: Intermediate Composition (3)

HUMANITIES (3 CREDIT HOURS)

- HIST 1150: Western Civilization I (3) *or*
- HIST 1160: Western Civilization II (3)

Technical Core Requirements

ART HISTORY (6 CREDIT HOURS)

- ARTH 2110: History of Art I (3)
- ARTH 2120: History of Art II (3) *or*
- ARTH 2130: Modern Art (3)

ART STUDIO COURSES (9 CREDIT HOURS)

- ARTS 1610: Drawing I (3)
- ARTS 1220: Art Practices I (3)
- ARTS 1230: Art Practices II (3)

ART STUDIO ELECTIVES (9 CREDIT HOURS)

Select 3 from:

- ARTS 1310: Introduction to Ceramics (3)
- ARTS 2610: Drawing II (3)

- ARTS 2630: Painting I (3)
- ARTS 2630: Painting II (3)
- ARTS 2340: Raku (3)
- ARTS 1320: Ceramics I (3)

TOTAL TECHNICAL CORE REQUIREMENTS

24 CREDIT HOURS

TOTAL CREDIT HOURS

30 CREDIT HOURS

CERTIFICATE

Business

This certificate represents completion of a course of studies related to the field of Business, with a concentration in either Management or Marketing. It may be used as a terminal certificate with subsequent entrance into the work force, or it may form the basis for additional course work leading to an associate's degree. *Select a Certificate with a concentration in either Management or Marketing.*

A minimum of 30 credit hours with a minimum grade point average of 2.0. At least 15 of these 30 hours must be University of New Mexico catalog credit courses taken in residence

General Education Requirements for either concentration

WRITING AND SPEAKING (3 CREDIT HOURS)

- ENGL 1110: Composition I (3) or ENGL 1110Y: Composition I: Stretch II (3) or ENGL 1110Z: Enhanced Composition (4)

MATHEMATICS (3 CREDIT HOURS)

- MATH 1220: College Algebra (3) *or*
- MATH 1130: Survey of Mathematics (3) *or*
- MATH 1350: Introduction to Statistics (3)

Management Concentration

TECHNICAL CORE COURSES REQUIRED (20 CREDIT HOURS)

- BSTC 203: Business Communication (3)
- BCIS 1110: Introduction to Information Systems (3)
- ECON 2120: Microeconomic Principles (3)
- ACCT 2110X: Principles of Accounting IA (3)
- ACCT 1125: Supplemental Instruction to Financial Accounting (1)
- ACCT 2110Y: Principles of Accounting IB (3)
- ACCT 1125: Supplemental Instruction (1)
- BUSA 1110: Introduction to Business (3)

TECHNICAL ELECTIVES (4 CREDIT HOURS)

Select 3 credits from the following:

- BSTC 113: Introduction to Project Management (1)
- BSTC 114: Customer Service and Relations (1)
- BSTC 115: Time Management (1)

- BSTC 116: Stress Management for the Workplace (1)
- BSTC 117: Organization Skills for the Workplace (1)
- BSTC 118: Conflict Resolution for the Workplace (1)
- BSTC 193: Topics (1-4)
- BSTC 204: Human Relations in Business (3)
- BSTC 220: Management Accounting (3)
- BSTC 293: Topics (1-4)
- MGMT 158: Ethics in Organizations (3)

TOTAL TECHNICAL REQUIREMENTS	24 CREDIT HOURS
TOTAL DEGREE REQUIREMENTS- MANAGEMENT CONCENTRATION	30 CREDIT HOURS

Marketing Concentration

TECHNICAL CORE COURSES REQUIRED (19-20 CREDIT HOURS)

- BCIS 1110: Introduction to Information Systems (3) (3), or
- CT 102: Introduction to Microcomputers on PC (4)
- ECON 2120: Microeconomic Principles
- DMA 165: Introduction to Digital Media Arts I (Photoshop) (3)
- DMA 166: Digital Media Arts II (Illustrator) (3)
- ACCT 2110X: Principles of Accounting IA (3)
- ACCT 1125: Supplemental Instruction to Financial Accounting (1)
- MKTG 2110: Principles of Marketing (3)

TECHNICAL ELECTIVES (5 CREDIT HOURS)

Select 5 credits from the following:

- BSTC 113: Introduction to Project Management (1)
- BSTC 114: Customer Service and Relations (1)
- BSTC 115: Time Management (1)
- BSTC 116: Stress Management for the Workplace (1)
- BSTC 117: Organization Skills for the Workplace (1)
- BSTC 118: Conflict Resolution for the Workplace (1)
- BSTC 193: Topics (1-4)
- BSTC 293: Topics (1-4)
- CT 165: Introduction to Web Authoring (3)
- FDMA 1545: Introduction to Photography and Digital Imaging (1)
- FDMA 1120: Desktop Publishing I (3)

TOTAL TECHNICAL REQUIREMENTS	24-25 CREDIT HOURS
TOTAL CREDIT HOURS - MARKETING CONCENTRATION	30-31 CREDIT HOURS

CERTIFICATE

Electro-Mechanical Technology

This certificate represents completion of a course of studies related to the field of Electro Mechanical Technology. It may be used as a terminal certificate with subsequent entrance into the work force, or it may form the basis for additional course work leading to an associate degree in this or another field.

A minimum of 32 credit hours with a cumulative grade point average of 2.5. At least 15 of these 32 hours must be UNM-LA catalog credit courses taken in the UNM system. Minimum grade of C (not C-) in each Technical Core course.

Program Pre-requisites

Students must meet prerequisites by achievement of minimum placement scores on the ACCUPLACER or ACT or through completion of course work. Course: ENG 100 and UNIV 101 or equivalent--or place into ENGL 110 (Credit hours 4 and 3). Course: MATH 012--or place into MATH 022 or higher (Credit Hours: 4).

General Education Requirements

WRITING AND SPEAKING

See pre-requisites above

MATHEMATICS (6 CREDIT HOURS)

- MATH 1220: College Algebra (3)
- MATH 1230: Trigonometry (3)

Technical Course Requirements

TECHNICAL CORE COURSES REQUIRED (26 CREDIT HOURS)

- CT 111: Introduction to Computer Aided Drafting and Design (3)
- DRFT 103 : Introduction to Drafting (3)
- ELCT 101L: DC Circuit Analysis (4)
- ELCT 102L: AC Circuit Analysis (4)
- ELCT 103: Mechanical Systems (3)
- ELCT 105L: Electromechanical Shop Practice (3)
- ELCT 137: Digital Electronics (3)
- ELCT 162: Robotics (3)

TECHNICAL ELECTIVES (OPTIONAL- NOT REQUIRED TOWARD THE 32-HOUR REQUIREMENT)

- MCHT 101L: Basic Welding (4)
- ELCT 163: Advanced Robotics (3)
- PHYS 1115: Survey of Physics (3)
- PHYS 1115L: Survey of Physics Laboratory (1)

TOTAL CREDIT HOURS

32 CREDIT HOURS

CERTIFICATE

Emergency Medical Technician - Basic (EMT-B)

Short-Term Emergency Medical Technician Basic Certificate Program Description

This program is designed in a short-term format featuring hands-on, skills-based learning techniques in the UNM - Los Alamos Health Sciences Lab followed by clinical skills training in various healthcare settings specific to each course. A UNM Certificate is awarded upon successful completion of this program.

Short-Term Certificate Career and Educational Advancement Opportunities

Students may enroll in any of the allied health programs offered at UNM - Los Alamos as they build on basic skills required for the provision of care at various levels in the healthcare field. For example, EMTs are in demand by agencies providing emergency services including ambulance services and fire departments. The basic skills learned in the EMT-Basic program are enhanced in the EMT-Intermediate classes and clinical settings and prepare students to sit for the New Mexico and National Registry exam and for emergency services agencies. Prospective paramedic students may be advised to take the EMT-Basic and EMT-Intermediate programs prior to enrolling in the bachelor's paramedic program. Students who intend to transfer to a four-year college or university may enroll in the associate of science in Emergency Medical Services which provides the academic core required for a bachelor's program. For more information, students should confer with an advisor.

Short-Term Certificate Program Requirements

Emergency Medical Technician Basic: 10 credit hours to include 8 credit hours of coursework and 2 credit hours of lab. Prior to entering clinical setting in the final week of class, students must be certified in American Heart Association Basic Life Support of Healthcare Providers CPR and First Aid and have taken a TB test as well as other immunizations as specified in each course description. Employers in the healthcare setting will require a fingerprint background check and drug testing prior to hiring.

Short-Term Certificate Course Prerequisites

Students must meet prerequisites by achievement of minimum placement scores on the ACCUPLACER or ACT or through completion of coursework.

Course: ENGL 100 and UNIV 101 or equivalent—or place into ENGL 110
ACCUPLACER/ACT Minimum Scores: 75/19

Course: MATH 012—or place into MATH 021 or higher;
NextGen ACCUPLACER/ACT Minimum Scores: 244/14

TECHNICAL CORE COURSES (10 CREDIT HOURS)

- EMS 113: EMT Basic (8)
- EMS 142: EMT Basic Lab (2)

TOTAL CREDIT HOURS

10 CREDIT HOURS

CERTIFICATE

Emergency Medical Technician - Intermediate (EMT-I)

Short-Term Emergency Medical Technician Intermediate Certificate Program Description

This program is designed in a short-term format featuring hands-on, skills-based learning techniques in the UNM - Los Alamos Health Sciences Lab followed by clinical skills training in various healthcare settings specific to each course. A UNM Certificate is awarded upon successful completion of this program.

Short-Term Certificate Career and Educational Advancement Opportunities

Students may enroll in any of the allied health programs offered at UNM - Los Alamos as they build on basic skills required for the provision of care at various levels in the healthcare field. For example, EMTs are in demand by agencies providing emergency services including ambulance services and fire departments. The basic skills learned in the EMT-Basic program are enhanced in the EMT-Intermediate classes and clinical settings and prepare students to sit for the New Mexico and National Registry exam and for emergency services agencies. Prospective paramedic students may be advised to take the EMT-Basic and EMT-Intermediate programs prior to enrolling in the bachelor's paramedic program. Students who intend to transfer to a four-year college or university may enroll in the associate of science in Emergency Medical Services which provides the academic core required for a bachelor's program. For more information, students should confer with an advisor.

Short-Term Certificate Program Requirements

Emergency Medical Technician Intermediate: 8 credit hours to include 5 credit hours of coursework and 1 credit hours of lab, and 2 credit hours of clinical rotation. Prior to entering clinical setting in the final week of class, students must be certified in American Heart Association Basic Life Support of Healthcare Providers CPR and 1st Aid and have taken a TB test as well as other immunizations as specified in each course description. Employers in the healthcare setting will require a fingerprint background check and drug testing prior to hiring.

Short-Term Certificate Course Prerequisites

Students must meet prerequisites by achievement of minimum placement scores on the ACCUPLACER or ACT or through completion of coursework.

Course: ENGL 100 and FYEX 1110 or equivalent—or place into ENGL 1110/ACCUPLACER/ACT Minimum Scores: 75/19

Course: MATH 012—or place into MATH 021 or higher; NextGen ACCUPLACER/ACT Minimum Scores: 244/14

TECHNICAL CORE COURSES (8 CREDIT HOURS)

- EMS 180: EMT Intermediate (5)
- EMS 143: EMT Intermediate Lab (1)
- EMS 151: EMT-I Clinical and Field Experience (2)

TOTAL CREDIT HOURS

8 CREDIT HOURS

CERTIFICATE

Nuclear Enterprise Science and Technology (NEST)

Nuclear Enterprise Science and Technology Certificate Program Description

The UNM-Los Alamos Nuclear Enterprise Science and Technology (NEST) program is an intensive thirty-two-week certificate program training technicians and technologists in fissionable material handling and glove box operation. As designed, this is a 30-credit hour program that allows students to obtain an academic credential to enter the workforce after one year of coursework and on-the-job training (OJT). The program was designed in partnership with Los Alamos National Laboratory. Program curriculum is based upon various Department of Energy (DOE) documents that address glovebox use and the handling of fissionable materials.

Certificate Career and Educational Advancement Opportunities

This certificate program is designed to provide students with the skills and experience to qualify for entry-level positions in nuclear facilities as Fissionable Material Handlers and/or Glovebox Operators. This certificate will also allow students wishing to pursue further education to ladder their credentials with additional coursework to acquire an Associate of Applied Science degree in an advanced program. The goal of the program is to provide for a technically qualified workforce who can execute a variety of programmatic work in modern nuclear materials handling and processing facilities.

Certificate Program Requirements

This is a technician or technologist certificate, focusing upon skills needed to work within a nuclear materials handling and processing facility as a Fissionable Materials Handler and/or a Glovebox Operator with the ability to work with radioactive materials, particularly plutonium, in support of manufacturing missions in the national security interest. The courses can be completed over the course of two full-time semesters for a combined 30 credit hours.

The program requires: a minimum of 30-credit hours (20-credit hours of coursework and 10-credit hours of Laboratory on-the-job-training courses with nuclear facility experience). The laboratory experience includes approximately 256 hours (16 hrs/week for 16 weeks) of on-the-job training with local fissionable material operators and LANL nuclear material subject matter experts. The program content is based upon various Department of Energy (DOE) documents that address glovebox use and the handling of fissionable materials. Students must earn a cumulative grade point average of 2.5. Minimum grade of C (not C-) in each Technical Core course.

Certificate Course Prerequisites

Satisfactory score on placement tests for writing, reading, and mathematics or completion of ENGL 1110X and MATH 012 with a grade of CR.

Instructor permission

TECHNICAL CORE COURSES (30 CREDIT HOURS)

Nuclear Facility Work (15 CREDIT HOURS)

- NFFW 1110: Nuclear Facility Fundamentals (5)
- NFFW 1120: Fissionable Material Handler (5)
- NFFW 1120L: Nuclear Facility Lab (5)

Actinide Science Fundamentals (15 CREDIT HOURS)

- ASFD 1110: Introduction to Actinide Science (5)
- ASFD 1120: Nuclear Materials Process Techniques (5)
- ASFD 1120L: Nuclear Materials Processing Lab (5)

TOTAL CREDIT HOURS

30 CREDIT HOURS

CERTIFICATE

Nuclear Waste Operator

Nuclear Waste Operator Certificate Program Description

The UNM-Los Alamos Boot Camp certificate program is an intensive twelve-week boot camp non-registered apprenticeship/qualification program training Nuclear Waste Operators. As designed, this is a 10-credit hour certificate program that allows students to obtain an academic credential to enter the workforce after completion of coursework and on-the-job training. The program was designed in partnership with local agencies to fulfill a local workforce need. Program curriculum is designed to meet the training and qualification requirements for positions at nuclear facilities in accordance with DOE Hazard Category 2 Nuclear Facilities Order 426.2.

Graduates are prepared to take a comprehensive exam for qualified operators. This credential represents successful completion of a course of studies related to the field of Nuclear Waste Operations. It may be used as a terminal credential with subsequent entrance into the work force, or it may form the basis for additional course work leading to an Associate of Applied Science degree in Nuclear Enterprise Science and Technology that is currently being developed, or in other fields.

Certificate Career and Educational Advancement Opportunities

The Certificate in Nuclear Waste Operators is designed for students who are seeking to obtain the skills necessary to qualify as entry-level Nuclear Waste Operators or plan to continue on to obtain a higher degree in nuclear waste operations. This apprenticeship program also prepares participants to work in disposing of hazardous materials. Enrollment into the program is dependent upon acceptance into an approved Nuclear Waste Operators apprenticeship program with local employers.

Certificate Program Requirements

A minimum of 10 credit hours (nine credit hours of coursework and one credit hour lab with field experience) with a minimum grade point average of 2.7. Students must earn a minimum grade of B- (not C) in each Technical Core course. The field experience includes approximately 100 hours of on-the-job training with local nuclear waste operators and experts.

TECHNICAL CORE COURSES (10 CREDIT HOURS)

- NWOB 1110: Nuclear Waste Operator Boot Camp (9)
- NWOB 1110L: Nuclear Waste Operator Boot Camp Lab/Field Experience (1)

TOTAL CREDIT HOURS

10 CREDIT HOURS

CERTIFICATE

Nursing Assistant (CNA)

Short-Term Nursing Assistant Certificate Program Description

This program is designed in a short-term format featuring hands-on, skills-based learning techniques in the UNM - Los Alamos Health Sciences Lab followed by clinical skills training in various healthcare settings specific to each course. A UNM Certificate is awarded upon successful completion of this program.

Short-Term Certificate Career and Educational Advancement Opportunities

Students may enroll in any of the allied health programs offered at UNM - Los Alamos as they build on basic skills required for the provision of care at various levels in the healthcare field. For example, PCA's are in demand in assisted living facilities and home healthcare. The basic skills learned in the PCA program are enhanced in the CNA classes and clinical settings and prepare students to sit for the certification exam and for work in healthcare facilities under the supervision of a Registered Nurse (RN). Prospective nursing students may be advised to take the CNA program prior to enrolling in area schools of nursing. Students who intend to transfer to a four-year college or university may enroll in the associate of science in Pre-Professional Health Sciences which provides the academic core required for many careers in healthcare. For more information, students should confer with an advisor.

Short-Term Certificate Program Requirements

Nursing Assistant: 8 credit hours to include 96 clock hours lecture/skills lab and 32 clock ours clinical. Prior to entering clinical setting in the final week of class, students must be certified in American Heart Association Basic Life Support of Healthcare Providers CPR and First Aid and have taken a TB test as well as other immunizations as specified in each course description. Employers in the healthcare setting will require a fingerprint background check and drug testing prior to hiring.

TECHNICAL CORE COURSES

- CNA 101L: Certified Nursing Assistant (8)

TOTAL CREDIT HOURS

8 CREDIT HOURS

CERTIFICATE

Personal Care Attendant (PCA)

Short-Term Personal Care Attendant Certificate Program Description

The Certificate for Personal Care Attendant is a specialized certificate program designed to build a workforce that is customized to the expected needs of towns, cities and counties in Northern New Mexico and beyond. Students in the program will receive basic academic and specialized hands-on training needed to meet the professional educational needs of home healthcare providers. The program is designed to meet the basic requirements to provide patient care in a home or assisted living center and incorporates requirements necessary for students to pass the National Direct Care Givers Coalition certification exam. Upon successful completion of certificate requirements with a minimum GPA of 2.33, graduates will be qualified for the National Direct Care Givers Coalition certification exam.

Short-Term Certificate Program Requirements

Nursing Assistant: 5 credit hours to include 64 clock hours lecture/skills lab and 16 clock ours clinical with a minimum GPA of 2.33. Prior to entering clinical setting in the final week of class, students must be certified in American Heart Association Basic Life Support for Healthcare Providers CPR. In addition to tuition and lab fees, the following fees are require and are paid to outside agencies. They may run up to \$175, depending on the course. Specific information will be available in the course syllabus on the first day of class.

- American Heart Association (AHA) Healthcare Provider CPR certification.
- State of New Mexico, Department of Health background check.
- Documentation of immunization, including Flu, MMR, Hepatitis B, TDaP, Varicella and TB screening.
- Physical exam. Health form available the first day of class.

TECHNICAL CORE COURSES

- PCA 101L: Personal Care Attendant (5)

TOTAL CREDIT HOURS

5 CREDIT HOURS

CERTIFICATE

Radiation Control Technology (RCT)

The Certificate in Radiation Control Technology is designed for students who would like to obtain a credential in Radiation Control Technology and are seeking qualification for entry level work in Radiation Control Technology or plan to continue on to obtain a higher credential in radiation control. The program prepares students to monitor environmental radioactivity levels, respond in emergencies, and to perform decontamination procedures. This is an apprenticeship program. Enrollment into the program is dependent upon acceptance into an approved RCT apprenticeship program with local employers.

This is a technician certificate, focusing upon skills needed to enter the workforce in the Radiation Control field. The program requires: a minimum of 10-credit hours (9-credit hours of coursework and a 1-credit hour lab with field experience). The field experience includes approximately 100 hours of on-the-job training with local radiation control technicians and experts. Program content is based upon Department of Energy Radiological Control Technician Training Handbook. Students completing the program are prepared to take the DOE certification exam and will be prepared to work as radiation control technicians at national facilities. Students should earn a cumulative grade point average of 2.5. Minimum grade of C (not C-) in each Technical Core course.

Specific Degree Requirements (10 CREDIT HOURS)

TECHNICAL CORE COURSES (10 CREDIT HOURS)

- RCTB 1110: Radiation Control Technician Boot Camp (9)
- RCTB 1110L: Radiation Control Technician Boot Camp Laboratory (1)

TOTAL CREDIT HOURS

10 CREDIT HOURS

CERTIFICATE

Robotics

This program is designed to develop skills that will assist students in gaining employment in various robotics career fields. Certificate holders may expect to find employment opportunities with manufacturing and industrial firms, government agencies, medical facilities, educational organizations, emergency responding agencies, security and surveillance firms, and research and development groups. This certificate program will enable students to become employable with a secure future in 21st century advanced technology jobs. This certificate program will provide students with the technical training to succeed as robotics professionals. Program content, in part, is based on 3 industrial robotics certification modules through FANUC Robotics, the world's largest manufacturer of robotic equipment and software.

A minimum of 30 credit hours with a cumulative grade point average of 2.5. At least 15 of these 30 hours must be UNM-LA catalog credit courses taken in the UNM system. Minimum grade of C (not C-) in each Technical Core course.

Technical Requirements (30 CREDIT HOURS)

TECHNICAL CORE COURSES (30 CREDIT HOURS)

- ELCT 162: Robotics (3)
- ELCT 163: Advanced Robotics (3)
- ELCT 264: Advanced Robotics II (3)
- ROBO 201: Industrial Robotics Operations (3)
- ROBO 202: Advanced Industrial Robotics (3)
- ROBO 204: Programmable Logic Controllers (3)
- ROBO 290: Robotics Synthesis (3)
- DRFT 103: Introduction to Drafting (3)
- CT 111: Introduction to Computer Aided Drafting and Design (3)
- ELCT 103: Mechanical Systems (3)

TOTAL CREDIT HOURS
HOURS

30 CREDIT

CERTIFICATE

Welding

This certificate program is designed to provide students with hands-on skills-based learning techniques in the field of welding. This certificate will allow students to enter the workforce as professional welders after only one year of university level courses (36 credit hours). This certificate will also allow students wishing to pursue additional coursework to ladder their credentials and pursue an Associate's degree in Electro-mechanical or welding related programs. The major goal of the program is to fulfill a community need to achieve competencies in reading blueprints, beginning and advanced Arc Welding, Oxy-Fuel, pipe, MIG & TIG welding, along with communication and metallurgy. This certificate is designed for students who would like to obtain a certificate or plan to continue on to obtain a higher degree; or for students seeking qualification for entry level work in the welding trades.

Students complete 30 hours of welding technology courses and an additional six hours in communication and computer fundamentals. Students should earn a cumulative grade point average of 2.5. At least 15 of these 36 hours must be UNM catalog credit courses taken in residence. Minimum grade of C (not C-) in each Technical Core course.

Technical Requirements (36 CREDIT HOURS)

TECHNICAL CORE COURSES (36 CREDIT HOURS)

- COMM 2120 Interpersonal Communication (3)
- IT 101 Computer Fundamentals (3)
- OR
- DRFT 115 AutoCAD Level I (3)
- WLDT 101 Blueprint Reading (4)
- WLDT 104 NCCER Basic Safety (4)
- WLDT 105 Arc Welding I (4)
- WLDT 107 Advanced Arc Welding (4)
- WLDT 108 Oxyacetylene Welding (4)
- WLDT 112 Gas Metal Arc Welding I (3)
- WLDT 120 General Welding Applications (3)
- WLDT 141 MIG & TIG Welding (4)

TOTAL CREDIT HOURS
CREDIT HOURS

36

Course Descriptions

A schedule of course offerings, which includes hours of meeting and instructors, will be issued before each semester and session. The following classes are not offered every semester or session. Students should check individual semester/session published Class Schedules. Course descriptions for any new courses to be offered by UNM-Los Alamos that have not been included in this catalog will be provided in Class Schedules. See current Class Schedule at <http://losalamos.unm.edu/academics/class-schedule.html>.

An equivalency articulation guide for other state institutions is available at the UNM-Los Alamos Student Services Office. Please contact UNM-Los Alamos academic advisors for more information.

UNM-Los Alamos reserves the right to cancel any course subject to budgetary requirements, enrollment figures, or availability of instructors.

ACCOUNTING (ACCT)

ACCT 1125: Supplemental Instruction. (1)

Collaborative workshop for students to provide additional problem solving necessary for students to master financial accounting.

ACCT 2110: Principles of Accounting I (Financial). (3)

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.

ACCT 2110X: Principles of Accounting IA (Financial).

(3)

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. Principles of Accounting IA plus IB are equivalent to Principles of Accounting I on the Matrix (1/2).

ACCT 2110Y: Principles of Accounting IB (Financial).

(3)

A continuation of Principles of Accounting IA emphasizing accounting principles and procedures for receivables, inventory, notes and interest, depreciation, equity transactions, cash flow and financial statement analysis. Principles of Accounting IA plus IB are equivalent to Principles of Accounting I on the Matrix.

Prerequisite: ACCT 2110X.

ACTINIDE SCIENCE FUNDAMENTALS (ASFD)

ASFD 1110: Introduction to Actinide Science. (5)

Introduction to the basic principles of actinide science, with a special emphasis on the light actinide elements uranium, neptunium, plutonium and americium. The course covers the full nuclear materials cycle from production to disposal in nuclear waste repository. The course covers production of plutonium in nuclear reactors, separations of actinides from nuclear fuels, conversion- and pyro-chemical operations, metallurgy, and nuclear waste management practices. Instructor permission.

Prerequisite: NFFW 1110, 1120, and 1120L.
Satisfactory score on placement tests for writing, reading, and mathematics or completion of ENGL 1110X and MATH 012 with a grade of CR.

ASFD 1120: Nuclear Materials Process Techniques. (5)
Introduction to the basic techniques used for the manipulation and manufacturing of nuclear materials, with a special emphasis on isotopes of the light actinide elements uranium, neptunium, plutonium and americium. The course covers the processes and equipment used in nuclear facilities for separations, purification, conversion, metallurgical processing, and nuclear waste isolation and storage. Additional topics include Department Of Energy requirements for criticality safety. Instructor permission.

Prerequisite: Employment as a Laboratory Technician/Technologist at Los Alamos National Laboratory (LANL), N3B, other National Laboratories, or Department of Energy facilities.

Prerequisite: NFFW 1110, 1120, and 1120L.

Corequisite: ASFD 1120L and ASFD 1110.

Satisfactory score on placement tests for writing, reading, and mathematics or completion of ENGL 1110X and MATH 012 with a grade of CR.

ASFD 1120L: Nuclear Materials Processing Laboratory. (5)

Laboratory experience portion of a sixteen-week course designed to prepare students for an entry level career in DOE nuclear facilities as a glovebox worker and fissile material handler. Students will learn how to use nuclear material process equipment and laboratory techniques for working with nuclear materials, respond in emergencies, to perform routine procedures, and other job-related tasks related to working in a nuclear laboratory. Instructor permission.

Prerequisite: Employment as a Laboratory Technician/Technologist at Los Alamos National Laboratory (LANL), N3B, other National Laboratories, or Department of Energy facilities.

Prerequisite: NFFW 1110, 1120, and 1120L.

Corequisite: ASFD 1120 and ASFD 1110.

Satisfactory score on placement tests for writing, reading, and mathematics or completion of ENGL 1110X and MATH 012 with a grade of CR.

AFRICANA STUDIES (AFST)

AFST 1120: Race in the Digital Age. (3)

The digital realm is comprised of storied sites such as commerce, employment, education, therapy, community, political expression, crime, and ideas. Technology has transformed the who, what, where, and why of how we define community and identity in the digital age. However, who you are and where you are still matters, despite the benefits of anonymity in cyberspace. This course will investigate the relevance of race, gender, class, identity, and the “cultural capital” that one can spend in our Digital Age economy. To this end, we will start with critical race scholar, Prof. Derrick Bell’s 1990 sci-fi influenced work, which prophesied a 21st century “post-racial” American: entwining over two centuries of racial designations on an ever evolving economic marketplace. This course will approach our present “post-racial” moment as an exceptional period for developing new models for identity formation.

AMERICAN STUDIES (AMST)

*Courses marked with an * may be repeated for credit because subject matter varies.*

AMST 1110: Introduction to Environmental and Social Justice. (3)

An introduction to the socially and politically constructed values directing Americans’ attitudes toward nature, science and technology and to the impacts of those attitudes on built and natural environments regionally, nationally and globally.

AMST 1120: Introduction to Gender Studies. (3)

While Gender Studies is truly a vast field of inquiry, there is great symmetry in the ways in which feminist scholars have

been engaged with questions as to how disciplinary apparatuses and discourses shape and construct "gender." This course will begin with the process of peeking into this exciting scholarship, focusing on 39 Revised 7/30/2019 the "intersectional ties" of identity-that is, how gender has been produced in and through other categories of identity, such as race, class, sexuality, and nation. While there are numerous ways to structure such a course, this course will maneuver through the field of Gender Studies with an eye toward feminisms, race, and U.S. Empire through processes of incarceration, colonialism, and war). In this course, we will explore how the "intersectional ties" of identities have been constructed within a range of institutions, discourses, and processes, such as law, medicine, popular culture, nationalism, colonialism, and empire. Throughout, we will pay close attention to how discourses normalize certain types of identities, practices, and behaviors, and mark others as deviant or unnatural. And, of course, we will look for strategies to contest these productions. This will necessarily place us within key debates in feminist studies of power, agency, activism, and justice at the individual, community, national, and transnational levels, and allow us to end the course by interrogating the role of Gender Studies in regard to current U.S. occupation in the Middle East and Native America. This course will provide a strong foundation for you to pursue studies in feminist, queer, critical race, and postcolonial theories.

AMST 1130: Introduction to American Popular Culture.
(3)

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.

AMST 1140: Introduction to Race, Class & Ethnicity.
(3)

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 US 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.

AMST 1150: Introduction to Southwest Studies. (3)

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.

AMST 2110: American Life & Thought. (3)

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.

AMST 2996*: Topics in American Studies. (3 to a maximum of 6)

The content of this course varies by semester.

ANTHROPOLOGY (ANTH)

ANTH 1115: Introduction to Anthropology. (3)

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.

ANTH 1135: Introduction to Biological Anthropology. (3)

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.

ANTH 1140: Introduction to Cultural Anthropology. (3)

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.

ANTH 1155: Introduction to Linguistic Anthropology. (3)

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.

ART HISTORY (ARTH)

ARTH 1120: Introduction to Art. (3)

In this class, students will be introduced to the nature, vocabulary, media and history of the visual arts, illustrated by examples drawn from many cultures, both Western and non-Western and across many centuries. We will begin with a general overview of the subject, including basic concepts and themes that shed light on the continuity of the artistic enterprise across the span of human experience. We will study the visual elements from which art is made, including how artists use these elements and how the artists' use of visual elements affects our experience of looking at art. We will examine both two-dimensional and three-dimensional media including drawing, painting, printmaking, camera and computer arts, graphic design, sculpture, installation, crafts and architecture. Selected works will be examined in context, including the history of the time and place in which they were created, as well as their function, patronage, and the character and intent of individual artists.

ARTH 2110: History of Art I. (3)

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.

ARTH 2120: History of Art II. (3)

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.

ARTH 2130: Modern Art. (3)

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.

ART STUDIO (ARTS)

[* May be taken twice for credit.]

Major Courses: All 1000-level studio courses carry no prerequisites and are designed for both students who have a general interest in art as well as students who plan on majoring or minoring in art.

ARTS 1220: Art Practices I. (3)

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.

ARTS 1230: Art Practices II. (3)

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.

Prerequisite: ARTS 1220.

ARTS 1240: Design I. (3)

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.

ARTS 1310: Introduction to Ceramics. (3)

This course introduces the technical processes and conceptual concerns of working with ceramic material. Various methods of forming functional and expressive works out of clay are explored. Methods used include hand building and throwing, basic clay bodies, slip and glaze, and atmospheric firing.

ARTS 1320: Ceramics I. (3)

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.

Prerequisite: ARTS 1310.

ARTS 1610: Drawing I. (3)

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.

ARTS 1630: Painting I. (3)

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.

Prerequisite: ARTS 1610.

ARTS 1830: Shop Foundation. (2)

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. Offered on a CR/NC basis only.

ARTS 1840: Sculpture I. (3)

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.

Prerequisite: ARTS 1830

ARTS 2340: Raku. (3)

This course introduces the principles of Raku firing, post firing, and alternative firing techniques and the process of making simple Raku glazes.

Prerequisite: ARTS 1310

ARTS 2610: Drawing II. (3)

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.

Prerequisite: ARTS 1610.

ARTS 2630: Painting II. (3 to a maximum of 6)

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.

Prerequisite: ARTS 1630.

ARTS 2996*: Special Topics. (1-3)

Titles will vary. CR/NC

ASTRONOMY (ASTR)

ASTR 1115: Introduction to Astronomy. (3)

This course surveys observations, theories, and methods of modern astronomy. The course is predominantly for non-science majors, aiming to provide a conceptual understanding of the universe and the basic physics that governs it. Due to the broad coverage of this course, the specific topics and concepts treated may vary. Commonly presented subjects include the general movements of the sky and history of astronomy, followed by an introduction to basic physics concepts like Newton's and Kepler's laws of motion. The course may also provide modern details and facts about celestial bodies in our solar system, as well as differentiation between them – Terrestrial and Jovian planets, exoplanets, the practical meaning of “dwarf planets”, asteroids, comets, and Kuiper Belt and Trans-Neptunian Objects. Beyond this we may study stars and galaxies, star clusters, nebulae, black holes, clusters of galaxies and dark matter. Finally, we may study cosmology -- the structure and history of the universe.

ASTR 1115L: Introduction to Astronomy Laboratory.

(1)

Introduction to Astronomy Lab will include hands-on exercises that work to reinforce concepts covered in the lecture, and may include additional components that introduce students to the night sky.

Pre-or Corequisite: ASTR 1115. Two hours lab.

BIOLOGY (BIOL)

Biology 121, 122, 219 and 221 can substitute for Biology 2110C, 2410C as prerequisites for upper-division courses.

BIOL 1110: General Biology. (3)

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. (Credit for both BIOL 1110 and BIOL 1140 may not be applied toward a degree program)

BIOL 1110L: General Biology Laboratory. (1)

This laboratory course for non-science majors complements 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.

Pre- or Corequisite: BIOL 1110.

BIOL 1140: Biology for Health Sciences. (3)

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.

(Credit for both BIOL 1110 and BIOL 1140 may not be applied toward a degree program. Not accepted towards a Biology major.)

BIOL 1140L: Biology for Sciences Laboratory. (1)

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.

Pre- or Corequisite: BIOL 1140.

BIOL 2110C: Principles of Biology: Cellular and Molecular Lecture and Laboratory. (4)

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. Three lectures, one discussion session..

Prerequisite: (CHEM 1215 or 1217) and CHEM 1215L

Note: Students who completed AP Chemistry in high school should see the instructor of record or Biology Department Advisor. At UNM-LA, this class includes a two-hour lab instead of the discussion required at UNM-Albuquerque.

BIOL 2210: Human Anatomy and Physiology I. (3)

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.

Prerequisite: BIOL (1140 and 1140L) or BIOL 2110C and (CHEM 1120C or CHEM 1215).

BIOL 2210L: Human Anatomy and Physiology I Laboratory. (1)

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. Topics integrated with BIOL 2210.

Pre- or Corequisite: BIOL 2210. Three hours lab.

BIOL 2225: Human Anatomy and Physiology II. (3)

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.

Prerequisite: BIOL 2210.

BIOL 2225L: Human Anatomy and Physiology II Laboratory. (1)

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. Topics integrated with BIOL 2225.

Pre- or Corequisite: BIOL 2225. Three hours lab.

BIOL 2305: Microbiology for Health Sciences. (4)

This course introduces the basic principles of microbial structure, genetics, and physiology, virology, parasitology, disease, pathogenicity, epidemiology and immunology. Only some emphasis is given to basic biological principles. The course is designed for those obtaining a career in the health sciences. Not accepted toward a Biology major or minor. (Credit for both BIOL BIOL 2305 and BIOL 351 and 352L may not be applied toward a degree program.)

Prerequisite: BIOL (1140 and 1140L) or BIOL (2110C) and (CHEM 1120 or (CHEM 1215 and 1215L))

BIOL 2410C: Principles of Biology: Genetics Lecture and Laboratory. (4)

Mitosis, meiosis, Mendelian genetics, chromosomes and inheritance, molecular basis of inheritance, genes to proteins, genetic models (viruses and bacteria), eukaryotic genomes, genetic basis of development and overview of genomes, *Prerequisite:* BIOL 2110C and (CHEM 1215/1215L or CHEM 1217)

Pre- or Corequisite: CHEM 1225/1225L or CHEM 1227.

BUSINESS ADMINISTRATION (BUSA)

BUSA 1110: Introduction to Business. (3)

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.

BUSA 1996: Special Topics. (3)

Restriction: Permission of Instructor.

BUSINESS COMPUTER AND INFORMATION SYSTEMS (BCIS)

BCIS 1110: Fundamentals of Information Literacy and Systems. (3)

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.

Prerequisite: MATH 1215 (or MATH 1215Z) or MATH 1220 or MATH 1230 or MATH 1240 or MATH 1430 or MATH 1440 or MATH 1512 or MATH 1522.

BUSINESS TECHNOLOGY (BSTC)

*Courses marked with an * may be repeated for credit because the subject matter varies.*

BSTC 111: Introduction to E-Commerce. (3)

E-commerce concepts ranging from varieties of e-commerce to secure business transactions over the web. How to market a product over the web, basic business concepts of selling, and understanding the evolution of e-commerce.

Note: Also offered as IT 111.

BSTC 113: Introduction to Project Management. (1)

The course introduces and applies the concepts, techniques, and tools of project management.

BSTC 114: Customer Service and Relations. (1)

Examines techniques for successful customer service, how to handle difficult and irate customers, customer complaints, and to build relationships with internal and external clients.

BSTC 115: Time Management. (1)

Examines methods of managing personal and professional time during the workday.

BSTC 116: Stress Management for the Workplace. (1)

Examines techniques and tips for managing stress in the work environment.

BSTC 117: Organization Skills for the Workplace. (1)

Examines techniques for organizing workplace space and filing systems.

BSTC 118: Conflict Resolution for the Workplace. (1)

Examines techniques for identifying and resolving conflict in the work environment.

BSTC 193*: Topics. (1-3)

BSTC 202: Microcomputer Accounting. (3)

Course uses accounting software applications to record, classify and report business activities.

Prerequisite: ACCT 2110X.

BSTC 203: Business Communication. (3)

Course emphasizes theory and application of customer contact skills, questioning and listening techniques, business etiquette, multicultural awareness, letter and memorandum writing, the job application process and interviewing, and conflict resolution.

BSTC 204: Human Relations in Business. (3)

Human relations in the work environment will be studied, including the psychological implications of business practices as they apply to individual employees and supervisors.

BSTC 212: Introduction to Income Tax. (3)

IRS code and regulations as they pertain to the individual. Includes capital gains and losses, accounting methods, income, deductions, social security, installment sales and alternative tax methods.

BSTC 218: Business Law. (3)

Introduction to the basic principles of business law and their applications to typical business situations. Topics include an introduction to the legal environment, contracts, regulatory agencies, negotiable instruments, and the sale of goods and real property.

Prerequisite: BUSA 1110

BSTC 220: Management Accounting. (3)

Course includes the role of accounting in the management information system, collection and processing of data for management decisions.

Prerequisite: (ACCT 2110Y or ACCT 2110), and BUSA 1110.

BSTC 292*: Topics. (1-3)

BSTC 293*: Topics. (1-4)

BSTC 299: Cooperative Work Experience (1-3) Designed to give students credit for volunteer or paid work experience.

Prerequisite: Permission of instructor

CERTIFIED NURSING ASSISTANT (CNA)

CNA 101L: Nursing Assistant. (8)

This course prepares students to provide patient care in a home, health care center, or hospital under the supervision of a professional health care provider (RN). Prepares students for the NM Nurse Aide Competency Evaluation (Prometric) exam. 128 total clock hours; 96 hours lecture/skills lab; 32 hours clinical.

Prerequisites: Satisfactory score on placement tests for writing, reading, and mathematics: ENGL 1110X or equivalent or ACCUPLACER Next-Generation Sentence Skills ≥ 289 or ACT English ≥ 17 or SAT Verbal ≥ 480 ; MATH 012 or ACCUPLACER Next Generation Arithmetic ≥ 244 or ACT Math ≥ 14 or SAT Math ≥ 440 *Prior to entering the clinical setting in the final week of class, students must have completed the following requirements:* American Heart Association Healthcare Provider CPR Certification; program health form signed by physician; caregiver background screening and finger printing; immunizations to include Measles-Mumps-Rubella (MMR), Varicella (chicken pox), Hepatitis B series, Diphtheria-Pertussis-Tetanus (DPT), adult Tetanus, and Influenza (flu shot); Tuberculosis exam (TB). A UNM Certificate is awarded upon successful completion of this course.

CHEMISTRY (CHEM)

CHEM 1110: Chemistry in our Community. (3)

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.

CHEM 1120C: Introduction to Chemistry Lecture and Laboratory. (4)

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. The laboratory component introduces students to techniques for obtaining and analyzing experimental observations pertaining to chemistry using diverse methods and equipment. (Credit for both CHEM 1120C and CHEM 1215 may not be applied toward a degree program.)

Prerequisite: ACT ≥ 22 or SAT ≥ 510 or MATH 1215 or MATH 1220 or MATH 1240 or MATH 1430 or MATH 1440 or MATH 1512 or MATH 1522 or MATH 2531.

CHEM 1215: General Chemistry I for STEM Majors. (3)

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. (Credit for both CHEM 1120C and CHEM 1215 may not be applied toward a degree program.)

Prerequisite: ACT Math ≥ 25 or SAT Math Section ≥ 590 or MATH 1220 or MATH 1230 or MATH 1240 or MATH 1250 or MATH 1430 or MATH 1440 or MATH 1512 or MATH 1522 or MATH 2531.

Pre or Corequisite: CHEM 1215L.

CHEM 1215L: General Chemistry I for STEM Majors Laboratory. (1)

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.

Prerequisite: ACT Math ≥ 25 or SAT Math Section ≥ 540 or MATH 1220 or MATH 1230 or MATH 1240 or MATH 1250 or MATH 1430 or MATH 1440 or MATH 1512 or MATH 1522 or MATH 2530.

Pre- or Corequisite: CHEM 1215 or CHEM 1217.

CHEM 1225: General Chemistry II for STEM Majors. (3)

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. (Credit for both CHEM 1225 and CHEM 1227 may not be applied toward a degree program.)

Prerequisite: (CHEM 1215 and CHEM 1215L) or CHEM (1217 and 1215L)

Pre or Corequisite: CHEM 1225L.

CHEM 1225L: General Chemistry II for STEM Majors Laboratory. (1)

Experiments illustrating the fundamental principles and techniques of chemistry. (3 hr lab)

Prerequisite: (CHEM 1215 and CHEM 1215L) or (CHEM 1217 and CHEM 1215L).

Pre- or Corequisite: CHEM 1225 or CHEM 1227.

CHEM 2120: Integrated Organic Chemistry and Biochemistry. (4)

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. (Credit for both CHEM 2120 and CHEM 301 may not be applied toward a degree program.)

Prerequisite: CHEM 1120C or CHEM 1225.

CHINESE (CHIN)

CHIN 1110: Mandarin Chinese I. (3)

This is the first semester of a two-semester sequence in first year modern standard Chinese (“Mandarin”). This course is recommended for students who have had little or no experience in the Chinese language. A beginning Mandarin Chinese course is designed to introduce the Mandarin sound system (“pinyin”), basic vocabulary, Chinese characters (either in Simplified or Traditional characters), and basic grammatical concepts and structures. In order to help beginners develop their communicative competence in the four basic skills, the 5Cs (Communication, Cultures, Comparisons, Connections, and Communities) will be integrated consistently into the content and exercises in the course. (Credit for both CHIN 1110 and CHIN 1130 may not be applied toward a degree program.)

CIVIL ENGINEERING (CE)

CE 160L: Civil Engineering Design. (3)

Introduction to engineering graphics (AutoCAD), computer-aided design; introduction to civil engineering and construction.

CE 202: Engineering Statics. (3)

Statics of particles and rigid bodies in two and three dimensions using vector algebra as an analytical tool; centroids; distributed loads; trusses, frames; internal forces, friction.

Prerequisite: PHYC 1310 and MATH 1522.

CLASSICS (CLST)

CLST 1110: Greek Mythology. (3)

Introduction to mythology; primary readings in stories about the gods and heroes, usually including Homer, Hesiod, Homeric Hymns and Tragedies. All texts will be in English.

CLST 2110: Greek Civilization. (3)

An interdisciplinary introduction to ancient Greece. Lectures on Greek art, history, literature and philosophy.

CLST 2120: Roman Civilization. (3)

An interdisciplinary introduction to ancient Rome. Lectures on Roman literature, history, art, and philosophy.

COMMUNICATION (COMM)

*Courses marked with an * may be repeated for credit because subject matter varies.*

COMM 1115: Introduction to Communication. (3)

This survey course introduces the principles of communication in the areas of interpersonal, intercultural, small group, organizational, public speaking, and mass and social media.

2 hrs. lecture, 1 hr. Lab.

COMM 1130: Public Speaking. (3)

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.

COMM 1150: Introduction to Mass Communication. (3)

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.

COMM 1155: Communication Across Cultures. (3)

An introduction to communication among people from different cultural backgrounds, emphasizing intercultural relations. The class seeks to identify, honor, and enhance the strengths of different cultural perspectives.

COMM 2120: Interpersonal Communication. (3)

This course provides an introduction to the study of interpersonal communication. Students will examine the application of interpersonal communication in personal and professional relationships.

COMM 2140: Small Group Communication. (3)

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..

COMM 2150: Communication for Teachers. (3)

This course will investigate and critically evaluate the influence of identity, communication, and culture on instruction, learning, engagement, classroom community, and the teacher-student relationship.

COMM 2996*: Topics. (1-3 to a maximum of 6 credit hours)

Topics will vary.

COMPARATIVE LITERATURE (COMP)

*Courses marked with an * may be repeated for credit because subject matter varies.*

COMP 2222: Fairy and Folk Tales. (3)

An exploration of fairy and folk tales from a variety of cultures. The course introduces methods of analysis while exploring historical and contemporary roles and interrelationships of the tales.

COMP 2240: Cultures, Texts, Worlds. (3)

Multi-disciplinary course explores how literature, film, and media shape identity and belonging, emphasizing cross-cultural perspectives. Explores how cultural texts confer meaning and value on human experience, shape different communities, and forge links among individuals and groups.

COMPUTER SCIENCE (CS)

CS 101: Introduction to Computer Science. (4)

An Introductory course covering the computer terminology, applications, and characteristics that a student would encounter in a CS degree. Students will learn introductory UNIX and how to run existing programs. (Credit for both CS 101 and CS 102 may not be applied toward a degree program.)

CS 102: Introduction to UNIX. (1)

For the computer novice. Students will be shown the UNIX commands needed in a computer-programming course. UNIX topics: electronic mail, file manipulation and creation, line/screen editors, and program compilation.

Offered on a CR/NC basis only.

(Credit for both CS 101 and CS 102 may not be applied toward a degree program.)

CS 103: Advanced UNIX. (1)

Focuses on shell scripts and shell programming, processes and job control; user tools; UNIX networking concepts; simple system administration; introduction to Perl scripting

Prerequisite: CS 102 or CS 101

Offered on a CR/NC basis only.

CS 152L: Computer Programming Fundamentals. (3)

Introduction to the art of computing. The course objectives are understanding relationships between computation, problem solving, and programming using high-level languages.

Prerequisites: CS 105L or CS 108L or ENG 130L or ECE 131L.

CS 220: Systems Analysis and Design. (3)

An overview of the system development lifecycle. Emphasis on current system documentation through the use of classical, structured, and object-oriented tools/techniques for describing program specifications.

Prerequisite: CS 151L or CS 152L or CS 160 or a full semester of programming.

CS 241L: Data Organization. (3)

Data representation, storage and manipulation. This course covers the memory organization of data storage and its relation to computation and efficiency. Topics include: linked vs. contiguous implementations, memory management, the use of indices and pointers, and an introduction to issues raised by the memory hierarchy. Programming assignments in C provide practice with programming styles that yield efficient code and computational experiments investigate the effect of storage design choices on the running time of programs

Prerequisite: CS 152L with a grade of B- or better; or CS 259L with a grade of C or better.

CS 251L: Intermediate Programming. (3)

An introduction to the methods underlying modern program development. Specific topics will include object-oriented design and the development of graphical user interfaces. Programming assignments will emphasize the use of objects implemented in standard libraries. (3 hrs lecture; 1 hr recitation)

Prerequisite: CS 152L with a grade of B- or better.

CS 261: Mathematical Foundations of Computer Science. (3)

This course is an introduction to the formal mathematical concepts of computer science for the beginning student. Topics include elementary logic, induction, algorithmic processes, graph theory, and models of computation.

Prerequisites: MATH 1240 with a grade of A or better; or MATH 1512 with a grade of B- or better.

CS 293: Social and Ethical Issues in Computing. (1)

Overview of philosophical ethics, privacy and databases, intellectual property, computer security, computer crime, safety and reliability, professional responsibility and codes, electronic communities and the Internet, and social impact of computers. Students make oral presentations and produce written reports.

COMPUTER TECHNOLOGY (CT)

*Courses marked with an * may be repeated for credit because the subject matter varies.*

CT 102: Introduction to Microcomputers on the PC. (4)

An overview of the use of computers and data processing in today's society. Discusses PC history, terminology, and applications. Introduces the rudiments of a word processor (Word), a PC database (Access), and a PC spreadsheet (Excel).

CT 106L: Introduction to WORD. (3)

Introduces advanced word processing techniques using Microsoft Word. The class content involves document design and formatting as well as file management. A great emphasis will be put on efficiency in applications.

CT 111: Introduction to Computer Aided Design and Drafting. (3)

Entry-level course intended for the technician or draftsman interested in the use of computer aided design in an engineering environment.

CT 165: Introduction to Web Authoring. (3)

(Also offered as IT 165) This course is an introduction to making and designing web pages using HTML generating software. Students learn how to make well-designed web pages from simple to the complex. Site creation with text, graphics, tables, Cascading Style Sheets, and simple animation effects are included. Design principles as they apply to the World Wide Web are also presented. No knowledge of HTML is required.

CT 192*: Topics. (1-3)

CT 193*: Topics. (1-3)

CT 202: Applications of Spreadsheets. (3)

Introduces fundamentals of spreadsheets and spreadsheet software; formatting, formulas and functions, charts and objects, sorting and filtering, data validation, consolidated views and reports, pivot tables and charts, software auditing and collaborative tools, and integrated spreadsheet applications.

Prerequisite: CT 102 or BCIS 1110.

CT 292L*: Topics. (1-3)

CT 293*: Topics. (1-3)

COOPERATIVE EDUCATION PROGRAM (ECOP)

BSTC 299: Cooperative Work Experience. (1-3)

Designed to give students credit for volunteer or paid work experience.

Prerequisite: Permission of instructor

IT 109: Information Technology Cooperative Education. (1-3)

A work-study program with local industry to give the student practical experience in an industrial environment doing technology work.

Prerequisite: Permission of Information Technology Department Chair required.

CRIMINAL JUSTICE (CJUS)

CJUS 1120: Criminal Law. (3)

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.

CJUS 2130: Police and Society. (3)

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.

CJUS 2140: Criminal Investigations. (3)

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.

DANCE (DANC)

*Courses marked with an * may be repeated for credit because subject matters varies.*

DANC 1110*: Dance Appreciation. (3-6)

This course introduces the student to the diverse elements that make up the world of dance, including a broad historic overview, roles of the dancer, choreographer and audience, and the evolution of the major genres. Students will learn the fundamentals of dance technique, dance history, and a variety of dance aesthetics. Course fee required.

DIGITAL MEDIA ARTS (DMA)

*Courses marked with an * may be repeated for credit because the subject matter varies.*

DMA 165: Introduction to Digital Media Arts I (Photoshop). (3)

This course serves as an introduction to the computer as an image-making device using raster-imaging software (Adobe Photoshop). It includes the making and manipulating of images derived from photography and other traditional media. Included also is the digital preparation of imagery for printed and display (Web) output.

DMA 166: Digital Media Arts II (Illustrator). (3)

This course is an introduction to the computer as an image-making device using vector-imaging software (Adobe Illustrator). It includes the creation and manipulation of digital imagery derived from traditional graphic design, including typography and illustration graphics. Students will design logo art and other projects aimed for printed and screen display.

Prerequisite: DMA 101 and (CT 125 or CT 122) (Previously CT 105LT and CT 120LT).

DMA 193*: Topics. (1-3)

Titles will vary.

DRAFTING TECHNOLOGY (DRFT)

*Courses marked with an * may be repeated for credit because the subject matter varies.*

DRFT 103: Introduction to Drafting. (3)

Intended as a first course for students with no previous exposure to drafting. The class will include hands-on drawing in class and will introduce basic topics in drafting methods.

DRFT 115: AutoCAD Level I. (3)

Students build CAD skills, create production drawings, and develop a CAD library of symbols. *Prerequisite:* DRFT 103 or instructor approval.

DRFT 119: Drafting/Blueprint Reading. (3)

Fundamentals of technical industrial communication: drafting, sketching, blueprint reading, layout work in specialized areas; visualization and interpretation of blueprints and sketches of parts, assemblies, and processes.

Prerequisite: DRFT 101L.

EARTH AND PLANETARY SCIENCE (EPS)

Note: Now listed under Geology (GEOL)

ECONOMICS (ECON)

ECON 2110: Macroeconomic Principles. (3)

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.

ECON 2120: Microeconomic Principles. (3)

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.

ECON 2125: Society and Environment. (3)

Introduces students to environmental and natural resource issues of both global and local scale. No prior economics coursework is required; basic economic tools will be introduced and then applied to a variety of environmental problems. This course will cover a variety of topics, including water & energy conservation, pollution taxes, tradable pollution permits and global warming.

ECON 2130: Personal Investing. (3)

Personal investing should be considered introductory, however it offers a wide-ranging overview of personal finance and the role financial assets can play in achieving personal financial goals. This course won't make you a millionaire, nor will it prepare you for a career as a hedge-fund manager. The goal is to increase your understanding of how financial markets work, and how to use financial assets as part of a life-long financial strategy. Your understanding of financial markets will be enhanced by learning the tools of economics, incorporating knowledge of human behavior, and becoming familiar with particular aspects of financial markets and assets.

EDUCATION (EDUC)

EDUC 1120: Introduction to Education. (3)

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. A field component at an educational site is required.

EDUC 1125: Introduction to Education in New Mexico. (3)

An exploration of contemporary issues around diversity, culture, and education in New Mexico. The course is of special interest to students considering a teaching career. Projects in schools and/or community sites are part of requirements.

ELECTRICAL AND COMPUTER ENGINEERING (ECE)

ECE 101: Introduction to Electrical and Computer Engineering. (1)

Insight into electrical and computer engineering is gained through videos, and the use of computer software to learn basic problem-solving skills.

ECE 131: Programming Fundamentals. (3)

Fundamental programming concepts, including consideration of abstract machine models with emphasis on the memory hierarchy, basic programming constructs, functions, parameter passing, pointers and arrays, file I/O, bit-level operations and interfacing to external devices.

Prerequisite: (MATH 1220 or higher) or ACT Math ≥ 25 or SAT Math Section ≥ 590 or ACCUPLACER Next-Generation Advanced Algebra and Functions ≥ 249

ECE 203: Circuit Analysis I. (3)

Basic elements and sources. Energy and power. Ohm's law and Kirchhoff's laws. Resistive networks, node and loop analysis. Network theorems. First-order and second-order circuits. Sinusoidal sources and complex representations: impedance, phasors, and complex power. Three-phase circuits.

Prerequisite: ENG 1120 or MATH 1522

Pre or Corequisite: PHYC 1320.

ECE 206L: Instrumentation. (2)

Introduction to laboratory practices and the use of test equipment. Measurements on basic electrical components, dc and ac circuits using ohmmeters, voltmeters, ammeters and oscilloscopes. Circuit simulation.

Prerequisite: ENGL 1120 or ACT English ≥ 29 or SAT Evidence-based Reading and Writing ≥ 700 .

Pre- or Corequisite: ECE 203.

ECE 213: Circuit Analysis II. (3)

Analysis of balanced three-phase circuits. Laplace transform with applications to circuit analysis. Passive and active filters. Fourier series and Fourier transform analysis. The two-port circuits.

Prerequisite: ECE 203.

Pre- or Corequisite: ECE 300 or (MATH 314 and MATH 316).

ECE 238L: Computer Logic Design. (4)

Binary number systems. Boolean algebra. Combinational, sequential and register transfer logic. VHDL Arithmetic/logic unit. Memories, computer organization. Input-Output. Microprocessors.

Prerequisite: ECE 131 or CS 152L or CS 259.

ELECTRO MECHANICAL TECHNOLOGY (ELCT)

ELCT 101L: DC Circuit Analysis. (4)

Basic elements of DC electrical and electronic circuits, circuit analysis, measurement, and circuit design. Study of circuit network theorems and their applications to design techniques. Study of conductors and insulators.

Prerequisite: MATH 1215.

ELCT 102L: AC Circuit Analysis. (4)

AC electrical and electronic components, including inductance, capacitance, resonance, filters, RC and LR time constants. Study of reactance, impedance, complex numbers, AC network analysis, magnetism, and simple power supplies. Introduction to rotating electrical machines, both AC and DC.

Prerequisite: ELCT 101L.

Pre- or Corequisite: MATH 1230.

ELCT 103: Mechanical Systems. (3)

This course covers vacuum, cryogenic, and hydraulic technologies and systems. Provide basic understanding of the design, assembly, and operations of mechanical systems typically found in industrial applications.

ELCT 105L: Industrial Shop Practice. (3)

Principles of and practice with hand and machine tools used by electromechanical technicians. Includes operation of lathe and milling machines, drilling, welding, sawing, grinding, soldering, brazing, measurements, sheet metal work, benchwork, or other appropriate operations.

ELCT 137: Digital Electronics I (Combinational Logic). (3)

An introduction to the analysis and synthesis of combinational logic circuits. Boolean algebra, logic gates, Karnaugh maps, MSI and LSI integrated circuits. Interpretation of logic diagrams. Techniques of troubleshooting digital circuits.

Prerequisite: ELCT 101L.

ELCT 162: Robotics. (3)

This course covers designing, building and programming NXT style robots. It includes autonomous robotics, light sound, touch and ultrasonic sensors, computer programming, problem solving, and remote-control robotics.

ELCT 163: Advanced Robotics. (3)

This course covers more advanced robotics concepts including designing, building, testing, and refining a prototype using engineering design processes. Topics include remote control robotics, robotic electronics, remote video navigation, autonomous robotics, more advanced programming techniques.

Prerequisite: ELCT 162.

ELCT 192*: Topics. (1-3)

ELCT 193*: Topics. (1-3)

ELCT 203L: Electronic Devices. (4)

Study of amplifiers, oscillators, integrated circuits, and operational amplifiers. Computer solutions of electronic circuits.

Prerequisite: ELCT 102.

ELCT 204L: Electronics Lab. (2)

Advanced laboratory measurements and design. Measurements using AC and DC meters, ohmmeters, oscilloscopes, signal generators, and pulse generators. Computer circuit stimulation.

Prerequisite: ELCT 203.

ELCT 264: Advanced Robotics II. (3)

This course covers advanced topics in robotics including: advanced robotic platform design and construction, remote control electronics, servo controlled mechanisms, and remote wireless video applications.

Prerequisites: ELCT 163.

EMERGENCY MEDICINE (EMS)

EMS 106: Emergency Medical Responder. (4)

Emergency Medical Responder is a 60-hour course designed specifically for personnel who are first at the scene of an accident or emergency. This course offers a foundation for advanced EMS courses.

EMS 113: EMT–Basic. (8)

Meets the 1998 EMT-Basic National Standard Curriculum requirements and incorporates New Mexico EMT-B scope of practice. Includes lecture instruction to prepare the student to sit for New Mexico and National Registry testing.

Restriction: Program permission

Corequisite: EMS 142.

EMS 120: Introduction to EMS System. (3)

Covers the history of emergency medical services and the development of EMS systems and current trends and issues in EMS. Ideal for students considering a career in EMS.

EMS 142: EMT-Basic Lab. (2)

Meets the 1998 EMT-Basic National Standard Curriculum requirements and incorporates New Mexico EMT-B scope of practice. Provides lab instruction to prepare the student to sit for New Mexico and National Registry testing.

Restriction: Program permission

Corequisite: EMS 113.

EMS 143: EMT-Intermediate Lab. (1)

Meets New Mexico requirements for EMT-Intermediate skills training, including intravenous fluid administration and pharmacology.

Prerequisite: EMS 113 and 142.

Corequisite: EMS 180.

Restriction: Program permission

EMS 151: EMT-I Clinical and Field Experience. (2)

Meets New Mexico requirements for EMT-Intermediate field and clinical training, including emergency department and prehospital experience.

Prerequisite: EMS 113 and 142.

Corequisite: EMS 180 and 143.

Restriction: Program permission.

EMS 180: EMT-Intermediate. (5)

Meets New Mexico requirements for EMT-Intermediate lecture content, including intravenous fluid administration and pharmacology.

Prerequisite: EMS 113 and 142.

Corequisite: EMS 143.

Restriction: Program permission.

EMS 193*: Emergency Medicine Topics. (1-3)

Titles will vary.

EMS 200 Medical Mathematics. (1)

Medical calculations for paramedics. Students will be able to perform all common medical calculations at the paramedic level, including converting units, properly manipulating decimals and fractions, and finding volumes, dosages and rates.

Prerequisite: MATH 1220.

Restriction: Permission of Instructor.

ENGINEERING (ENG)

ENG 116: Introduction to Engineering. (1-3)

Description of the engineering profession, orientation to engineering education, introduction to the engineering design process. Does not count toward degree credit in the College of Arts and Sciences or in the School of Engineering. Two hours lecture and demonstrations.

ENG 120: Mathematics for Engineering Applications.

(4)

Provides an overview of basic engineering math topics necessary for success in second-year engineering courses. Topics are presented in the context of engineering applications, and reinforced through labs and examples from core engineering courses.

Prerequisite: MATH 1220 or ACT Math \geq 25 or SAT Math Section \geq 590 or ACCUPLACER Next-Generation Advanced Algebra and Functions = 249-283.

ENG 130L: Intro Engineering Computing. (3)

Introduction to the use of computing to solve engineering problems. Students learn computer programming fundamentals and learn to use a numerical computing environment (e.g., MATLAB). Applications to engineering problems are explored.

ENG 195: Special Topics. (1-6 to a maximum of 6)

Selected topics in interdisciplinary engineering or computer science at an introductory level.

ENG 200: Technology in Society. (3)

This is an introduction to the ways in which technology shapes the world—and is itself shaped by society, culture, politics, economics and history. Topics include industrialization, technological changes, cultural impact, environmental policies and social and ethical responsibilities.

ENGLISH (ENGL)

ENGL 1110: Composition I (3)

Covers Composition I: Stretch I and II in one semester. 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. (Credit for both ENGL 1110 and ENGL 1110Y may not be applied toward a degree program).

Prerequisite: ACT English = 16-25 or SAT Evidence-Based Reading and Writing = 450-650 or ACCUPLACER Next-Generation Writing \geq 279.

ENGL 1110X: Composition I: Stretch I (3) and ENGL 1110Y: Composition I: Stretch II (3).

First and second semester of Composition I & II sequence. Focuses on analyzing rhetorical situations and responding with appropriate genres and technologies. These are the first and second courses in a two-part sequence. In order to receive transfer credit for ENGL 1110, all courses in this sequence (ENGL 1110X, ENGL 1110Y) must be taken and passed. (Credit for both ENGL 1110 and ENGL 1110Y may not be applied toward a degree program) Students with ACT English $<$ 16 or SAT Evidence-Based Reading and Writing $<$ 450 or ACCUPLACER Next-Generation Writing $<$ 279 will begin their English Composition Sequence with ENGL 1110X.

Restriction for 1110X: Permission of Department.

Prerequisite for 1110Y: ENGL 1110X.

ENGL 1120: Composition II. (3)

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.

Prerequisite: 1110 or 1110Y or 1110Z or ACT English = 26-28 or SAT Evidence-Based Reading and Writing = 660-690.

ENGL 1210: Technical Communications. (3)

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. 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.

Prerequisite: ENGL 1110 or 1110Y.

ENGL 1410: Introduction to Literature. (3)

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.

ENGL 2110: Traditional Grammar. (3)

This course surveys traditional grammar, introducing linguistic terminology and methods for identifying and understanding parts of speech, parts of sentences and basic sentence patterns. The course presents terminology and methods designed to increase the student's understanding of the structure of the language.

ENGL 2120: Intermediate Composition. (3)

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.

Prerequisite: ENGL 1120 or ACT English ≥ 29 or SAT Evidence-Based Reading and Writing ≥ 700 .

ENGL 2210: Professional and Technical Communication. (3)

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.

Prerequisite: ENGL 1120 or ACT English ≥ 29 or SAT Evidence-Based Reading and Writing ≥ 700 .

ENGL 2220: Introduction to Professional Writing. (3).

Introductory course in the professional writing concentration. Study of technical writing, public information and public relations writing, and freelance nonfiction writing.

Prerequisite: ENGL 1120 or ACT English ≥ 29 or SAT Evidence-Based Reading and Writing ≥ 700 .

ENGL 2310: Introduction to Creative Writing. (3)

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.

Prerequisite: ENGL 1110 or 1110Y or 1110Z or ACT English = 26-28 or SAT Evidence-Based Reading and Writing = 660-690.

ENGL 2510: Analysis of Literature. (3)

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.

Prerequisite: ENGL 1120 or ACT English \geq 29 or SAT Evidence-Based Reading and Writing \geq 700.

ENGL 2540: Introduction to Chicana/o Literature. (3)

This course examines a variety of literary genres to explore the historical development of Chicano/a social and literary identities. This survey offers an overview of the history of Chicano/a literature, introducing the major trends and placing them into an historical framework.

ENGL 2560: Introduction to Native American Literature. (3)

This course will introduce students to the literature produced by Native American authors as well as explore issues relevant to the study of Native American literature. The course will also introduce the basic elements of literary analysis.

ENGL 2610: American Literature I. (3)

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.

ENGL 2620: American Literature II. (3).

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.

ENGL 2630: British Literature I. (3)

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.

ENGL 2640: British Literature II. (3)

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..

ENGL 2650: World Literature I. (3)

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.

ENGL 2660: World Literature II. (3)

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.

ENGL 2670: African American Literature. (3)

(Also offered as AFST 251) The course introduces students to the African American classics of the slavery era. Daily experiences of the characters in these books become the basis for discussing race, class, gender, revolt, freedom, peace and humanity.

ENGL 2993: Workshop. (1 - 3)

Various topics in literature, language, and writing.

ENGL 2996*: Topics. (3)

ENVIRONMENTAL SCIENCE (ENVS)

ENVS 1130: The Blue Planet. (3)

To understand global change and environmental concerns, this course weaves together an understanding of Earth's lithosphere, atmosphere and oceans and how ecosystems are linked to the physical environment. Students are encouraged, but not required, to enroll concurrently in 1130L.

ENVS 1130L: The Blue Planet Laboratory. (1)

In this course, students will often work together to collect data. Students are encouraged to discuss their observations and ideas, but students are expected to write their own answers in their own words on their worksheets.

Pre- or Corequisite: ENVS 1130.

FILM AND DIGITAL MEDIA ARTS (FDMA)

FDMA 1120: Desktop Publishing I. (3)

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..

FDMA 1515: Introduction to Digital Image Editing: Photoshop. (3)

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.

FDMA 1535: Introduction to Illustrator. (3)

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.

Prerequisite: FDMA 1545 and (CT 125 or CT 122)

FDMA 1545: Introduction to Photography & Digital Imaging (3)

This course is a study of the principles and techniques of photography using digital equipment, and discusses how digital cameras, imaging editing, and technology have changed the world of photography. Students will learn about studies in resolution, lighting, software, editing, printing, and web applications. They will gain fundamental knowledge in the rapidly expanding technology of photography and imaging, and be able to incorporate the knowledge into all areas of digital graphics.

FDMA 2110: Introduction to Film Studies. (3)

This course introduces students to the fundamentals in film history, criticism, and theory. Though viewing and analysis of a variety of narrative, documentary, and experimental films, students will advance their understanding of key issues in filmic representation and aesthetics. A range of approaches will be employed in understanding the aesthetic and cultural significance of the medium, including feminism, post-colonialism, critical race theory, and modernism. Special Fee Required.

FDMA 2195: Beyond Hollywood. (3)

This course concentrates on the representation of children and adolescents in world cinema. The portrayal of children throughout world cinema has a long and rich complex history, which has been primarily shaped by family and national structures. Through film screenings, readings, and discussions class will center on the exploration of what it means to look at children and what cultural baggage are their bodies asked to carry. Also, what impact do national and global politics have on the lives of children? Through the establishment and use of basic vocabulary and analytic methodologies of film studies, larger theoretical and practical questions about how cinema functions as a cultural and ideological force, especially how it helps to construct ideas about the family, the nation, and national identities will be addressed. Class screenings will cover a breadth of children and adolescents in world cinema but readings, discussions, and outside film viewings will provide a more comprehensive overall picture. Special Fee Required.

FINE ARTS (FA)

*Courses marked with an * may be repeated for credit because subject matter varies*

FA 229*: Topics. (1-3)

Interdisciplinary topics in the arts.

FA 284: Experiencing the Arts. (3)

Explores fundamental connections and differences among artistic media through readings, lectures, attendance at artistic exhibits and events, and discussions with creators of collaborative works of art.

FIRE SCIENCE (FISC)

FISC 101: Principles of Emergency Services. (3)

Fire protection, emergency services overview; careers; culture; history; fire-loss analysis; organization, function of fire protection services; fire departments; laws, regulations; nomenclature; fire protection functions; fire chemistry and physics; protection systems; strategy and tactics; safety initiatives.

FISC 102: Fire Prevention. (3)

Fundamental knowledge of fire prevention. Includes: history and philosophy of fire prevention; organization, operation of fire prevention bureau; use, application of codes and standards; plans review; fire inspections; fire and life safety education; fire investigation.

FISC 103: Hazardous Materials. (3)

Introduces hazardous materials incidents, recognizing and identifying hazardous materials, planning response, implementing response procedures, decision making, and continued evaluation at the awareness and operation level.

FISC 104: Wildland Firefighting. (3)

Covers all aspects of wildland firefighting; introduces new advances in technology for wildland fire suppression, advances in technology for wildland fire suppression, the use of GPS, includes basic skills needed for wildland firefighting.

FISC 105: Principles of Fire and Emergency Services Safety & Survival. (3)

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.

FISC 106: Fire Behavior and Combustion. (3)

Explores the theories and fundamentals of how and why fires start, spread, and are controlled.

FISC 201: Fire Protection Systems. (3)

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.

FISC 202: Fire Administration I. (3)

Introduces student to organization and management of fire and emergency services department and relationship of government agencies to fire service. Emphasis on fire and emergency service, ethics, and leadership from perspective of company officer.

Prerequisite: FISC 101.

FISC 210: Incident Safety Officer. (3)

Critical skills needed to be a proficient safety officer; teaches specific job functions in NFPA 1521: Standard for Fire Department Safety Officer; response to hazardous materials incidents, technical rescue, wildland fire and other disasters.

Prerequisite: FISC 202.

FISC 212: Building Construction for Fire Prevention. (3)

Components of building construction related to firefighter and life safety. Elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies.

Prerequisite: FISC 101.

FISC 220: Fire Protection Hydraulics and Water Supply. (3)

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.

Prerequisite: MATH 1215 or higher

FISC 225: Strategies and Tactics. (3)

This course provides the principles of fire ground control through utilization of personnel, equipment, and extinguishing agents.

Prerequisite: FISC 101.

FIRST YEAR EXPERIENCE (FYEX)

Previously UNIV 101/106 (UNIV).

FYEX 1030: Critical Text Analysis (1-3)

This course presents the reading process including study reading, critical thinking and analysis. It addresses the transition from high school to college and incorporates strategies needed for problem solving.

FYEX 1110: First-Year Seminar (1-3)

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.

FRENCH (FREN)

FREN 1110: French I. (3)

Intended for students with no previous exposure to French, this course develops basic listening, speaking, reading, and writing 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.

FREN 1120: French II. (3)

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 toward the ACTFL intermediate-low level. This course is designed to increase student fluency in French as applied to everyday situations. Students will also learn to recognize and understand various 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.

GENERAL STUDIES (GNST)

*Courses marked with an * may be repeated for credit because the subject matter varies*

GNST 192*: Topics. (1-3)

Titles will vary. CR/NC

GNST 193*: Topics. (1-3)

Titles will vary.

GNST 292*: Topics. (1-3)

Titles will vary. CR/NC

GNST 293*: Topics. (1-4)

Titles will vary.

GEOGRAPHY (GEOG)

GEOG 1160: Home Planet: Land, Water, and Life. (3)

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.

GEOG 1160L: Home Planet: Laboratory. (1)

Exercises designed to complement 1160. Applied problems in the spatial processes of the physical environment. Map construction and reading, weather and climate analytics, classification of vegetative and soil associations, landform distribution analysis. Two hours lab.

Pre- or Corequisite: GEOG 1160

GEOG 1165: People and Place. (3)

By focusing on issues of globalization, this course provides an overview of core concepts from human geography, including systematic analyses of economic, political, and cultural geography.

GEOG 1175: World Regional Geography. (3)

The regional geography of the world. Both physical and human aspects are studied along with current economic and political problems.

GEOG 2110: Introduction to Maps and Geospatial Information. (3)

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.

GEOG 217: Energy, Environment and Society. (3)

(Also offered as ME 217) A look at the social, ethical, and environmental impacts of energy use both now and through history. A survey of renewable energy and conservation and their impact on environmental and social systems.

GEOLOGY (GEOL)

GEOL 1110: Physical Geology. (3)

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. Students are encouraged but not required to enroll concurrently in GEOL 1110L.

GEOL 1110L: Physical Geology Laboratory. (1)

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.

Pre- or Corequisite: GEOL 1110.

GEOL 2110C: Historical Geology. (3)

Origin and history of the Earth including age of the planet and dating of rocks, changing configurations of oceans and continents as a result of plate tectonics, records of climate change, history of formation and erosion of mountain chains, origin and evolution of life and causes of extinction. Required field trip and lab exercises permit understanding of how Earth history is interpreted from the geologic rock record.

Prerequisite: GEOL 1110 or ENVS 1130

GEOL 2130: Introduction to Meteorology. (3)

Introduction to Earth's atmosphere and the dynamic world of weather as it happens. Working with current meteorological data delivered via the Internet and coordinated with learning investigations keyed to the current weather; and via study of select archives.

GEOL 2996: Topics. (1-3 to a maximum of 3)

GERMAN (GRMN)

GRMN 1110: German I. (3)

Intended for students with no previous exposure to German, this course develops basic listening, speaking, reading, and writing skills aiming toward the ACTFL novice-mid level. This is an introductory course designed to teach the student to communicate in German in everyday situations and to develop an understanding of German 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.

GRMN 1120: German II. (3)

A continuation of GRMN 1110, students will develop a broader foundation in skills gained during the first semester, including understanding, speaking, reading and writing German aiming toward the ACTFL novice-high level. This course is designed to increase student fluency in German as applied to everyday situations. Students will also learn to recognize and understand various German 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.

GREEK (GREK)

GREK 1110: Greek I. (3)

This course serves as an introduction to the fundamentals of the historic Greek language and culture. The aims of this course are to acquire basic skills in reading, writing, and comprehension in order to read authentic Greek texts with the help of a dictionary. Students will also study the history of the Greek language, texts, and culture.

GREK 1120: Greek II. (3)

This course continues the study of the historic Greek language and culture. The aims of this course are to continue to build basic skills in reading, writing, and comprehension in order to read authentic Greek texts with the help of a dictionary. Students will also continue to study the historical factors behind the developments of the Hellenic world and its texts.

HISTORY (HIST)

*Courses marked with an * may be repeated for credit because the subject matter varies.*

HIST 1110: United States History I. (3)

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.

HIST 1120: United States History II. (3)

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.

HIST 1150: Western Civilization I. (3)

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.

HIST 1160: Western Civilization II. (3)

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.

HIST 1170: Survey of Early Latin America. (3)

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.

HIST 1180: Survey of Modern Latin America. (3)

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.

HIST 2110: Survey of New Mexico History. (3)

The primary objective of this course is to serve as a survey of the history of Latin America 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 to the understanding of the development of New Mexico within the context of the Americas.

HIST 2996: Topics* (3)

The primary objective of this course is to serve as a survey of the history of Latin America pre-Colombian times to the present day. The elements of this course are designed to inform students on the major events and trends that are essential to the understanding of the development of New Mexico within the context of the Americas.

HONORS (HNRS)

Previously UHON

HNRS 1120: Honors Legacy Seminar. (3)

INFORMATION TECHNOLOGY (IT)

IT 101: Computer Fundamentals. (3)

This course is an introduction to the use of computers; including hardware, software and applications using Microsoft 365. The course includes instruction in Microsoft Word, Excel and PowerPoint, as well as terminology, computer ethics and using the internet.

IT 109: Information Technology Cooperative Education. (3)

The student works in an IT-related job for one semester and gains on-the-job insight into a technology field. Student must write projected goals for the semester's work, midterm summaries of work completed thus far, and an end of the term report summarizing work completed during the semester. Students must also get a supervisor evaluation.

Prerequisite: Permission required.

IT 111: Introduction to E-Commerce. (3)

E-commerce concepts ranging from varieties of e-commerce to secure business transactions over the web. How to market a product over the web, basic business concepts of selling, and understanding the evolution of e-commerce.

IT 119: Networking Core Concepts. (3)

(Previously IT 120LT) This course serves as a general introduction in current networking technology for local area networks (LANs), wide-area networks (WANs), and the Internet.

IT 130: Microcomputer Operating Systems (3)

This class covers the skills necessary to select, install/deploy, integrate platforms or components to support an organization's IT infrastructure.

Prerequisite: CS 101, IT 119.

IT 141: Technical Support. (3)

The student is enrolled in a 3-credit course which has two parts: a normal weekly lecture plus a mandatory service time manning the Help Desk Service Phone. In this course, students are taught how to assist other students, faculty, and staff with answering computer-related questions. Skills for running the Help Desk are taught, along with technical skills related to commonly asked questions. Working at the Help Desk phone is mandatory for a fixed number of hours per week. Students will be required to log all questions with appropriate answers to those questions.

Prerequisite: CS 101, IT 119.

IT 165: Introduction to Web Authoring. (3)

(Also offered as CT 165) This course is an introduction to making and designing web pages using HTML generating software. Students learn how to make well-designed web pages from simple to the complex. Site creation with text, graphics, tables, Cascading Style Sheets, and simple animation effects are included. Design principles as they apply to the World Wide Web are also presented.

IT 193*: Topics. (1-4)

Titles will vary. May be repeated for credit. No Limit.

IT 231: Systems Administration. (3)

This class covers the essential skills for IT majors to administer a system. Topics may include configuration/organization, file systems, user management, and backup/disaster recovery.

Prerequisite: CS 101, CS 152, IT 119.

IT 235: Windows System Administration. (3)

Topics In Windows Administration, this is an introduction to system administration of Windows Server with a focus on security and reliability. Topics covered will include Window Server system configuration, available tools, file system and registry structure, auditing and automation of tasks.

Prerequisite: IT 119.

IT 250: Web Fundamentals. (3)

Introduction to development, creation, and management of websites intended for IT majors. Topics include HTML, JavaScript, and web server technology.

Prerequisite: CS 101, CS 152.

IT 260: Information Assurance and Security. (3)

The primary goal of the course is a general introduction to “defense-in-depth” perimeter security on both Windows and LINUX/UNIX networks and an in-depth study of the step-by-step approach used in computer/network attacks.

Prerequisite: CS 101, IT 119.

IT 262: Scripting for Network Defense. (3)

Scripting programming for security purposes. Students build on prior programming, operating systems, and security knowledge to develop, code, use, and debug new and existing scripts.

Prerequisite: CS 101, CS 152, IT 130, IT 260.

IT 265: Forensics and Incident Response. (3)

This course exposes the student to the topics of computer forensics and incident response. Topics include: fundamental concepts, history of computing forensics, data recovery techniques, and responses to security incidents.

Prerequisite: IT 260, IT 262.

IT 271: Databases and Information Management. (4)

This course will cover development and administration issues of relational databases. Topics to span areas of efficient collection, organization, retrieval and management of data.

Prerequisite: CS 101, CS 152.

Pre- or Corequisite: IT 250.

IT 293*: Topics. (1-4)

Titles will vary. May be repeated for credit. No limit.

JAPANESE (JAPN)

JAPN 1110: Japanese I. (3)

This course focuses on the basics of the Japanese language with a balanced approach to the development of four skills: listening, speaking, reading and writing. The course is designed to teach students to communicate with Japanese socially and to utilize culturally appropriate manners to engage in Japanese daily life. While conversational skills are emphasized, the student will also be introduced to the various Japanese scripts.

JAPN 1120: Japanese II. (3)

This course focuses on building upon the basics of the Japanese language with a balanced approach to the development of four skills: listening, speaking, reading and writing. The course is designed to teach students to communicate with Japanese socially and to utilize culturally appropriate manners to engage in Japanese daily life. Along with further developing conversational skills, the student will also continue to learn about and utilize various Japanese scripts.

JAPN 2110: Japanese III. (3)

This course is designed for students who have completed 12 credit hours or the equivalent of Japanese study. This course continues to expand vocabulary, grammar and 209 Kanji to deal with daily activities. Its objective is to teach students to communicate in a meaningful way using all four language skills: speaking, listening comprehension, reading and writing. Students will be able to manage not-complicated daily situation. Students will attain ACTFL intermediate-low level in four skills.

JAPN 2120: Japanese IV. (3)

This course is designed for students who have completed 15 credit hours or the equivalent of Japanese study. This course continues to expand vocabulary, grammar and 271 Kanji to deal with not-complicated daily situation with ease. Also students acquire a competence for Japanese pragmatic usage. This course follows ACTFL language guidelines, integrating the five C's: communication, cultures, connections, comparisons and communities, to offer the student a well-rounded classroom experience. Students will attain ACTFL intermediate-mid level in four skills.

LATIN (LATN)

LATN 1110: Latin I. (3)

Introduction to the Latin language; grammar, syntax and readings in Roman authors.

LATN 1120: Latin II. (3)

Continuation of 1110. Introduction to the Latin language; grammar, syntax, and readings in Roman authors.

Prerequisite: LATN 1110.

LATN 2110: Latin III. (3)

Systematic review of Latin grammar and syntax; readings in simple prose authors such as Cicero and Caesar; introduction to Latin poetry and scansion.

Prerequisite: LATN 1110, LATN 1120.

LATN 2120: Intermediate Latin IV. (3)

Systematic review of Latin grammar and syntax; readings in simple prose authors such as Cicero and Caesar; introduction to Latin poetry and scansion

Prerequisite: LATN 1110, 1120. 2110

LINGUISTICS (LING)

LING 2110: Introduction to the Study of Language and Linguistics. (3)

This course presents an introduction to the study of language through the basic aspects of linguistic analysis: the sound system (phonetics and phonology), the structure of words and sentences (morphology and syntax), and the ways in which language is used to convey meaning (semantics and pragmatics). In addition, the course will investigate how language is acquired and stored in the brain, and how differences in speech styles and dialects reflect different social and cultural backgrounds of individual speakers.

LING 2996: Topics. (3 to maximum of 12)

MANAGEMENT (MGMT)

MGMT 105: Business Co-op Work Phase. (3)

Offered on a CR/NC basis only.

MGMT 158: Ethics in Organizations. (3)

Introduction to ethical issues in business, government, and nonprofit organizations and how to deal with those issues. Emphasis on ethical reasoning and cases of ethical and unethical behavior in management and the professions.

MANUFACTURING TECHNOLOGY (MFGT)

MFGT 101: Introduction to Technology. (1)

A general topics course on subjects relevant to electro-mechanical technology, manufacturing technology, and nanotechnology. Students will learn about the differences and similarities of the three technologies.

MARKETING (MKTG)

MKTG 2110: Principles of Marketing. (3)

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.

MATHEMATICS (MATH)

Note: A student who wishes to enroll in a course requiring a prerequisite must earn a grade of C (not C-) or better in the prerequisite course.

Courses marked with an * may be repeated for credit because the subject matter varies.

Students placing into MATH 011, 012, 021, 022, 099, or 100 must also take FYEX 1110: First Year Seminar, as a pre- or corequisite.

Restrictions:

MATH 011, 012, 021, 022, 099, 100, 118 may not be counted towards graduation.

Credit not allowed for both MATH 1512 and MATH 1430.

Credit not allowed for both MATH 1522 and MATH 1440.

Students who have credit for any courses numbered MATH 1220 and above may not take MATH 106, or MATH 1215 for credit.

Students who have credit for any courses numbered MATH 1512 and above may not take MATH 1215, 1220, 1230, or 1240 for credit. (Students with MATH 1430/1440 may take MATH 1230 for credit.)

A student normally may not take an examination to validate credit in mathematics courses.

Mathematics or Statistics course work dating back more than five years cannot automatically be counted as fulfillment of a prerequisite. Students with older course work who feel they have retained subject knowledge are encouraged to take the ACCUPLACER placement tests offered through the Testing Center.

MATH 011: Prealgebra Part I. (2)

This course includes the first half of a prealgebra course including whole numbers, fractions, decimals, ratio and proportions, and percent.

MATH 012: Prealgebra Part II. (2)

This is the second half of a prealgebra course and covers measurement and geometry, real numbers, introduction to algebra and basic equation solving, and applications.

Prerequisite: MATH 011.

MATH 021: Introduction to Algebra Part I. (2)

This course includes the first half of a beginning algebra course including a review of basic arithmetic, real numbers, integer exponents, linear equations and inequalities, and an introduction to application problems.

Prerequisite: MATH 012.

MATH 022: Introduction to Algebra Part II. (2)

This course includes the second half of a beginning algebra course including a review of the Cartesian coordinate system, graphing linear equations in two variables, properties of exponents, polynomials and an introduction to factoring.

Prerequisite: MATH 021.

MATH 106: Problems in Intermediate Algebra. (1)

Study session for MATH 1215 with an emphasis on problem solving. Offered on a CR/NC basis only. *Corequisite:* MATH 1215.

MATH 107: Problems in College Algebra. (1)

Study session for MATH 1220 with an emphasis on problem solving. Offered on a CR/NC basis only. *Corequisite:* MATH 1220.

MATH 1130: Survey of Mathematics. (3)

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.

Prerequisite: (MATH 118 and 119) or MATH 1215 or (1215X and 1215Y) or 1220 or 1230 or 1240 or 1350 or 1430 or 1440 or 1512 or 1522 or 2530 or ACT Math ≥ 22 or SAT Math Section ≥ 540 or ACCUPLACER Next-Generation Advanced Algebra and Functions ≥ 218 or ACCUPLACER Next-Generation Quantitative Reasoning, Algebra, and Statistics ≥ 253 .

MATH 1215: Intermediate Algebra. (3)

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.

Prerequisite: (MATH 021 and MATH 022) or ACT Math ≥ 17 or SAT Math Section ≥ 460 or ACCUPLACER Next-Generation Advanced Algebra and Functions ≥ 218 .

MATH 1220: College Algebra. (3)

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.

Prerequisite: (MATH 118 and 119) or 1215 or (1215X and 1215Y and 1215Z) or ACT Math ≥ 22 or SAT Math Section ≥ 540 or ACCUPLACER Next-Generation Advanced Algebra and Functions ≥ 239 .

MATH 1230: Trigonometry. (3)

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. May be taken concurrently with MATH 1240.

Prerequisite: MATH 1220 or ACT Math ≥ 25 or SAT Math ≥ 590 or ACCUPLACER Next-Generation Advanced Algebra and Functions ≥ 249 .

MATH 1240: Pre-Calculus. (3)

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. May be taken concurrently with MATH 1230.

Prerequisite: MATH 1220 or ACT Math ≥ 25 or SAT Math Section ≥ 590 or ACCUPLACER Next-Generation Advanced Algebra and Functions ≥ 249 .

MATH 1250: Trigonometry and Pre-Calculus. (5)

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.

Prerequisite: MATH 1220 or ACT Math ≥ 25 or SAT Math Section ≥ 590 or ACCUPLACER Next-Generation Advanced Algebra and Functions ≥ 249 .

MATH 1350: Introduction to Statistics. (3)

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.

Prerequisite: (118 and 119) or 1215 or (1215X and 1215Y) or 1220 or 1230 or 1240 or 1512 or 1522 or 1430 or 1440 or 2531 or ACT Math ≥ 22 or SAT Math Section ≥ 540 or ACCUPLACER Next-Generation Quantitative Reasoning, Algebra, and Statistics ≥ 253 .

MATH 1430: Applications of Calculus I. (3)

An algebraic and graphical study of derivatives and integrals, with an emphasis on applications to business, social science, economics and the sciences.

Credit for both MATH 1430 and MATH 1512 may not be applied toward a degree program.

Prerequisite: MATH 1220 or 1240 or 1250 or ACT Math ≥ 26 or SAT Math Section ≥ 620 or ACCUPLACER Next-Generation Advanced Algebra and Functions ≥ 249 .

MATH 1440: Applications of Calculus II. (3)

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.

Credit for both MATH 1440 and 1522 may not be applied toward a degree program.

Prerequisite: MATH 1430.

MATH 1512: Calculus I. (4)

Limits. Continuity. Derivative: definition, rules, geometric and rate-of-change interpretations, applications to graphing, linearization and optimization. Integral: definition, fundamental theorem of calculus, substitution, applications to areas, volumes, work, average.

Credit for both MATH 1512 and 1430 may not be applied toward a degree program.

Prerequisite: (1230 and 1240) or 1250 or ACT Math ≥ 28 or SAT Math Section ≥ 660 or ACCUPLACER Next-Generation Advanced Algebra and Functions ≥ 284 .

MATH 1522: Calculus II. (4)

Transcendental functions, techniques of integration, numerical integration, improper integrals, sequences and series, Taylor series with applications, complex variables, differential equations.

Credit for both MATH 1522 and 1440 may not be applied toward a degree program.

Prerequisite: MATH 1512.

MATH 1996: Topics. (1-3)

Various topics in mathematics including, but not limited to, tools and techniques designed to improve attitudes and performance in math class, and calculator usage.

MATH 2531: Calculus III. (4)

Continuation of Calculus II 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..

Prerequisite: MATH 1522.

MECHANICAL ENGINEERING (ME)

ME 160L: Mechanical Engineering Design I. (3)

Introduction to engineering graphics, the design process, computer aided design, engineering ethics, design economics and project management. 2 hrs lecture, 3 hrs. lab.

Prerequisite: MATH 1220 or ACT MATH ≥ 25 or SAT Math Section ≥ 590 or ACCUPLACER Next-Generation Advanced Algebra & Functions ≥ 249 .

Pre- or corequisite: ENG 120 or MATH 1230 or MATH 1240 or MATH 1250 or MATH 1430 or MATH 1440 or MATH 1512 or MATH.

ME 217: Energy, Environment and Society. (3)

A look at the social, ethical, and environmental impacts of energy use both now and through history. A survey of renewable energy and conservation and their impact on environmental and social systems.

ME 260L: Mechanical Engineering Design II. (3)

The design process, project management, shop practice CNC and rapid prototyping, design economics and engineering ethics. 2 hrs. lecture, 3 hrs. lab.

Prerequisite: ME 160 L.

Pre- or Corequisite: CHEM 1215 and CHEM 1215L.

**MECHANICAL TECHNOLOGY
(MCHT)**

MCHT 101L: Basic Welding. (4)

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—including gas welding, brazing and cutting (oxy-acetylene), stick (SMAW), MIG (GMAW), TIG (GTAW), and plasma arc cutting (PAC). Students may opt to specialize in one or more of the areas after required exercises in all areas are satisfied.

MCHT 120: GTAW Welding. (3)

Focuses on the advanced techniques employed in the Gas Tungsten Arc Welding (GTAW) field. Provides hands on welding practice and knowledge with the GTAW process in various Positions and Joint Configurations. Students may opt to specialize in one or more of the areas after learning all. Course prepares student to take the GTAW welding tests outside of UNM - Los Alamos.

Prerequisite: MCHT 101L.

MCHT 193*: Topics. (1-3)

Titles will vary.

MUSIC (MUS)

**May be repeated for credit with permission of Fine Arts Department Chair.*

MUSC 1110: Music Appreciation: Jazz. (3)

A study of the evolution of jazz in the United States from its beginnings to the present.

MUSC 1120: Music Appreciation: Rock and Roll. (3)

An Introduction to the fundamentals of music and the development of listening skills through the examination of rock music, including its history, styles and significance in the realm of popular music. No musical background necessary.

Corequisite: MUS 150.

MUSC 1130: Music Appreciation: Western Music. (3)

Designed to expand the student's ability to listen actively to Western classical art music: a survey of the various genres including chamber music, symphonic, and vocal repertoire Includes live guest performances. Attendance at several on campus concerts required. No musical background necessary.

MUSC 1210: Fundamentals of Music for Non-Majors. (3)

Students will develop an awareness of basic elements of melody, rhythm, harmony, form and expression through involvement as singers, players, creators, movers, listeners, and readers of music. Designed for students with little or no musical training.

MUSC 1220: Fundamentals of Piano for Non-Majors. (1)

Keyboard fundamentals, including key and chord relationships. Opportunities exist for the creative exploration of piano sound, with repertoire assigned for the individual student's current ability. Open only to non-music majors.

NATIVE AMERICAN STUDIES (NATV)

NATV 1150: Introduction to Native American Studies. (3)

This course surveys the significance of Native American Studies through an inter-disciplinary approach to two areas of academic concentrations: Indigenous Learning Communities and Leadership and Building Native Nations.

NATURAL SCIENCE (NTSC)

NTSC 1110: Physical Science for Teachers. (4)

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.

NTSC 1120: Life Science for Teachers. (4)

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.

NTSC 2110: Environmental Science for Teachers. (4)

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.

NUCLEAR FACILITIES FUNDAMENTALS (NFFW)

NFFW 1110: Nuclear Facility Fundamentals. (5)

Introduction to the basic principles of working in a DOE nuclear facility. Topics include an introduction to radioactive materials, personnel protective equipment, biological monitoring programs, ventilation systems, waste generation and general laboratory hazards. Instructor permission.

Prerequisite: Employment as a Laboratory Technician/Technologist at Los Alamos National Laboratory (LANL), N3B, other National Laboratories, or Department of Energy facilities.

Satisfactory score on placement tests for writing, reading, and mathematics or completion of ENGL 1110X and MATH 012 with a grade of CR.

NFFW 1120: Fissionable Material Handler. (5)

Introduction to fissile material handling for glovebox workers. Topics include an introduction to laboratory ventilation and glovebox systems, movement of fissionable materials, and nuclear material control and accountability fundamentals. Instructor permission.

Prerequisite: Employment as a Laboratory Technician/Technologist at Los Alamos National Laboratory (LANL), N3B, other National Laboratories, or Department of Energy facilities.

Corequisite: NFFW 1110 and NFFW 1120L.

Satisfactory score on placement tests for writing, reading, and mathematics or completion of ENGL 1110X and MATH 012 with a grade of CR.

NFFW 1120L: Nuclear Facility Laboratory. (5)

Laboratory experience portion of a sixteen-week course designed to prepare students for an entry level career in DOE nuclear facilities as a glovebox worker and fissile material handler. Students will learn how to use appropriate equipment and laboratory practices to work with nuclear materials, respond in emergencies, to perform routine procedures, and other job-related tasks related to working in a nuclear laboratory. Instructor permission.

Prerequisite: Employment as a Laboratory Technician/Technologist at Los Alamos National Laboratory (LANL), N3B, other National Laboratories, or Department of Energy facilities.

Corequisite: NFFW 1110 and NFFW 1120.

Satisfactory score on placement tests for writing, reading, and mathematics or completion of ENGL 1110X and MATH 012 with a grade of CR.

NUCLEAR WASTE OPERATOR (NWOB)

NWOB 1110: Nuclear Waste Operator Boot Camp. (9)

Twelve-week boot camp style course designed to prepare students for a career as a Waste Processing Operator. This curriculum will prepare individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in identifying and disposing of hazardous materials. Topics include instruction in environmental safety principles, biohazard identification, testing and sampling procedures, laboratory techniques, instrumentation calibration, hazardous waste disposal procedures and systems, safety and protection procedures, equipment maintenance, and report preparation.

Prerequisite: Acceptance into an approved Waste Processing Operator Apprenticeship program with local employer.

Corequisite: NWOB 1110L.

NWOB 1110: Nuclear Waste Operator Boot Camp Laboratory. (1)

Field/lab experience portion of a twelve-week boot-camp-style course designed to prepare students for a career in Waste Processing Operator. Students will learn how to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in identifying and disposing of hazardous materials. Topics include instruction in environmental safety principles, biohazard identification, testing and sampling procedures, laboratory techniques, instrumentation calibration, hazardous waste disposal procedures and systems, safety and protection procedures, equipment maintenance, and report preparation.

Prerequisite: Acceptance into an approved Waste Processing Operator Apprenticeship program with local employer.

Corequisite: NWOB 1110.

NUTRITION (NUTR)

NUTR 1110: Nutrition for Health. (3)

This course provides an overview of general concepts of nutrition, which can be applied to food choices that support a healthy lifestyle. The cultural, psychological, physiological and economic implications of food choices are explored.

NUTR 2110: Human Nutrition. (3)

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.

Prerequisite: BIOL 1140 or BIOL 2110C or CHEM 1120C or (CHEM 1215 and CHEM 1215L).

PERSONAL CARE ATTENDANT (PCA)

PCA 101L: Personal Care Attendant. (5)

(Home Health Aide) Students prepare to work as a Personal Care Attendants in home healthcare, as independent contractors/self-employment, or to provide care for a relative. Course includes lectures, group learning, video instruction, workbook exercises, instructor demonstrations, hands-on skills practice and exams. Skills Lab: 64 hours; job shadowing: 16 hours in a home healthcare or assisted living facility.

Prerequisites: Satisfactory score on placement tests for writing, reading, and mathematics.

Prior to entering the clinical setting in the final week of class, students must have completed the following requirements: American Heart Association Healthcare Provider CPR Certification; program health form signed by physician;

caregiver background screening and finger printing (fee required); immunizations to include Measles-Mumps-Rubella (MMR), Varicella (chicken pox), Hepatitis B series, Diphtheria-Pertussis-Tetanus (DPT), adult Tetanus, and Influenza (flu shot); Tuberculosis exam (TB). A UNM Certificate is awarded upon successful completion of this course.

PHILOSOPHY (PHIL)

PHIL 1115: Introduction to Philosophy. (3)

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.

PHIL 1120: Logic, Reasoning, and Critical Thinking. (3)

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.

PHIL 1130: Contemporary Moral Issues. (3)

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.

PHIL 2140: Professional Ethics. (3)

This course focuses on some of the ethical issues that arise in the context of professional life. Beginning with an overview of several major ethical theories, the course will consider how these theories, which traditionally concern personal morality, apply to life in a professional setting. The course will focus on issues that might include lying and truth-telling, whistleblowing, confidentiality, the obligations of businesses toward the public, and the ethical concerns of privacy in journalism. Using a combination of readings, case studies, and discussion, students will explore these issues by critically evaluating ethical principles and also applying them to real-world settings.

PHIL 2210: Early Modern Philosophy. (3)

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.

PHIL 2220: Greek Philosophy. (3)

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.

PHIL 2225: Greek Thought. (3)

An introductory survey of early and classical Greek philosophy, literature, and history. Figures: the Pre-Socratics, Socrates, Plato and Aristotle; Homer and Sophocles; Herodotus and Thucydides.

PHIL 2240: Introduction to Existentialism. (3)

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.

PHYSICAL EDUCATION (PHED)

*Courses marked with an * may be repeated for credit because the subject matter varies.*

PHED 1110: Topics in Dance. (1, no limit)*

PHED 1410: Yoga. (1, no limit)

Introduction to the five areas of yoga which are particularly significant to the Western World.

PHED 1420: Topics in Stretching and Relaxation. (1, no limit) *

Instruction and practice of various techniques to enhance flexibility and reduce stress.

PHED 1430: Pilates. (1, no limit)

Instruction in movements that increase balance, core fitness and cardio respiratory endurance.

PHED 1440: T'ai Chi. (1, no limit)

Instruction and practice in techniques to enhance body awareness, reduces stress, improve balance, and increase strength.

PHED 2410: Yoga II: Intermediate Yoga. (1, no limit) *

Instruction in more advanced techniques of Yoga emphasizing the physical aspects of Hatha Yoga.

PENP 2296*: Topics. (1-2)

Titles will vary. May be repeated for credit, no limit. New activities offered on an exploratory basis.

PHYSICS (PHYS)

Listed in the UNM-Albuquerque catalog as the Department of Physics and Astronomy. See also "Astronomy."

PHYS 1110: Physics and Society. (3)

If you are curious about how common things work, about physics that is relevant to social and political issues, or just about the natural world in general, Physics and Society is just the course for you! No previous background in physics or mathematics (beyond high school algebra) is required or expected. Just bring a lively curiosity and a dedication to learning new things.

PHYS 1115: Survey of Physics. (3)

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.

PHYS 1115L: Survey of Physics Laboratory. (1)

A series of laboratory experiments associated with the material presented in PHYS 1115. Two hours lab.

Pre- or Corequisite: PHYS 1115.

PHYS 1230: Algebra-Based Physics I. (3)

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.

Credit for both PHYS 1230 and PHYS 1310 may not be applied toward a degree program.

Prerequisites: MATH 1240 or MATH 1250 or MATH 1430 or MATH 1512 or ACT Math ≥ 28 or SAT Math Section ≥ 660 or ACCUPLACER Next-Generation Advanced Algebra and Functions ≥ 284 .

PHYS 1230L: Algebra-Based Physics I Laboratory. (1)

A series of laboratory experiments associated with the material presented in PHYS 1230. Three hours lab.

Pre- or Corequisite: PHYS 1230.

PHYS 1231: Problems in Algebra-Based Physics I. (1)

This is a supplemental course for Algebra-based Physics I. Offered on a CR/NC basis only.

Corequisite: PHYS 1230.

PHYS 1240: Algebra-Based Physics II. (3)

The second half of a two semester algebra-based introduction to Physics. This course covers electricity, magnetism and optics.

Prerequisite: PHYS 1230.

PHYS 1240L: Algebra-Based Physics II Laboratory. (1)

A series of laboratory experiments associated with the material presented in PHYS 1240. Three hrs. lab.

Pre- or Corequisite: PHYS 1240.

PHYS 1241: Problems in General Physics. (1)

This is a supplemental course for Algebra-based Physics II. Offered on a CR/NC basis only.

Corequisite: PHYS 1240.

PHYS 1310: Calculus-Based Physics I. (3)

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. Credit for both PHYS 1230 and PHYS 1310 may not be applied toward a degree program.

Pre- or Corequisite: MATH 1512.

PHYS 1310L: Calculus-Based Physics I Laboratory. (1)

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. Three hrs. lab.

Pre- or Corequisite: PHYS 1310.

PHYS 1311: Problems in Calculus-Based Physics I. (1)

This is a supplemental course for Calculus-based Physics I. Offered on a CR/NC basis only.

Corequisite: PHYS 1310.

PHYS 1320: Calculus-Based Physics II. (3)

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, PHYS 1320L.

Prerequisite: PHYS 1310.

Pre- or Corequisite: MATH 1522.

PHYS 1320L: Calculus-Based Physics II Laboratory. (1)

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. Three hrs. lab.

Pre- or Corequisite: PHYS 1320.

PHYS 1321: Problems in Calculus-Based Physics II. (1)

This is a supplemental course for Calculus-based Physics II. Offered on a CR/NC basis only.

Corequisite: PHYS 1320.

PHYS 2310: Calculus-Based Physics III. (3)

This course, the third in the calculus based sequence for science and engineering students, is a study of optics and topics in modern physics.

Prerequisite: PHYS 1320.

Pre- or Corequisite: MATH 2531.

PHYS 2310L: Calculus-Based Physics III Laboratory. (1)

Physics 2310L is a companion course to Physics 2310 covering topics in geometrical optics, wave optics and modern physics at the calculus level. Lab activities mirror and enhance lecture topics. Hands on experiments involving data collection and analysis give students a better conceptual framework for understanding physics. Geometrical and wave optical phenomena are deeply probed. Three hrs. lab.

Pre- or Corequisite: PHYS 2310.

PHYS 2311: Problems in Calculus-Based Physics III. (1)

Problem solving and demonstrations related to Calculus-Based Physics III. Offered on a CR/NC basis only.

Corequisite: PHYS 2310.

POLITICAL SCIENCE (POLS)

POLS 1120: American National Government. (3)

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.

POLS 1140: The Political World. (3)

This course introduces politics with emphasis on the ways people can understand their own political systems and those of others in a greater depth. This course will help in becoming more responsible and effective in the political world.

POLS 2110: Comparative Politics. (3)

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.

POLS 2120: International Relations. (3)

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.

PSYCHOLOGY (PSYC)

PSYC 1110: Introduction to Psychology. (3)

This course will introduce students to the concepts, theories, significant findings, methodologies, and terminology that apply to the field of psychology.

PSYC 2110: Social Psychology. (3)

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.

Prerequisite: PSYC 1110.

PSYC 2120: Developmental Psychology. (3)

Study of human physical and psychological change and stability from a lifespan development perspective.

Prerequisite: PSYC 1110.

PSYC 2220: Cognitive Psychology. (3)

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.

Prerequisite: PSYC 1110.

PSYC 2250: Brain and Behavior. (3)

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.

Prerequisite: PSYC 1110 or BIOL 1110 or BIOL 1140.

PSYC 2270: Psychology of Learning and Memory. (3)

This course provides an overview of how information is acquired, stored, retrieved, and manifested in the behavior of human and non-human animals.

Prerequisite: PSYC 1110.

PSYC 2320: Health Psychology. (3)

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.

Prerequisite: PSYC 1110.

PSYC 2330: Psychology of Human Sexuality. (3)

Exploration of the psychological, physiological, cultural, social and individual factors that influence sexual behavior, sex roles, and sex identity.

Prerequisite: PSYC 1110.

PSYC 2510: Statistical Principles for Psychology. (3)

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.

Prerequisite: PSYC 1110.

PSYC 2996: Topics in Psychology. (1-3, no limit) *

May be repeated for credit provided the subject matter varies.

PUBLIC SAFETY (PBST)

PBST 101: Introduction to Homeland Security. (3)

Historical and contemporary governmental actions for prevention, detection, response and recovery from terrorism and disasters including components of DHS. Multi-jurisdictional agencies' and stakeholders' roles. Challenges; Balance between freedom and security.

PBST 102: Principles of Emergency Management. (3)

History, characteristics, functions, resources of integrated system; how emergency management services work together in a system of resources and capabilities. Application to all hazards for all government levels, phases and functions of emergency management.

PBST 105: Incident Command. (3)

Provides insight into operational levels, functions, responsibilities of supervisors of established ICS organization. Examines Federal Emergency Management Agency, Incident Command System, creation of FEMA's National Incident Management Systems, how NIMS is structured and works.

PBST 106: Introduction to Terrorism and Public Safety. (3)

Introduces terrorism and its impact twenty-first century life. Historical background, definitions, tactics, ideologies, terrorist organizations, including states from around the world. How terrorism influences civilization from public policy to emergency response operations.

PBST 107: Social Impacts of Disaster (3)

Focuses on human behavior and the stages of human response during and after a natural or man-made disaster; for example, hurricanes, tornados, earthquakes, floods, fires, chemical spills, nuclear power plant accidents, riots, etc.

PBST 108: Critical Infrastructure Protection. (3)

An introduction to analyses and tools to identify critical private and public sector infrastructure, and optimal protection strategies.

PBST 109: Public Safety Interview and Report Writing. (3)

Writing the types of reports required in a criminal justice career. Gather pertinent information and write report narratives representative of those prepared by individuals working in a profession within the criminal justice system.

PBST 110: Basic Police Operations. (3)

Explains duties, authority, responsibilities, and rights of the uniformed police officer. Emphasis on the function of the patrol officer as it relates to criminal investigation, intelligence, vice units and traffic administration.

PBST 119: Traffic Accident Investigation. (3)

Studies traffic collisions using scientific methods: vehicle speed calculation, timed distance speed, report writing, diagramming. Explores legal, statistical, professional aspects of the field. Dynamic vehicle experiments; practical exercises gathering facts for traffic investigators.

PBST 120: Emergency Management Planning. (3)

Developing an effective emergency planning system. Fundamentals of emergency planning process and rationale behind planning. Effective all-hazard emergency planning operations planning process to save lives and protect property threatened by disaster.

PBST 121: Introduction to Security. (3)

Examines the history of security, the role of security professionals, terrorism and national strategies, crime prevention, workplace security, security of physical structures, risk management, critical infrastructure and key national resources, future of security technology.

PBST 131: Introduction to Transportation Security. (3)

Examines securing transportation systems, passengers, and cargo. Components of major transportation systems and various security threats, risks, and vulnerabilities they face. Discusses issues involving governmental and non-governmental entities involved in transportation.

PBST 193: Special Topics in Public Safety. (1-3)

Topics of specific interest will be developed as needed.

PBST 204: Constitutional Law for the Public Safety Professional. (3)

Introduces constitutional law; guarantees of personal liberties in federal constitution. Jurisdiction of U.S. Supreme Court and lower courts, case law, fundamental rights such as trials by jury, right to counsel, privilege, self-incrimination.

PBST 220: Exercise Design and Evaluation. (3)

Fundamentals of emergency management exercise design, management, evaluation. Meets FEMA guidelines for exercise design and evaluation courses and DHS Exercise and Evaluation Program.

PBST 221: Developing Volunteers. (3)

Designed to provide insight into the tasks, roles and responsibilities required for emergency managers to effectively manage volunteer resources during a disaster.

PBST 230: Intelligence Analysis and Security Management. (3)

Identifies components of intelligence analysis and security management. Duties and relationships of different intelligence agencies; historical events with important intelligence analysis and impact of analysis. Importance of security management upon security of the homeland.

PBST 232: Homeland Security Risk Assessment. (3)

Examine US homeland security goals; explore the all hazards concept of threat. Domestic and foreign threats, methods of attack, likely targets. Process of identifying threat, risk and vulnerability, impact of attacks.

RADIATION CONTROL TECHNOLOGY (RCTB)

RCTB 1110: Radiation Control Technology Boot Camp. (9)

Twelve week boot camp style course designed to prepare students for a career in Radiation Control Technology. Topics include monitoring environmental radioactivity levels, responding in emergencies, and performing decontamination procedures.

Prerequisite: Acceptance into an approved RCT Apprenticeship program with local employer.

Corequisite: RCTB 1110L.

RCTB 1110L: Radiation Control Technology Boot Camp Laboratory. (1)

Field/lab experience portion of a twelve week boot camp style course designed to prepare students for a career in Radiation Control Technology. Students will learn how to use appropriate tools and practices to monitor environmental radioactivity levels, respond in emergencies, to perform decontamination procedures, and other job related tasks related to radiation control technology

Prerequisite: Acceptance into an approved RCT Apprenticeship program with local employer.

Corequisite: RCTB 1110.

RELIGION (RELG)

RELG 1110: Introduction to World Religions. (3)

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..

RELG 1120: Introduction to the Bible. (3)

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.

RELG 2110: Eastern Religions. (3)

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.

RELG 2120: Western Religions. (3)

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.

ROBOTICS (ROBO)

ROBO 201: Industrial Robotics Operations. (3)

This course covers basic robotics operations, including robotics system components, peripherals, robot set-up, programming, production, and robotics operation safety practices.

Prerequisite: ELCT 163, ENG 130L.

ROBO 202: Advanced Industrial Robotics. (3)

This course covers industrial robotics programming and intelligent visual recognition software. Students will work with robots, peripheral equipment, and workspaces specific to industrial manufacturing robots.

Prerequisite: ROBO 201.

ROBO 204: Programmable Logic Controllers. (3)

This course explores the many aspects of Programmable Logic Controllers (PLCs) from basic concepts to system level applications.

Prerequisite: ELCT 163.

ROBO 290: Robotic Synthesis. (3)

This is a capstone course in the robotics program. Students will integrate and demonstrate all previously gained robotics, electronics, manufacturing, CADD, and programming skills to produce a comprehensive robotic project.

ROBO 293: Topics in Robotics. (1-3)

This course is a topics course for robotics.

RUSSIAN (RUSS)

RUSS 1110: Russian I. (3)

This is an entry level Russian course for students with no previous exposure to the language. The purpose of this beginning course is to develop listening, speaking, reading and writing skills to communicate at a basic level. After the completion of the course, students will be able to perform in specific situations at the Novice-Mid level on the American Council on the Teaching of Foreign Languages proficiency scale.

RUSS 1120: Russian II. (3)

This is an entry-level continuation course for students that have completed Elementary Russian I. The course will use a communicative approach to cover the fundamentals of basic vocabulary, grammar, conversation and culture. After the completion of the course, students will be able to perform in specific situations at the Novice-High level on the American Council on the Teaching of Foreign Languages proficiency scale.

SOCIOLOGY (SOC)

SOCI 1110: Introduction to Sociology. (3) 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 “taken for granted” 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.

SOCI 2120: Introduction to Criminal Justice Systems. (3)

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.

Prerequisite: SOCI 1110.

SOCI 2210: Sociology of Deviance. (3)

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.

Prerequisite: SOCI 1110.

SOCI 2310: Contemporary Social Problems. (3)

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.

Prerequisite: SOCI 1110.

SOCI 2315: The Dynamics of Prejudice. (3)

This course is designed to help students understand how attitudes and beliefs of individuals shape intergroup relations and their impacts on the daily lives of individuals as well as the effects that these beliefs have on the larger social structure of American society. We will examine how profoundly our society and the groups to which we belong, influence us and our beliefs and ultimately how these beliefs shape prejudice in our society. In this course, students are encouraged to challenge ideologies that are considered "common sense" or that are taken for granted and this in turn will allow them to critically engage issues in society such as racism, classism, sexism, and will leave with an understanding on how privilege affects our views on disability, LGBTQ issues, religion and immigration. Rather than investigating these themes in the abstract, students will identify and unpack how these larger structural issues play integral roles in their everyday lives, interactions, and existence. Ultimately, this course aims to address the social inequalities that exists in our society as a result of prejudice and will challenge students to identify and engage in strategies to work towards changing these aspects of society.

SOCI 2340: Global Issues. (3)

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.

Prerequisite: SOCI 1110.

SPANISH (SPAN)

*Courses marked with an * may be repeated for credit because the subject matter varies.*

SPAN 1110: Spanish I. (3)

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.

SPAN 1120: Spanish II. (3)

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.

SPAN 1125: Conversational Spanish I. (1)

This third-semester Spanish course emphasizes oral communication, idiomatic usage and the development of vocabulary, with a review of basic syntax.

Offered on a CR/NC basis only.

Pre or Corequisite: SPAN 1110 or 1120 or 1210 or 1220.

SPAN 2996*: Topics in Spanish. (1-3)

Titles will vary.

THEATRE (THEA)

THEA 1110: Introduction to Theater. (3)

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.

WELDING TECHNOLOGY (WLDT)

WLDT 101: Welding Blue Print Reading. (4)

Introductory course on welding blueprint reading and related theory. Students demonstrate competency by satisfactory completion of instructional modules and American Welding Society Standards. Course combines lecture and laboratory instructional formats.

WLDT 104: NCCER Core. (4)

Required introduction to the National Center for Construction Education and Research for certification. Topics studied include basic math, communications, prints, methods, and ethics. Students demonstrate skills level through laboratory assignments.

WLDT 105: Arc Welding I. (4)

This course will introduce the student to the process of electrode manipulation, position welding and use of the different welding machines.

WLDT 107: Advanced Arc Welding. (4)

Directed to achieving high quality S.M.A.W. welds, which conforms to specific codes and procedures. Competency in this course is encouraged before attempting pipe classes. Course will introduce American Welding Society D5.0 welding qualification codes.

WLDT 108: Oxyfuel Welding I. (4)

This course will introduce the student to gas welding process. The student will learn to handle and use the acetylene gas form of welding.

WLDT 112: Gas Metal Arc Welding (GMAW) I. (3)

General safety procedures for GMAW & FCAW. Perform equipment setup and use GMAW & FCAW. Learn how to select and use different filler metal and shielded gas. Make multiple-pass filler and V-Groove welds on carbon steel plate in various positions.

WLDT 120: General Welding Applications. (3)

Preparation and setup of arc welding equipment. Process of striking an arc and making stringer beads, weave, overlapping beads and filler metal. Visually detect and correct arc blow.

WLDT 141: M.I.G. and T.I.G. Welding. (4)

Arc Welding Course designed to further the knowledge and skills of welders. The course begins with a short review of pipe welding and groove welds on plate in all positions and covers stainless steel, cupro nickel alloys, hard facing processes and advanced uses for, gas metal arc welding or M.I.G. and Gas Tungsten Arc Welding or T.I.G.



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