

## Doña Ana Community College



**Catalog** 2018-2019



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# DOÑA ANA ACADEMIC CATALOG

# Doña Ana Community College 2018-2019 Catalog

Any item in this catalog is subject to modification at any time by proper administrative procedure.

The ultimate responsibility for planning an academic program in compliance with university, community college, college and departmental requirements rests with the student. In addition, the student bears ultimate responsibility for understanding all matters of the Course Catalog.

Catalog effective summer 2018 through spring semester 2024.

## **GENERAL INFORMATION**

This catalog is the student's guidebook to earning a degree or other academic credential. The catalog contains three important parts: (1) the official listing of NMSU-DACC's academic programs and their requirements, (2) a listing of the courses offered at NMSU-DACC with descriptions and prerequisites, and (3) other information essential for student success including many of the rules and regulations that govern the student's academic journey at NMSU-DACC.

As with any other journey, advance planning is essential. To avoid wrong turns and lost time, each student must chart their own path, with the help of their academic advisors and this guidebook. Each student is responsible for planning an academic program of study in compliance with university, community college, college and departmental requirements as set forth in the Catalog. In addition, each student is obligated to abide by the Academic Rules and Regulations as set forth in the Catalog, as well as the Student Social Code of Conduct, as set forth in the Student Handbook (available through the Dean of Students website).

Upon proper application and payment of fees, students will be awarded academic degrees and designations when the completion of the academic program requirements is verified by the relevant NMSU-DACC academic unit. Degrees and designations may be awarded under any catalog in effect on the date of degree or designation completion, provided that the catalog year is the same or subsequent to the year in which the student was first enrolled.

The academic program requirements of each catalog are effective for a period of six academic years. This 2018-19 Catalog is effective summer 2018 through spring semester 2024. All other catalog content, including rules, regulations, course descriptions and prerequisites are effective only for the catalog's denoted academic year. While content changes are typically implemented between Catalog years, the catalog does not represent a contract and NMSU-DACC reserves the right to make modifications to the catalog at any time.

Academic programs at the New Mexico State University System are available to all students without regard to age, ancestry, color, disability, gender, national origin, race, religion, sexual orientation or veteran status.

NMSU-DACC is transforming lives through discovery. With the help of your advisors, you can chart your own transformational journey, using this catalog as your guidebook.

This publication focuses primarily on academic matters. Candidates for degrees and certificates may elect to fulfill requirements as outlined in the catalog in effect at the date of initial enrollment (provided the catalog is not more than six years old) or any subsequent catalog in effect during their dates of registration at Doña Ana Community College. Readers should be aware of the following:

- The DACC Catalog is not a complete statement of all procedures, policies, rules, and regulations that might apply to a student in all circumstances. It may be necessary to consult other documents, such as the DACC Student Handbook, as well.
- DACC reserves the right to change at any time and without notice any item contained in this publication, including program offerings and content, course offerings and descriptions, procedures, policies, and regulations.

# **Welcome | Bienvenidos Welcome to the Community College**

Welcome to Doña Ana Community College, where helping students discover their passion and meet their educational goal is important. We have created a responsive, learning-centered environment to assist students in developing the knowledge and skills necessary to continue their education or enter the workforce in their chosen profession. In addition to preparing students to transfer or enter the workforce, DACC is committed to life-long learning helping community members attain their personal and professional goals through workforce training and continuing education.

DACC is a comprehensive community college offering career programs through 41 Associate Degrees and numerous certificates. Upon graduation, students will attain the technical skills and licenses necessary to enter a rewarding and challenging career. In addition to career education, DACC offers a quality general education program where each student will gain knowledge and skills through general education courses designed to help them attain important twenty-first century skills. This training is necessary to be successful in any job or continue on to complete a bachelor's degree upon transferring.

DACC welcomes and supports a diverse student population including our veterans. As each student's educational goals and needs are unique to them, DACC provides important student support services to assist in developing a degree or certificate plan, become oriented to the college, register for courses, apply for graduation and search for a job. In addition to these vital support services, students attending DACC will develop supportive relationships with their advisor, faculty and fellow students.

DACC supports many other education goals as well:

- Through the Adult Education program, citizens can earn a high school equivalency credential.
- The dual-credit courses afford high school students the opportunity to earn college and high school credit simultaneously, saving them time and money.
- Early College High Schools offer students the opportunity to earn their high school degree and college certificates and associate degrees.
- Short courses offered through the Community Education program are available for anyone looking for personal enrichment opportunities.
- Customized Training programs for business and industry provide education offerings tailored to meet the needs of employees.
- The Small Business Development Center offers guidance to prospective and current small business owners and managers.

Use this catalog to explore all that DACC has to offer. Visit one of our campuses and then get started or continue your educational plan today.

#### Renay M. Scott, Ph.D., President

#### **Bienvenidos**

El Colegio Comunitario Doña Ana se complace en abrir sus puertas a toda la comunidad. La misión de esta institución es ofrecer oportunidades educativas a todos los que deseen enriquecer sus conocimientos.

Estamos trabajando para eliminar todas las barreras en la educación. Ofrecemos cursos completamente gratuitos para aprender inglés como segundo idioma, por medio del programa de Educación para Adultos, ya que todas las clases que se ofrecen en el colegio se imparten en inglés.

Si desea información sobre estos cursos, comuníquese al teléfono (575) 527-7540<sup>1</sup>.

Para más información sobre el colegio, llame al (575) 527-7500<sup>1</sup>.

<sup>1</sup> Se habla español.

## **Basic Policies and General Information**

## A Note About Career Technical Education Courses

Students planning to pursue a bachelor's degree at New Mexico State University after completing their studies at DACC need to be aware that not all career technical education courses taken at DACC can be used to satisfy degree requirements at NMSU. The number of DACC credits that may be counted toward a bachelor's degree depends on the major selected and any agreements providing for the acceptance of career technical education courses.

Programs already having such agreements are called "articulated" programs, and are listed at Applying DACC Credit Toward Bachelor's Degree Programs (p. 62). It is best for students to consult advisors at both DACC and NMSU early in their associate degree program to insure that the maximum number of credits will apply toward the bachelor's degree program selected.

#### **Tuition Differentials**

DACC students enrolling in courses on any other NMSU campus pay the tuition rate in effect at that campus.

#### **Nondiscrimination**

It is the policy of Doña Ana Community College not to discriminate on the basis of age, color, disability, gender, national origin, race, religion, sexual orientation, or veteran status in employment or other college-administered programs. This policy is in compliance with Title VII of the Civil Rights Act of 1964, Executive Order 11246 as amended by 11375 and section 504 of the Vocational Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Americans with Disabilities Amendment Act of 2008 (ADAAA), and Title IX of the Educational Amendments of 1972 and subsequent revisions.

Disability Statement. Doña Ana Community College is strongly committed to providing education to all citizens of Doña Ana County. The college's faculty and staff are dedicated to the goal of providing equal access to individuals with disabilities and to the spirit of the Americans with Disabilities Act (ADA) of 1990. The ongoing effort to reduce and remove physical and attitudinal barriers is designed to assist individuals with disabilities to enjoy the college's facilities, programs, and services to the fullest extent. We are dedicated to developing an educational environment free of discrimination.

Policy of Nondiscrimination on the Basis of Disability. Doña Ana Community College does not discriminate on the basis of disability in the admission or access to, or treatment or employment in, its programs or activities.

The ADA coordinator for DACC, located at the East Mesa Campus in DASR 104A, (575) 527-7548, has been designated to oversee compliance with the nondiscrimination requirements contained in Section 35.107 of the Department of Justice Regulations. Information concerning the

provisions of the Americans with Disabilities Act, and the rights provided thereunder, are available from the ADA coordinator.

#### **Technical Standards for Admissions**

Some programs may require technical standards for admissions and/ or continued program participation. Technical standards may include possessing or acquiring skills or behaviors to complete performancebased tasks. Completion of these tasks may be required for program completion.

#### **Learning Outcomes Assessment**

As part of its continuing effort to maintain quality academic programs and to provide strong support services, all DACC programs have established student learning outcomes. DACC/NMSU routinely conducts learning outcomes assessment activities at the classroom, program, and college levels through activities such as general education assessment projects, exit exams, exit interviews, and standardized tests. Students may be required to participate in one or more of these activities. Collegewide essential learning outcomes and program-specific student learning outcomes are published on the DACC Assessment of Student Learning website.

#### **DACC Graduation and Retention Rates**

Under the Student Right to Know and Campus Security Act of 1990, Public Law 101-542, DACC is required to calculate (using a prescribed formula) and disclose graduation rates for all first-time, full-time, degree-seeking students who enrolled at DACC in Summer and Fall 2013. This cohort consists of 1,108 students. The number of graduates who earned either a certificate or an associate degree by Summer 2016 was 147. The three-year, Student-Right-to-Know graduation rate was 13.3 percent.

Rates for previous cohorts after three years are as follows:

Cohort	Rate	
Fall 2012 cohort	10.4%	
Fall 2011 cohort	11.2%	
Fall 2010 cohort	12.2%	

The retention rate for first-time, full-time DACC admitted students from Fall 2015 to Spring 2016 was 71 percent. The retention rate for these students from Fall 2015 to Fall 2016 was 58 percent.

#### **Student Special Care Policy**

To ensure the safety and well-being of our students, DACC/NMSU may, on occasion, require that students receive a particular type of care or treatment (e.g., emergency medical attention, live-in attendants, or vaccinations) as a condition of continued enrollment or eligibility to reside in university-operated housing. When this care or treatment is required by the cognizant DACC/NMSU administrator, the student will be obligated to assume any financial responsibility associated with the treatment.

Furthermore, DACC/NMSU may, on occasion, contact a student's parents, legal guardian, or spouse in cases of extreme emergency, or where a possibility of imminent harm exists. Such action will be taken only when, in the judgment of the appropriate official, the best interests of the student and the institution will be served.

When practical, DACC/NMSU will notify the student in writing of the institution's intention to undertake the steps authorized by this policy. This decision may be appealed by the student to the DACC vice president for student services (VPSS) within 24 hours of notification. The appeal

should be in writing and should state clearly the reason why the student objects to the proposed action. The VPSS will review the facts in the case and convey the decision to all parties within 48 hours. The VPSS's decision shall be final.

#### **Jurisdiction for Legal Matters**

By applying for admission/enrollment, both the student and parent(s) or guardian(s) agree that New Mexico law prevails and all litigation will be in federal court in New Mexico or in state court in Doña Ana County, N.M.

## **Academic Calendar and Contact Information**

### 2018-2019 Academic Calendar

### Fall Semester 2018 - August 15 - December 11, 2018

Event Type	Date
Campus Housing Opens	Friday-Sunday, August 10-12
Faculty Report	Monday, August 13
DACC Fall Convocation	Monday, August 13
Instruction Begins	Wednesday, August 15
Late Registration	Wednesday, August 15
Last day to Add a Course without Instructor's Permission	Thursday, August 16
First Deadline for Filing Certificate/Degree Application (Last Day to Submit & Avoid Late Fee)	Friday, August 24
Last Day to add a Course (Instructor's Permission Required)	Friday, August 24
Labor Day Holiday	Monday, September 3
Window for Early Performance Grades	Friday-Tuesday, September 21-25
Last Day to Drop Course with "W" (Except courses carrying designated dates)	Friday, October 12
Last Day to Withdraw from DACC/NMSU (Except courses carrying designated dates)	Friday, November 30
Thanksgiving Holiday for Students	Monday-Friday, November 19-23
EXAM WEEK	Monday-Friday, December 3-7
Last Day of Classes	Friday, December 7
Campus Housing Closes	Saturday, December 8
Final Grades Due	Tuesday, December 11

#### **Spring Semester 2019 - January 16 - May 14, 2019**

Event Type	Date
Faculty Report	Thursday, January 10
DACC Spring Convocation	Thursday, January 10
Campus Housing Opens	Sunday, January 13
New Student Orientation/Registration	Tuesday, January 15

Instruction Begins	Wednesday, January 16
Late Registration	Wednesday, January 16
Last Day to Add a Course without Instructor's Permission	Thursday, January 17
Martin Luther King Jr Holiday	Monday, January 21
First Deadline for Filing Certificate/Degree Application (Last Day to Submit & Avoid Late Fee)	Friday, January 25
Last Day to Add a Course (Instructor's Permission Required)	Monday, January 28
Last Day to Drop a Course with "W" (except courses carrying designated dates)	Friday, March 15
Window for Early Performance Grades	Friday-Tuesday, February 22-26
Spring Break	Monday-Friday, March 25-29
Spring Holiday	Friday, April 19
Last Day to Withdraw from DACC/NMSU (except courses carrying designated dates)	Friday, May 3
EXAM WEEK	Monday-Friday, May 6-10
DACC Commencement	Thursday, May 9
Last Day of Classes	Friday, May 10
Campus Housing Closes	Saturday, May 11
Final Grades Due	Tuesday, May 14

## **Summer Semester 2019 - May 22 - August 5, 2019**

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Event Type	Date
Campus Housing Opens (noon)	Tuesday, May 21
Faculty Report	Tuesday, May 21
Instruction Begins	Wednesday, May 22
Last Day to Add a Course without Instructor's Permission	Thursday, May 23
Memorial Day Holiday	Monday, May 27
Last Day to Add a Course (Instructor's Permission Required)	Wednesday, May 29
Last Day to Drop Course with "W" (except courses carrying designated dates)	Monday, July 1
Independence Day Observance	Thursday, July 4
First Deadline for Filing Certificate/Degree Application (Last Day to Submit & Avoid Late Fee)	Monday, July 8
Last Day to Withdraw from DACC/NMSU (except courses carrying designated dates)	Thursday, July 25
Last Day of Classes	Thursday, August 1
Campus Housing Closes	Friday, August 2
Final Grades Due	Monday, August 5

#### **Holidays for Administrative Offices**

<b>,</b>	
Event Type	Date
Labor Day	Monday, September 3, 2018
Thanksgiving	Thursday-Friday, November 22–23, 2018

Winter Holiday	December 24, 2018 - January 1, 2019
Martin Luther King Jr Holiday	Monday, January 21, 2019
Spring Holiday	Friday, April 19, 2019
Memorial Day Holiday	Monday, May 27, 2019
Independence Day Observance	Thursday, July 4, 2019

**NOTE**: Dates in this calendar were compiled in January 2018 and are subject to change. For the most up-to-date information, consult the online Academic Calendar (https://academiccalendar.nmsu.edu/academiccalendar-2018-2019)

Inquiries about DACC are welcomed in person, by telephone, by mail and via the DACC Website. Please contact the college for a free information packet.

Location	Phone Number
Switchboard:	(575) 528-7000
Toll free:	1 (800) 903-7503
Fax:	(575) 527-7515
Web:	http:// dacc.nmsu.edu/

#### **Central Administration and Student Services:**

Doña Ana Community College East Mesa Campus 2800 Sonoma Ranch Blvd. Las Cruces, New Mexico 88011-1656

#### Postal Address for All Other Locations:

DACC-NMSU (MSC 3DA)
P.O. Box 30001

Las Cruces, NM 88003-8001

#### **Web Information Requests:**

 $\label{lem:dacc.nmsu.edu/admissions/request-information/ (http://dacc.nmsu.edu/admissions/request-information)} \\$ 

### **Departmental Phone Numbers**

Location	Phone Number
Security-All Locations	575-527-7777
Academic Advising Center - East Mesa Campus	575-528-7272
Academic Advising Center - Espina Campus	575-528-7257
Academic Advising Center - Gadsden Center	575-882-6809
Academic Advising Center - Sunland Park Center	575-874-7787
Academic Readiness Center/Tutoring - East Mesa Campus	575-528-7275
Academic Readiness Center/Tutoring - Espina Campus	575-527-7275
Academic Readiness Center/Tutoring - Gadsden Center	575-882-6818
Academic Readiness Center/Tutoring - Sunland Park Center	575-874-7807
Admission to Career Programs	575-528-7001
Adult Education - Espina Campus	575-527-7540
Adult Education - Gadsden Center	575-882-6813

Adult Education - Sunland Park Center	575-874-7790
Adult Education - Chaparral Center	575-824-2010
Adult Education - Workforce Center	575-528-7477
Advanced Technologies Division	575-527-7599
Arts, Humanities & Social Sciences Division	575-527-7669
Bookstore - East Mesa Campus	575-528-7253
Bookstore - Espina Campus	575-527-7692
Business & Public Services Division	575-527-7560
Cashiers Office	575-527-7516
Chaparral Center	575-824-2000
Computer Lab - East Mesa Campus	575-528-7265
Computer Lab - Espina Campus	575-527-7561
Computer Lab - Gadsden Center	575-882-6802
Computer Lab - Sunland Park Center	575-874-7783
Computer Lab - Chaparral Center	575-824-2003
Computer Lab - Creative Media/Digital & Design	575-527-7677
Counseling (Provided by Ben Archer)	575-640-4669
Customized Training Program	575-528-7440
Dual Credit Program	575-528-7244
East Mesa Campus	575-527-7500
ENLACE - East Mesa Campus	575-528-7395
ENLACE - Espina Campus	575-528-7397
ENLACE - Parent Engagement	575-528-7396
Espina Campus	575-527-7500
Financial Aid - East Mesa Campus	575-528-7001
Financial Aid - Gadsden Center	575-882-6808
Financial Aid - Sunland Park Center	575-882-6808
Gadsden Center	575-882-3939
Health Sciences Division	575-527-7630
Information Center - East Mesa & Espina	575-528-7001
Campuses	
Learn-to-Read - Literacy Program	575-527-7641
Library/Media Center - East Mesa Campus	575-528-7260
Library/Media Center - Espina Campus	575-527-7555
Library Satellite Office - Gadsden Center	575-882-6819
Library Satellite Office - Sunland Park Center	575-874-7808
Science, Engineering & Mathematics Division	575-527-7690
Small Business Development Center	575-527-7676
Student Accessibility Services (SAS) - All	575-527-7548
Campuses and Centers	
Student Government Association	575-528-7396
Student Recruitment	575-527-7508
Student Services	575-527-7530
Sunland Park Center	575-874-7780
Testing Services - Accuplacer	575-527-7569
Testing Services - GED & Other Tests	575-528-7294
Veterans Program Office	575-528-7081
Virtual Learning & Instructional Technology (VLIT) -	
East Mesa Campus	
Virtual Learning & Instructional Technology (VLIT)	575-527-7738
- Espina Campus	F7F F07 7776
Workforce Development & Career Readiness	575-527-7776

# **Institutional and Program Accreditations**

## **Institutional Accreditation**

Coverage	Organization	Mailing Address	Telephone	Fax	Email	Web Address
College as a whole	The Higher Learning Commission (of the North Centra Association of Colleges and Schools)	<b>J</b> ,	(800) 621-7440, (312) 263-0456	(312) 263-7462	info@hlcommission.org, complaints@hlcommission.org	http:// www.ncahlc.org

## **Program Accreditations, Approvals, and Certifications**

## **Program Accreditations**

Programs

Program Acci	realtations					
Program	Organization	Mailing Address	Telephone	Fax	Email	Web Address
Associate Degree in Nursing <sup>1</sup>	Accreditation Commission on Education in Nursing	3343 Peachtree Rd., NE, Atlanta, GA 30326	(404) 975-5000	(404) 975-5020	info@acenursing.org	http:// www.acenursing.org
Automotive Technology	National Automotive Technicians Education Foundation	101 Blue Seal Dr., S.E., Suite 101, Leesburg, VA 20175	(703) 669-6650	(703) 669-6125	webmaster@nate.org	http://www.natef.org/
Building Construction Technology	National Center for Construction Education and Research	13614 Progress Blvd., Alachua, FL 32615	(386) 518-6500	(386) 518-6303	Use "Contact Us" tab on website	http://www.nccer.org
Business Management	Accreditation Council for Business Schools and Programs	11520 West 119th St. Overland Park, KS 66213	(913) 339-9356	(913) 339-6226	info@acbsp.org	http://www.acbsp.org
Business Office Technology	Accreditation Council for Business Schools and Programs	11520 West 119th St. Overland Park, KS 66213	(913) 339-9356	(913) 339-6226	info@acbsp.org	http://www.acbsp.org
Dental Assisting	Commission on Dental Accreditation	211 East Chicago Ave. Chicago, IL 60611-2678	(312) 440-2500	(312) 587-5107	renfrowp@ada.org or smithmi@ada.org	http:// www.ada.org/117.asp
Dental Hygiene	Commission on Dental Accreditation	211 East Chicago Ave. Chicago, IL 60611-2678	(312) 440-2500	(312) 587-5107	renfrowp@ada.org or smithmi@ada.org	http:// www.ada.org/117.asp
Diagnostic Medical Sonography	Commission on Accreditation of Allied Health Education Programs	1361 Park St. Clearwater, FL 33756	(727) 210-2350	(727) 210-2354	mail@caahep.org	http:// www.caahep.org
Emergency Medical Services	Commission on Accreditation of Allied Health Education	1361 Park St. Clearwater, FL 33756	(727) 210-2350	(727) 210-2354	mail@caahep.org	http:// www.caahep.org

Emergency Medical Services	New Mexico Emergency Medical Systems Bureau	1301 Siler Rd., Building F, Santa Fe, NM 87507	(505) 476-8200	(505) 471-2122	charles.schroeder@state.nm.us	www.nmems.org (http:// www.nmems.org)
Fire Science Technology	International Fire Service Accreditation Congress	Oklahoma State Univ. 1812 Tyler Ave. Stillwater, OK 74078	(405) 744-8303	(405) 744-8802	admin@ifsac.org	https://ifsac.org
Health Information Technology	Accreditation Council for Business Schools and Programs	11520 West 119th St. Overland Park, KS 66213	(913) 339-9356	(913) 339-6226	info@acbsp.org	http://www.acbsp.org
Pre-Business	Accreditation Council for Business Schools and Programs	11520 West 119th St. Overland Park, KS 66213	(913) 339-9356	(913) 339-6226	info@acbsp.org	http://www.acbsp.org
Radiologic Technology	Joint Review Committee on Education in Radiologic Technology	20 N. Wacker Dr., Suite 2850, Chicago, IL 60606-3182	(312) 704-5300	(312) 704-5304	email via website: http:// www.jrcert.org/contact	http://www.jrcert.org
Respiratory Therapy	Commission on Accreditation for Respiratory Care	,	(817) 283-2835	(817) 354-8519	email via website: http:// www.coarc.com/10.html	http:// www.coarc.com
Welding Technology	American Welding Society	8669 NW 36th St., #130, Miami, FL 33166	(305) 443-9353	N.A.	Use "Contact Us" tab on website	http://www.aws.org

The Associate Degree in Nursing Program currently has initial accreditation status. The next anticipated evaluation visit is set for spring 2020.

## **Program Approvals by the State of New Mexico**

Program	Organization	Mailing Address	Telephone	Fax	Email	Web Address
Associate Degree in Nursing	New Mexico Board of Nursing	6301 Indian School Rd., N.E., Suite 710, Albuquerque, NM 87110	(505) 841-8340	(505) 841-8347		http:// nmbon.sks.com
Library Science Endorsement in Library Media	New Mexico Public Education Department	300 Don Gaspar Ave. Santa Fe, NM 87501	(505) 827-5821	(505) 827-4148	licensureunit@state.nm.us	http:// www.ped.state.nm.us
Licensed Practical Nursing Certificate	New Mexico Board of Nursing	6301 Indian School Rd., N.E., Suite 710, Albuquerque, NM 87110	(505) 841-8340	(505) 841-8347		http:// nmbon.sks.com
Nursing Assistant	New Mexico Health Improvement Division	Delfinia Sandoval, NAR Coordinator, 2040 S. Pacheco St., 2nd Floor, Rm. 237, Santa Fe, NM 87505	(505) 476-9040	(505) 476-9026	Delfinia.Sandoval@state.nm.us	https://nmhealth.org/ about/dhi/

## **Program Certifications**

Program	Organization	Mailing Address	Telephone	Fax	Email	Web Address
Aerospace Technology	SpaceTEC®	Mail Code: SpaceTEC Kennedy Space Center, FL 32899	(321) 730-1020	(321) 476-5335	information@spacetec.org	http:// www.spacetec.us/

Developmental Studies	National Association for Developmental Education	500 N. Estrella Parkway, Suite B2 PMB 412, Goodyear, AZ 85338	(877) 233-9455	(623) 792-5747	office@nade.net	http://www.nade.net
Drafting and Design Tech.	American Design Drafting Association	105 East Main St. Newbern, TN 38059	(731) 627-0802	(731) 627-9321	email via website, "Contact Us" tab	http://www.adda.org
Library Science	American Library Assn. — Allied Professional Assn.	50 E. Huron St. Chicago, IL 60611	(312) 280-2424	(312) 280-3256	lssc@ala.org	http://ala-apa.org/ lssc

# **About the Community College History and Organization**

In 1965, Doña Ana County was designated by the New Mexico Department of Education as an appropriate site in southern New Mexico for an area vocational-technical school. In 1971, the boards of education of the Gadsden, Hatch, and Las Cruces school districts requested that New Mexico State University establish a branch community college located on its campus in Las Cruces to offer postsecondary vocational-technical education in Doña Ana County. The NMSU Board of Regents approved the request in 1972, and the voters in Doña Ana County approved an operational mill levy in May 1973. The institution became an official entity on July 1, 1973. It began offering vocational training programs on September 4, 1973, as the Doña Ana County Occupational Education Branch of New Mexico State University.

#### College Mission, Vision, and Values

MISSION STATEMENT. DACC is a responsive and accessible learningcentered community college that provides educational opportunities to a diverse community of learners in support of workforce and economic development.

**VISION STATEMENT.** DACC will be a premier learning college that is grounded in academic excellence and committed to fostering lifelong learning and active, responsible citizenship within the community.

**VALUES STATEMENT.** As a learning-centered community college, DACC is committed to the following core values:

#### Education that:

- offers lifelong learning opportunities
- fosters dynamic learning environments designed to meet the needs of our students
- guarantees equality of rights and access
- ensures integrity and honesty in the learning process
- · provides comprehensive assessment of learning

#### Students who will be:

- · respected for their diversity
- · provided with a safe and supportive learning environment
- · challenged to become critical and independent thinkers
- expected to take an active role in their learning process

#### Leaders and employees who:

 practice transparency and inclusiveness in decision-making through shared governance and with external stakeholders

- encourage and support professional growth
- · demonstrate high ethical standards and integrity
- · encourage collaborative interaction among faculty and staff
- practice responsible fiscal management and personal accountability
- · ensure equal opportunities for a diverse faculty and staff

#### Communities that:

- build partnerships, including educational alliances
- strengthen industry partnerships to provide workforce development services and programs in support of economic development
- develop and adapt instructional programs in response to changing educational needs

#### **NMSU SYSTEM VALUES**

- · Diversity and Inclusion
- Accountability
- Excellence
- · Discovery
- Engagement

#### Governance and Funding

DACC is a community college of New Mexico State University. As such, it is governed by the Board of Regents of the university. Through an operating agreement between the university and the three school districts in Doña Ana County DACC is served by an Advisory Board. Operating expenses for the community college are paid from state-appropriated funds, a property tax within the three school districts in the county, federal career-technical education funds, special grants, and tuition paid by students, the majority of which is subsidized by financial aid

#### **Educational Facilities**

Doña Ana Community College has three locations in Las Cruces, as well as centers located throughout the county. For more information about the individual sites, see the section titled "Additional Locations (p. 27)".

#### **Online Study**

Many courses and, in some cases, entire programs may be completed without ever attending classes at a physical campus. The following DACC programs may currently be completed entirely online:

#### **Online Degrees**

- · Associate of Arts (p. 67)
- · Associate of Business Occupations (p. 78)
- · Associate Pre-Business (p. 187)
- · Associate Criminal Justice (p. 97)

- Associate of Applied Science Health Information Technology (p. 155)
- · Associate Public Health (p. 188)
- Associate of Applied Science Computer and Information Technology (p. 83)

#### **Online Certificates**

- · Business Management (p. 78)
- · Computer Information Technology (p. 83)
- Health Information Technology (p. 155)

To see which classes are being offered online during a given semester, consult the *Schedule of Classes*.

#### **Institutional Accreditation**

New Mexico State University – Doña Ana Community College is independently accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools.

The Higher Learning Commission 230 South LaSalle Street, Suite 7-500 Chicago, Illinois 60604-1411

Phone: 1 (800) 621-7440 / (312) 263-0456

Fax: (312) 263-7462

E-mail: info@hlcommission.org

Web site: http://www.ncahlc.org/General/contact-us.html

For links to e-mail addresses of various departments at the Higher Learning Commission, visit http://www.ncahlc.org/General/contact-

## Individual Program Accreditations, Approvals, and Certifications

Refer to the tables at Institutional and Program Accreditations (p. 11) for information about individual program accreditations, approvals, and certifications.

## Achieving the Dream™ Participation and Leader College Status

DACC became an Achieving the Dream community college in fall 2005, gaining Leader College status in 2009. Leader College status was renewed in 2016 for three years. (http://www.achievingthedream.org/)

## **Admissions**

Doña Ana Community College provides educational opportunities for those who seek to advance in the workforce or to prepare for further study at a higher level. The community college endorses the opendoor admission concept and will admit—to the limit of its physical and financial resources—new, first-time students who wish to attend and who have a high school diploma or its equivalent. High school diplomas must be from an accredited high school. Diplomas from accredited, on-line high schools, however, are subject to strict review and may not in all cases be judged valid for the purpose of enrolling at DACC.

## **Assessment and Accuplacer Placement**

Unless applicants have taken the ACT or SAT within the last 12 months, they will be required to take the Accuplacer assessment, which covers basic academic skills. Transfer students who have taken math and

English courses at another institution may be exempted from taking the Accuplacer.

Academic assessment and placement improves one's chances for success in college courses. The Accuplacer is not used to select students; rather, it ensures students will be placed in classes best suited to their preparation and ability. These may include credit ESL courses, if English is not their first language. If deficiencies in basic academic skills are indicated, an individualized educational plan can be developed by an advisor to help the student acquire these skills.

There is no charge for a first-time Accuplacer assessment, except under the following circumstances:

- 1. when a student chooses to re-take the Accuplacer, and
- when a student takes the Accuplacer at DACC for the purpose of conveying the results to an entity outside of the NMSU system.

For more information call (575) 527-7569.

#### Orientation

Students who have never attended college before must schedule an appointment for a First-Year Student Orientation, which is designed to provide new students with information they will need to make a successful start at DACC. Students learn about the steps to getting started in college, the majors and career programs offered at DACC, the principles of effective academic planning, and the many services and resources designed to enhance educational success. Failure to complete an orientation will result in a "hold" on the student's account, such that (s)he will be unable to register for courses. Students can register for orientation online at https://newstudentregistration.nmsu.edu. Additional information may be obtained by calling the Orientation Office at (575) 527-7536.

#### **How to Apply**

Prospective students should follow these procedures when applying for admission to any program at the community college:

- 1. Download and complete the paper application for admission (https://dacc.nmsu.edu/admissions/wp-content/uploads/sites/6/2017/02/undergrad-application-20170201.pdf), or complete the online application at http://dacc.nmsu.edu/admissions/.
- Submit the application with a \$20 nonrefundable application fee (do not mail cash) to: Admissions Office Doña Ana Community College MSC-3DA, P.O. Box 30001
  - Las Cruces, NM 88003-8001.
- 3. Request official high school and/or college transcripts. Transcript request forms may be obtained at the DACC Admissions Office, located on the East Mesa Campus in DASR 107, or online at http://dacc.nmsu.edu/admissions/downloadable-admission-forms/. First-time college students should have their official high school transcript sent directly from the high school to the DACC Admissions Office. Transfer students must have official transcripts sent directly to the DACC Admissions Office by the registrar of each college or educational institution previously attended (see "How Transfer Students Are Admitted (p. 15).") Hand-carried transcripts are not accepted.
- Applicants possessing a high school equivalency must request to have official GED or HiSET transcripts sent directly to the DACC Admissions Office.

5. Make arrangements to take the Accuplacer assessment with the testing coordinator at (575) 527-7569, who can provide information regarding dates, times, and location.

#### **Aggie Pathway**

Student applicants who do not meet NMSU-Las Cruces admission requirements may apply to participate in the Aggie Pathway to the baccalaureate program at any of the NMSU community colleges. Aggie Pathway students may transition to the NMSU-Las Cruces campus after successful completion of any required developmental education courses and 24 degree credits with a 2.5 cumulative college GPA. Each student will follow an individualized study plan developed in partnership with an academic advisor that typically includes study skills courses, developmental education courses, and/or general education courses. Aggie Pathway students enrolling through NMSU-Dona Ana have access to NMSU-Las Cruces on-campus housing, dining, and activities. For more information, go to http://aggiepathway.nmsu.edu or call (575) 646-8011.

#### How to Be Readmitted to Doña Ana Community College

Former Doña Ana Community College students who will have been out of school for more than 12 months before re-entering are required to complete an application for readmission. Applications should be submitted 30 days before the beginning of the semester or summer session for which the student plans to enroll.

A student who has attended other institutions during an absence from DACC / NMSU must have official transcripts forwarded directly to the DACC Admissions Office by the registrar of each institution and must be eligible to return to the college or university last attended. Transcripts must be received prior to the date of registration. Admission status at the time of readmission will normally be determined by previous DACC academic standing. However, academic performance at other institutions attended during the applicant's absence from DACC may be taken into consideration in determining the student's academic admission status.

#### How GED and HiSET Graduates Are Admitted

Students having successfully completed the GED or HiSET in English are eligible to apply for admission to DACC. They must have their official GED or HiSET transcripts sent directly to the DACC Admissions Office through diplomasender.com (https://www.diplomasender.com). Students who took the GED or HiSET in Spanish should contact the DACC admissions director.

#### **How Home-School Students Are Admitted**

Students enrolled in a home-school program may be accepted to Doña Ana Community College if they meet the requirements for regular or provisional admission. In addition, the home-school educator must submit a transcript or document that lists the courses completed and grades earned by the student and also indicates the date the student completed or graduated from the home-school program. Home school students who are New Mexico residents and wish to participate in the Lottery Success Scholarship program are required to submit official New Mexico GED test results.

#### **How Transfer Students Are Admitted**

Transfer students from other colleges or universities may be accepted if their cumulative GPA is at least 2.0, they are eligible to return to the college or university they last attended, and they graduated from high school or successfully passed the GED. Those who have fewer than 30 credits must meet first-time freshman admission requirements. Transfer students follow the same procedures as those outlined under "How to Apply." Official transcripts from all colleges and/or universities previously

attended must be sent directly to the DACC Admissions Office by the registrar of each college or educational institution. An academic credit evaluation will be mailed to the student from DACC Academic Advising.

A student who conceals the fact that (s)he has attended another college or university and who has not had transcripts submitted by each institution previously attended—whether or not credit was earned—will be subject to immediate suspension.

Transfer students must have a minimum of 60 credit hours showing the student has successfully completed at least a two-year program that is acceptable for full credit toward a bachelor's degree showing the student has successfully completed at least a two-year program that is acceptable for full credit toward a bachelor's degree. This is a requirement for those who will receive financial aid. Those who have fewer than 60 credit hours must meet first-time freshman admission requirements.

#### How International Students Are Admitted

An international student is any individual attending DACC while present in the United States on a non-immigrant student visa. In addition to the general policies of DACC/NMSU that apply to all students, some special policies applicable only to international students are necessitated by federal laws. DACC refers all prospective international students to the NMSU Office of University Admissions or to the NMSU International Student and Scholar Services (ISSS) Office for further information and to begin the application process. The Office of University Admissions, located in the Educational Services Building on the Las Cruces (Main) campus, can be reached at 1 (800) 662-6678. The ISSS Office, located in Garcia Annex on the NMSU Las Cruces (Main) campus, can be reached by calling (575) 646-2834. The NMSU Catalog (http://catalogs.nmsu.edu/nmsu) contains more specific information pertaining to international student admissions.

Students submitting transcripts from a foreign high school or postsecondary institution must submit a translated copy of their transcripts if they are not already in English. Contact the DACC Admissions Office at (575) 527-7710 for more information.

#### **How Non-Degree Students Are Admitted**

IMPORTANT: Students enrolling under non-degree status are ineligible for financial aid, student employment, veteran's benefits, and participation in intercollegiate athletics and student government. Furthermore, courses taken while one is enrolled under non-degree status may not be used to meet NMSU requirements for regular admission. Non-degree admission is designed to meet the needs of mature, part-time students who do not wish to pursue a degree. Those who prefer not to receive a grade may choose to audit. (See "Audit Option (p. 28)" in Academic Regulations section.)

Transcripts from previous institutions (including high school) and/or results of college entrance exams may be required to assure readiness for university-level courses.

Non-degree students are subject to the same regulations as regular students. They may not transfer more than 30 credits that were taken while in this status to any degree program.

Admission requirements include a non-degree application and a nonrefundable \$20 application fee.

Changing from Non-Degree to Degree-Seeking Status. A non-degree student in good academic standing with a GPA of 2.0 or better may apply

for a change of status from non-degree status to regular (degree-seeking) status. Requirements for regular admission must be met, including submitting official high school transcripts as well as official college transcripts from all previously attended institutions of higher education. The status will be effective on or before the census date of the semester in which all official transcripts are received. If all official transcripts are received after the census date of the current semester, the change of status will take effect in the next immediate term.

#### **Application Materials**

All documents submitted as part of the admissions process become property of DACC/NMSU and will not be returned to the student. Application materials are retained for one calendar year for students who apply but do not attend.

## Early Admission for High School and Adult Education Students

It is possible for a current junior or senior high school student to be admitted to DACC, provided the following criteria have been met:

- The student has obtained written permission from the high school principal/counselor and the parents.
- 2. The student's cumulative grade-point average is at least 3.0.
- The student has attained the established minimum scores on the ACT/SAT assessment, or passed two out of three sections of the Accuplacer assessment.
- The student has attained the established minimum scores required to enroll in ENGL 111G Rhetoric and Composition and MATH 120 Intermediate Algebra.

For more information about the Accuplacer assessment, please see the subsection titled, "Assessment and Accuplacer Placement (p. 14)." which appears near the beginning of the Admissions section of this catalog.

To apply, high school students must provide the following documents:

- written permission from the high school counselor or principal/ counselor,
- · written permission from parents,
- · an official high school transcript sent directly to DACC, and
- · a complete DACC/NMSU admissions application.

Students currently enrolled in an Adult Education (AE) Program at DACC may also apply for early admission. Current AE students applying for early admission must provide TABE scores of 580 or above on every section (reading, writing, math), written permission from the AE executive director, pass two out of three sections of the Accuplacer assessment, and submit a complete DACC/NMSU application for admission.

Under the Early Admissions Program, all students are admitted in a non-degree status. For more information regarding non-degree status, please refer to the subsection titled, "Non-degree Admission (p. 15)." Non-degree students are ineligible to receive federal financial aid funds. Students admitted under this program are also limited to seven (7) credit hours per semester and incur all costs associated with enrollment, including books.

Developmental courses are not available for enrollment under the Early Admissions Program.

Early admissions students who wish to enroll at DACC or NMSU upon graduation from high school or obtaining a GED must reapply under their new status as a first-time freshman.

## **Dual Credit Program**

The Dual Credit Program (DCP) is designed to give high school students the opportunity to enroll at Doña Ana Community College prior to high school graduation. Students must be enrolled at least half time as a junior or senior in a New Mexico public high school. Under a Dual Credit Master Agreement between DACC and the school district, students enrolled in approved dual credit courses are eligible to have the full cost of tuition and general fees waived. DCP participants do not pay for tuition or textbooks; however, they do pay for their own supplies, protective apparel, and tool sets when needed. Students are responsible for any course-specific fees, such as lab or online fees. They may take collegelevel, career-technical courses that will simultaneously count toward high school graduation and toward a certificate or an associate degree at DACC.

Completing requirements for a degree or certificate prior to graduating from high school is not the norm. Students typically must attend additional semesters or sessions at DACC following high school graduation and pay DACC tuition and fees from that point forward.

Students should apply for DCP opportunities with their high school counselor. They must complete the Application for Admission, the State Dual Credit Request Form, and provide their official high school transcripts. Requirements to be admitted to the DCP are a high school grade-point average (GPA) of 2.0 and either an ACT score of 15 or passing scores on two out of three sections of the Accuplacer assessment. Students must also meet the criteria agreed upon by their school district and DACC. For further information, contact the appropriate high school counselor or the DACC Admissions Office at (575) 528-7244.

High school students enrolled in a high school that does not have a Dual Credit Master Agreement with DACC may be eligible for enrollment as Early Admission students; however, as such, they would be responsible for all costs related to enrollment.

**NOTE**: Not all DACC courses taken through the DCP are transferrable to other colleges and universities.

### **Early College High School Program**

The Early College High School Initiative is designed to allow students to simultaneously earn a high school diploma while earning up to two years (60 hours) of college credit, which might result in a college certificate or associate degree by the time they graduate from high school. The facilities, usually located on a college or university campuses, make higher education more accessible and also help students become more comfortable in a higher education environment.

The key to the success of this initiative is a strong partnership between the school districts and higher education institutions. In the State of New Mexico, Doña Ana Community College has created a partnership with the Las Cruces Public School District and the Gadsden Independent School District to offer enrollment in three early college high schools. DACC is currently serving more than 500 students through this program.

For further information on the admission requirements for early college high school, contact one of the high schools directly. Information about the Arrowhead Park Early College High School and the Arrowhead Park Medical Academy (both part of LCPS) may be obtained by calling (575) 527-9540; for Alta Vista Early College High School (GISD), call (575) 882-6400.

#### **Special Admissions Requirements**

Certain programs at DACC have special admissions requirements:

- Culinary Arts (p. 100)
- · Dental Assistant (p. 103)
- Dental Hygiene (p. 105)
- · Diagnostic Medical Sonography (p. 108)
- Dual Credit (concurrent enrollment) (p. 16)
- · Emergency Medical Services-Paramedic (p. 136)
- · Nursing (associate degree program) (p. 171)
- · Radiologic Technology (p. 190)
- · Respiratory Therapy (p. 193)

In addition to fulfilling the general requirements for admission to the community college, individuals seeking admission to these programs must also fulfill certain special admissions requirements. Since these programs generally have limited enrollment, completion of the admissions requirements for a specific program does not guarantee acceptance into the program. Acceptance may be competitive, based on individual academic performance in previous coursework and other criteria. Information regarding the application procedure for a specific program may be obtained from the department offering that program.

Students must reapply to special admissions programs each time they wish to be considered for acceptance. For example, a student who has fulfilled the special admissions requirements, yet was not admitted because of space limitations, will not automatically be considered for a subsequent semester; (s)he must reapply. Similarly, one who may have been accepted during a particular semester, but failed to accept an offer to enroll, must also reapply in order to be considered again.

#### **Standards for Program Participation**

Some programs may require technical standards for admissions and/ or continued program participation. Technical standards may include possessing or acquiring skills or behaviors to complete performancebased tasks. Completion of these tasks may be required for program completion. See individual program descriptions for further information.

Security Background Checks. Certain programs of study require that students complete and pass a security background check. Past criminal violations may prevent a student from completing his/her degree and from being hired after graduating. Programs requiring a security background check disclose this fact in their program description sections found in this catalog.

## **Aggie Pathway**

Student applicants who do not meet NMSU-Las Cruces admission requirements may apply to participate in the Aggie Pathway to the baccalaureate program at any of the NMSU community colleges. Aggie Pathway students may transition to the NMSU-Las Cruces campus after successful completion of any required developmental education courses and 24 degree credits with a 2.5 cumulative college GPA. Each student will follow an individualized study plan developed in partnership with an academic advisor that typically includes study skills courses, developmental education courses, and/or general education courses. Aggie Pathway students enrolling through NMSU-Dona Ana have access

to NMSU-Las Cruces on-campus housing, dining, and activities. For more information, go to http://aggiepathway.nmsu.edu or call (575) 646-8011.

## **Academic Advising and Registration**

Academic advising at DACC is an ongoing, shared partnership between a student and an advisor that focuses on assisting the student to identify, plan and achieve academic goals aligned with his or her career and life aspirations. Moreover, it is part of the educational process that aims to assist students to become active and effective agents of their own learning.

In the academic advising process, students and advisors work together to:

- Develop an awareness of values, interests, abilities, skills and potential
- · Identify academic and career goals and options
- · Choose an academic program
- Strategically plan out steps toward graduation, or the completion of an academic goal
- · Identify effective academic study skills and habits
- Learn how to solve problems that impede progress toward an academic goal
- · Identify appropriate campus resources
- · Learn how to use the my.NMSU.edu account and STAR Degree Audit
- · Select courses
- · Register for classes

Targeted student-learning outcomes underlying the DACC academic advising process include critical thought, self-appraisal, decision making, healthy independence, responsibility, and respect for self and others. These outcomes are the ideal product of quality academic advising.

## **Structure of DACC Academic Advising**

Students declared into a specific major or academic program are advised by a specific professional academic advisor and/or a DACC faculty advisor in that academic program. Students may visit or call the Academic Advising Center, DASR 103, (575) 528-7272 for more details.

Students who are not declared into a specific major, or who are in transition between programs, are advised through the Academic Advising Center, which serves as a central resource for the following categories of students:

- Transitional students, including those in the Aggie Pathway Program and other unclassified students who choose DACC as a place to begin their college career
- Degree-seeking students pursuing the Associate Degree in General Studies
- · Exploratory (undecided) students
- · Non-degree-seeking students

#### When to Seek Academic Advising

**NEW STUDENTS** will meet with an academic advisor and register for classes after attending a first-year student orientation.

**TRANSFER AND READMITTED STUDENTS** should make an appointment to see an academic advisor once their DACC admission is complete.

**CONTINUING STUDENTS** should plan ahead and meet with their academic advisor every semester, well in advance of continuing-student registration.

#### **Registering for Classes**

After academic advising is completed, students have the option to register for classes either online or in person.

REGISTERING ONLINE. After being admitted and receiving academic advising, eligible students may register for classes on the Web at my.NMSU.edu/ (https://login.nmsu.edu/cas/login?service=https %3A%2F%2Fmy.nmsu.edu%2Fc%2Fportal%2Flogin). For additional information, refer to the online Registration Guide, available at http://registration.nmsu.edu/.

Students need to use their NMSU user ID and password to access web registration through the *my.NMSU.edu* website. In the event that a student forgets his/her password, the system will allow the student to reset it online, provided (s)he answers a pair of security questions correctly. If attempts to do so fail, the student must consult with the ICT help desk in room 140 of the NMSU Computer Center (575) 646-1840.

The web registration system will not accept requests for the *S/U* grading option unless the course is offered exclusively on an *S/U* basis. Likewise, the system will not accept requests for the "audit" grading option. To request *S/U* or audit grading for courses, students will need to see their academic advisor.

Upon completing online registration, students may either print out the registration document themselves or ask for it at the DACC Information Center on the East Mesa Campus (DASR 101H), at any other DACC location, or at the NMSU Registrar's Office.

REGISTERING IN PERSON. Students must obtain a Change of Schedule form from their academic advisor, complete the form and have the advisor sign it, and then submit the form to the DACC Information Center in DASR 101H on the East Mesa Campus, to the NMSU Registrar's Office, or to a registration office at any other DACC location. In some cases, the student must obtain the instructor and/or department head signature on the Change of Schedule form before submitting it to the Information Center. Once registered, students should obtain their registration document, which is available at the DACC Information Center or at any other location where one may register. The registration document includes a student's official class schedule, along with related financial information.

REGISTERING FOR COURSES ON OTHER NMSU CAMPUSES. Students may register for courses at another campus in the NMSU system if the course is not offered at their home campus, or if the course is full at their home campus. In the case of all other courses, open enrollment into all classes on all campuses will begin two weeks before classes begin for the semester, provided seats are available and students meet prerequisites.

#### Terms and Conditions of Course Registration

Students must complete registration for all courses prior to the first day of class to avoid incurring late fees. Students who subsequently decide not to attend, and have not officially withdrawn from DACC / NMSU, will earn failing grades while remaining financially liable.

When students have a previous balance, their courses for the current term may be canceled if they have not made the appropriate arrangements to pay the debt owed. Visit http://registration.nmsu.edu/,

click on the drop-down menu for the appropriate semester or term, and select "Tuition and Billing Information."

Additionally, students will be dropped from courses for which they do not meet prerequisites, including courses in a sequence that require a grade of *C* or better to proceed to the next course in that sequence.

#### **Academic Sanctions**

Students placed on academic warning, probation, or suspension during the end-of-term grading process will be emailed a notification to their NMSU email. Students placed on suspension will have any courses in which they may be registered for future semesters canceled, and applicable refunds will be made by the Business Office.

#### **Changes in Registration: Adding and Dropping Courses**

Registration changes may be processed only in accordance with university regulations and with appropriate signatures. If a student decides to stop attending a course, it is the responsibility of the student to initiate official withdrawal from the course and to obtain all necessary signatures on the Change of Schedule form. Failure to do so could result in failing grades.

Forms are available from academic advisors or at the DACC Information Centers. Courses may not be added or dropped after the cutoff date indicated in the university calendar, with the exception of petitions for retroactive withdrawals processed in accordance with Policy 6.92. For refund policy, see http://uar.nmsu.edu/withdrawals/. If a student drops a course after the last day to "cancel" a course with a 100 percent refund, no refund in any amount will be issued.

**ADDING A COURSE.** The deadline for adding courses during a given term is listed online at http://registration.nmsu.edu/.

Students desiring to add a course to their current registration schedule should do so in consultation with their academic advisor. If the desired course is still open, the student may add it online through his/her *my.nmsu.edu* account. If the course is closed, the student will need the instructor and department chair's permission and signatures on a Change of Schedule form.

Once the Change of Schedule form has been completed and all necessary signatures have been obtained, the student takes the completed form to the Information Center for processing. The Information Center will provide the student with a revised registration schedule, which the student should review immediately to ensure there are no inaccuracies. Any errors found in the class codes, class title, room/building numbers or credits should be reported immediately.

**DROPPING A COURSE.** The process for dropping a course is similar to the process for adding a course. The student must consult with the academic advisor and drop the course by the deadline either online through his/her *my.nmsu.edu* account, or with a Change of Schedule form with all required signatures.

When a student officially drops a course, the *W* grade is assigned as follows:

- 1. No grade is assigned during the end of the cancellation period.
- A grade of W is recorded when a course is dropped between the last day to cancel and the midpoint of the semester. A student may not withdraw from courses after this deadline, unless the student officially withdraws entirely from DACC / NMSU.

 Officially withdrawing completely from DACC / NMSU is equivalent to dropping all classes, and therefore a grade of W will be recorded for all classes attempted. The deadline for withdrawing completely is listed online at http://registration.nmsu.edu/.

#### NOTES:

- A student found to be insufficiently prepared for a particular course may be transferred to a more elementary course in the same subject area, provided that
  - a. the instructor of the more elementary course has given his/her consent, and
  - b. the transfer is completed before the last day to officially withdraw from an individual course. Commonly referred to as a "drop-back," this type of transfer is usually, but not always, employed in cases of sequenced courses such as mathematics, English, or foreign languages.
- Financial aid or other third-party funding sources should be consulted when enrollment changes occur. Anyone attending under the Veterans Educational Assistance Program should notify the Veterans Office in DASR 107 on the East Mesa Campus when dropping or adding courses, as such changes could cause a reduction in the benefits received.

#### Full Withdrawal from DACC/NMSU

Full withdrawal from DACC or any other NMSU campuses terminates enrollment in all courses and effects a full withdrawal from the entire NMSU system. It is an official procedure requiring signed approvals as indicating on the withdrawal form; it cannot be completed online. As such withdrawals will be noted on the student's transcript.

It is the student's responsibility to initiate withdrawal from the university and to obtain necessary signatures. Students who leave without following the official procedure are graded appropriately by the instructor. DACC students enrolled at any NMSU campus may process their withdrawal either at the Information Center on one of the DACC campuses or at the NMSU Registrar's Office, located in the Educational Services Building on the Las Cruces Campus.

Applicable dates are published in the official academic calendar for all regular sessions at http://registration.nmsu.edu/.

Financial information concerning drops and withdrawals can be found at http://uar.nmsu.edu/withdrawals/. Financial Aid recipients should contact the Office of Financial Aid before withdrawing.

The Federal Higher Education Act requires the University to calculate a Return of Federal Student Aid Funds for students who withdraw (officially or unofficially) from all classes on or before the 60 percent attendance point in the semester. Using a pro-rata schedule, the percentage of the semester attended is used to calculate the amount of the student's earned versus unearned Federal student aid funds. The unearned portion of Federal student aid funds will be returned to the appropriate aid program(s). Students withdrawing from classes are responsible for payment of any balance due after the required return of Federal student aid funds.

#### Student Medical Withdrawal

A medical withdrawal applies to a student who becomes seriously ill, injured, or hospitalized and is therefore unable to complete an academic term for which he or she is enrolled. The attending physician must provide a letter on official letterhead with an original signature, stating

the date(s) within the semester that the student was under medical care and that the student must withdraw because of the medical condition. This letter must be submitted within the semester or no later than one academic year after the end of that term for which the withdrawal is being requested.

Once the information is reviewed a determination will be made if the student is eligible for consideration of tuition or other refunds (Students receiving any funds awarded by the Office of Financial Aid should consult with them on policies regarding withdrawal). Those seeking medical withdrawal should contact NMSU Registrar's Office directly to initiate the process.

## Withdrawal Due to Medical Conditions of a Family Member

A student who must withdraw because of a medical condition of an immediate family member will need to submit a letter from the family member's attending physician on official letterhead with an original signature, stating the date(s) within the semester that the student's immediate family member was under medical care, and confirm that the student must withdraw to attend to the immediate family member's medical condition. This letter must be submitted within the semester or no later than one academic year after the end of that term for which the withdrawal is being requested.

For purposes of this policy, "immediate family member" includes spouse, a domestic partner as defined in the NMSU Policy Manuel 7.04 Domestic Partnerships, a child, parent or legal guardian, a sister or brother, a grandparent, or a grandchild. Such familial relationships created by law are also included (i.e. mother/father in law; half or step siblings); other relationships can be considered on a case—by-case basis.

Once the information is reviewed a determination will be made if the student is eligible for consideration of tuition or other refunds (Students receiving any funds awarded by the Office of Financial Aid should consult with them on policies regarding withdrawal). Those seeking medical withdrawal due to medical conditions of a family member should contact NMSU Registrar's Office directly to initiate the process.

#### **Administrative Withdrawal**

In the event that a student has stopped attending class without formally withdrawing, the instructor reserves the right to remove the student from the class by means of an administrative withdrawal.

#### **Military Withdrawal**

Veteran students attending DACC who are called up for active duty and need to withdraw from all classes must contact the following offices:

- DACC VETERANS PROGRAM. Students will provide a copy of their orders to the DACC Veterans Program Office in DASR 107 on the East Mesa Campus (575) 528-7081. To assist in reporting accurate information to the VA Regional Office, students should also provide documentation stating the last day of class attendance.
- NMSU OFFICE OF THE REGISTRAR. Students also will present their
  orders to the NMSU Office of the Registrar (575) 646-3411. They will
  receive a military withdrawal from classes and a full refund of tuition
  and fees for the semester in which they are called to active duty.

Students who still have their receipts for textbooks purchased during the semester in which they are called to active duty will be given a full refund for these textbook purchases when they present their orders.

## **Tuition and Fees**

For the most up-to-date information please visit New Mexico State University's Accounts Receivable (http://uar.nmsu.edu/tuition-fees). Prices, rates, and fees are subject to change at any time and without notice.

## **Application Fee**

A one-time \$20 application fee and a completed application must be submitted to DACC. The fee, which is not refundable, is required of students who have not previously enrolled at New Mexico State University or one of its community colleges.

## **Tuition and Mandatory Fees**

For academic year 2018-2019, tuition rates, including mandatory fees, at DACC are as follows:

- \$74 per credit, or \$888 per semester, for in-district students (residents of Doña Ana County);
- \$90 per credit, or \$1,080 per semester, for out-of-district students (residents of other counties within New Mexico); and
- \$236 per credit, or \$2,832 per semester, for nonresident (out-of-state and international) students. However, when nonresidents enroll in a summer session, or when they enroll in six credits or fewer during a regular term, they pay the in-state (but out-of-district) rate.

Per-semester costs for tuition and mandatory fees are calculated by multiplying the number of credits by the applicable per-credit rate. Students taking between 12 and 18 credits are charged for only 12, provided that all credits are taken exclusively at DACC. Then, beginning with the 19th credit, the per-credit charge is again imposed.

At NMSU, tuition with mandatory fees for academic year 2018-2019 are \$278.60 per credit for residents and \$907.10 per credit for nonresidents (out-of-state and international students). For further information about tuition, fees, and other charges at NMSU, visit http://uar.nmsu.edu/tuition-fees/.

DACC and NMSU tuition and mandatory fees are calculated independently of each other.

## **Resident, Nonresident Status**

Resident or nonresident status shall be determined according to the uniform definition set forth by the New Mexico Higher Education Department. The NMSU Registrar's Office administers residency. Out-of-district information is available at the DACC Office of Admissions in DASR 107 on the East Mesa Campus.

Members of the Armed Forces, as well as their spouses and minor children, who are not otherwise entitled to claim residency are eligible for tuition payment at the resident student rates upon presentation of certification from their commanding officer of assignment to active duty within New Mexico. Certification is required at the time of initial registration.

All enrolled members of the Navajo Tribe who reside on the Navajo Reservation, as certified by the Navajo Department of Higher Education, will be assessed in-state, out-of-district tuition rates at all times.

## Other Fees-Resident and Nonresident

Graduation Fee: Associate Degree \$25

Graduation Fee: Certificate Programs	\$10
International Student Admission	\$50

## **Payment of Charges**

By enrolling in classes at DACC/NMSU, a student makes a financial commitment to pay the tuition and fee charges associated with that enrollment. The enrollment action constitutes a financial obligation between the student and DACC/NMSU and all proceeds of this agreement will be used for education purposes and constitutes an education loan pursuant to 11 U.S.C 523(a) (8). Terms and Conditions of Course Registration are posted on the NMSU website and available in each term's registration quide.

Payments can be made by mail, web or telephone, as well as in person. Cash, checks, money orders and all major credit cards are accepted.

Those preferring to pay in person may do so at the DACC Cashiers Office (DASR 102B) on the East Mesa Campus or on the NMSU Las Cruces Campus at the University Accounts Receivable Office. Payments are also accepted in person at the Espina Campus, and Gadsden and Sunland Park centers.

Students may pay in full, enter into a payment plan, or provide proof of a third-party payment agreement. Students who do not pay in full or make third party payment arrangements by the payment deadline will automatically be placed on the payment plan. For payment plan options, visit the NMSU website. Fees vary according to the plan chosen.

Any financial aid received will be applied toward balances owed. DACC/ NMSU reserves the right to deny the payment plan to any student who has a poor credit rating or who has been negligent in making payments to the institution for previous debts.

**NOTE:** Workshops, institutes, and noncredit courses are treated as completely separate sessions. Check the Continuing Education program announcements for the specific noncredit course fees and registration instructions.

## **Late Registration**

A late registration fee of \$25 is imposed if registration has not been completed before the late-registration period begins.

## **Delinquent and Prior-Term Balances**

DACC/NMSU reserves the right to cancel the registration of any student who fails to pay, when due, any indebtedness to the institution.

Academic credits, transcripts, and diplomas will be withheld until all financial obligations are paid.

## **Dishonored Checks/Credit Cards**

DACC/NMSU charges a penalty on all dishonored cash instruments. Personal checks will not be accepted from students who have had a previously dishonored check.

## **Tuition Adjustments, Refunds, and Forfeitures**

Students officially withdrawing or dropping courses during a semester or term are eligible for a 100-percent refund of tuition and fees through the deadlines listed online. Go to http://registration.nmsu.edu, click on

the drop-down menu for the appropriate semester or term, and select "Important Dates and Deadlines." Students withdrawing from courses after that deadline will not be eligible for a refund and will remain liable for full tuition and fee charges. Non-attendance does not constitute an official course drop or withdrawal. All charges due to DACC/NMSU must be paid before refunds or adjustments will be permitted.

In cases of academic or disciplinary suspension, eligibility for tuition refunds and adjustments will depend on the conditions of the suspension and will be entirely at the option of the institution. Should unforeseen circumstances beyond the reasonable control of Doña Ana Community College or New Mexico State University result in curtailing classes, closing residence facilities, or otherwise withdrawing services that are a normal function of the institution, refunds of any nature will be at the discretion of the college/university administration.

Residence hall rentals and dining hall charges may be refunded in accordance with schedules adopted by these departments.

## Program-Related and Course-Related Fees

#### **Course and Lab Fees**

Certain courses/labs require an additional fee, which is subject to change. At the time this publication went to press, the fees for the following courses were as follows:

All <b>ONLINE</b> courses	\$25 per credit extra
ART 275	\$25
ART 276	\$25
ART 294	\$25
DAS 115	\$250
DHYG 122, 132, 212, 222	\$400
DMS 120, 122, 124, 126	\$175
NA 104 (Certified Nursing Assistant lab fee)	\$150
NURS 136, 147, 226, 236	\$250
RESP 110 L, 120 L, 230 L, 240 L	\$120

#### **Toolboxes, Tool Kits, and Personal Materials**

Students enrolled in the Automotive, Dental, Radiologic Technology, Welding, and Heating, Air Conditioning, and Refrigeration programs will be issued tools during the first week of classes. One-third of the total price of the toolboxes or tool kits is due at the time the tools are issued. The remaining toolbox/kit balance must be paid by the end of the semester in two equal installments, usually spaced two months apart. Failure to pay the balance will result in exclusion from registration the following semester. Down payment and subsequent payments for toolboxes/kits must be made at the DACC Cashiers Office in DASR 102B on the East Mesa Campus. Students are responsible for full payment even if they withdraw from the community college. Return of toolboxes/kits will not constitute payment, as used tools cannot be reissued. Call the appropriate academic division for current costs. (Division telephone numbers appear on the Contact Information (p. 9) page.)

## **Medical Insurance Coverage Not Provided**

DACC does not provide medical insurance for students. DACC students are encouraged to obtain their own medical insurance for any potential illness, accident, or injury that might occur while they are enrolled at the college. Visit www.healthcare.gov (https://www.healthcare.gov) to shop

for, compare costs and coverage benefits of, and enroll in, insurance coverage.

## **Aggie Health and Wellness Center**

DACC students can purchase semester-long access to the services offered by the NMSU Aggie Health and Wellness Center. Visit the following site for pricing information: http://chc.nmsu.edu/for-students/student-health-insurance/

### **Supplemental Health Insurance**

Students who have access to the Student Health Center may choose to buy a commercial insurance policy endorsed by NMSU. This insurance is intended to supplement the Student Health Center service. Dependent coverage is not available through NMSU but may be purchased directly from the insurance company; however, dependents of students are not eligible to use the Student Health Center. Information about this insurance can be found at http://www.uhcsr.com.

## **AggieFit Membership**

AggieFit is a good option for improving one's health while studying at NMSU/DACC. Membership in the AggieFit program provides access to the Activity Center, Aquatic Center, fitness classes provided in both, and participation in our Intramural programs. For additional information, including the fee schedule, visit http://recsports.nmsu.edu/aggiefit/.

### Housing

Housing is available to community college students on the same basis as it is for other New Mexico State University students. Rates and other information may be obtained online at http://housing.nmsu.edu/.

### **Food Services**

New Mexico State University, located adjacent to the DACC Espina Campus, offers a number of meal plans and has a wide selection of eateries: http://dining.nmsu.edu/. The DACC Snack Bar operates stores on the Espina and East Mesa campuses.

## **Financial Aid**

The Office of Financial Aid administers a broad spectrum of grant, loan, scholarship, and work-study funding in an attempt to meet the financial needs of DACC's students.

DACC's Financial Aid and Scholarship Services awards financial aid to students according to their individual needs. Parents of students are expected to contribute to their child's education according to their ability, taking into account their income, assets, number of dependents, and other relevant information. Students themselves are expected to contribute from their own assets and earnings, including appropriate borrowing against future income. All information provided to Financial Aid is regarded as confidential.

Students applying for financial aid must complete a Free Application for Federal Student Aid (FAFSA), designed to determine in accordance with state and federal guidelines, the difference between what the student and/or family is expected to contribute and the cost of attending DACC. Among the factors that determine the Expected Family Contribution (EFC) are:

 annual adjusted gross income as reported to the Internal Revenue Service;

- 2. savings, stocks, and/or bonds;
- 3. other assets in the form of a business, farm, or real estate;
- 4. nontaxable income and benefits; and
- 5. student's prior year income and assets.

Students applying for financial aid should complete a FAFSA by visiting www.fafsa.ed.gov/ (https://fafsa.ed.gov). Priority deadline for FAFSA completion is March 1.

## **General Eligibility Requirements**

To receive financial aid you must demonstrate the following:

- Have a high school diploma or a General Education Development (GED) Certificate, pass a test approved by the U.S. Department of Education, meet other standards your state establishes that are approved by the U.S. Department of Education, or complete a high school education in a home school setting that is treated as a home school or private school under state law. See your financial aid advisor for more information.
- Be enrolled or accepted for enrollment as a regular student working toward a degree or certificate in an eligible program. (You may not receive aid for correspondence or telecommunications courses unless they are part of an associate's or bachelor's degree program.)
- Be a U.S. citizen or eligible non-citizen (state funded scholarships may be available to undocumented students).
- Have a valid Social Security number. If you don't have a Social Security number, you can find out more about applying for one at www.ssa.gov (https://www.ssa.gov).
- Be meeting satisfactory academic progress (SAP).
- Sign a statement on the FAFSA certifying that you will use Federal student aid only for educational purposes.
- Sign a statement on the FAFSA certifying that you are not in default on a Federal student loan and that you do not owe money back on a Federal student grant.
- · Register with the Selective Service, if required.

No applicants will be denied financial assistance on the basis of age, color, disability, gender, national origin, race, religion, or sexual orientation.

#### **Sources of Financial Aid**

GRANTS. The foundation for financial aid is the Federal Pell Grant, available to undergraduate students with documented financial need. Pell Grants range from \$600 to \$5,920 (subject to change each year.) In some instances, students may be eligible to receive other types of aid, including the Federal Supplemental Educational Opportunity Grant (SEOG) or Leveraging Education Assistance Partnership Program Grant (LEAP), and/or other miscellaneous grants. These grants are awarded on a first-come-first-served basis to undergraduate students who show exceptional financial need. Typically, all three types of grants do not have to be repaid; funding is limited, however, and it is therefore very important that students complete their financial aid files by the priority deadline. For more information, contact DACC's Financial Aid and Scholarship Services Office, or visit dacc.nmsu.edu/fa (http://dacc.nmsu.edu/fa) on the Web.

SUBSIDIZED AND UNSUBSIDIZED FEDERAL DIRECT LOANS. These loans are need and non-need-based, long-term loans available to undergraduate students. Students receiving a subsidized or unsubsidized Federal Direct Loan, must complete an initial In-Person Entrance Counseling session and then a yearly online session every year after that. All students wishing to receive a Federal Stafford Loan must also complete

a Master Promisory Note (MPN). Both the MPN and the online entrance counseling can be found at https://studentloans.gov. In addition, students must complete an exit interview upon graduation or withdrawal from the University. Repayment of a Stafford Direct Loan begins six months after graduation or six months after enrollment drops below 6 credits for undergraduate students. The interest rate is variable but will not exceed 8.25%. More information will be available at the time the loan is made.

WORK-STUDY PROGRAMS. The Federal Work-Study Program provides employment opportunities for selected undergraduate students with demonstrated financial need. The New Mexico Work-Study Program also provides employment opportunities for students; however, only New Mexico residents are eligible to participate in the program. Both federal and state work-study are limited in funding and are awarded to those who have requested work-study and completed their financial aid files by the priority deadline.

For more information on the U.S. Department of Education student aid programs, go to http://studentaid.ed.gov or see the DACC Financial Aid web site at http://dacc.nmsu.edu/fa.

#### **Financial Aid Awards**

All financial aid awards are based on information provided by the student and parents, availability of funds, and eligibility requirements. Any award may be revised based on changes in enrollment, cost of attendance, family contribution, or failure to meet satisfactory academic progress. Withdrawals or reductions in enrollment may affect an award or any future awards. Financial aid will not pay for audited courses or some repeats.

**SCHOLARSHIPS.** All scholarships are contingent upon availability of funds. Individual scholarship criteria are subject to change. Students are encouraged to apply online at http://scholarships.nmsu.edu/. The online application will be available in early November and is due by March 1. Only one application is necessary to be considered for most scholarships.

- The Legislative Endowment Scholarship. This scholarship provides aid for undergraduate students with substantial financial need who are enrolled in a post-secondary institution in New Mexico at least half time (6 credit hours) and have maintained a GPA of at least 2.5.
- The New Mexico Legislative Lottery Scholarship. This state scholarship pays Standard Sector-Based Tuition Average only for New Mexico high school graduates (or GED recipients) who attend an eligible New Mexico public college or university. Students establish eligibility in their first regular semester immediately following their high school graduation. Students qualify after completing 12 credits a semester (at a 2 year institution) with a GPA of 2.5 or higher and can continue on the Legislative Lottery Scholarship for up to 3 consecutive semesters.
- **Private Scholarships.** Thanks to the generosity of our private donors, DACC is able to offer a wide array of scholarships to assist a diverse student population pursuing a higher education. Scholarships are primarily awarded according to merit, as successful candidates are selected on the basis of academic achievement, personal leadership, and financial need.
- DACC Institutional Scholarships. Scholarships are awarded on a first-come, first-served basis. Applicants must be pursuing a certificate or associate degree at DACC, have at least a 2.0 cumulative GPA, and be a New Mexico Resident, as well as a US Citizen or eligible noncitizen.

WORKFORCE INVESTMENT ACT (WIA) INITIATIVES. These federally funded programs assist students pursuing careers in technical-vocational or associate degree programs. In some instances, students may be assisted for GED and noncredit courses. Sponsored students may receive financial support for tuition and fees, textbooks, laboratory and classroom supplies, tools and safety equipment, and testing and licensor fees. They may also receive a supportive service allowance to cover transportation, child care, and subsistence costs.

Students in the local and surrounding area may apply for WIA eligibility at:

New Mexico Department Workforce Solutions 226 S. Alameda Blvd. Las Cruces, N.M. 88005 (575) 524-6250.

Those living outside the Greater Las Cruces Area should visit their local Department of Labor Office. For more information, call the community college at (575) 527-7535.

#### **Financial Aid Satisfactory Academic Progress**

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

- Qualitative Progress. Undergraduate students must maintain a cumulative GPA of at least 2.0 (a C average). Grade point values are:
   A = 4.0, B = 3.0, C = 2.0, D = 1.0, F = 0. Grades of I, CR, RR, PR, NC, W, AU
   are not calculated in the GPA. Adjusted Credit Options are not taken into consideration for financial aid purposes.
- Completion Rate. Students must complete a minimum of 70 percent of all coursework (registered credit hours) attempted at DACC/NMSU. Any course with a grade of withdraw (W), incomplete (I), repeats (RR), failure (F), audit (AU), or no credit (NC) is not considered completed coursework. Repeated courses are included in the calculation.
- Maximum Time Frame. Undergraduate students must complete their program within 150 percent of the credit hours required by the program. (Most Associate degree programs at DACC require 60 hours, therefore maximum allowable attempted hours would be 90 credits.) Students who have reached the maximum allowable time will be suspended from receiving financial aid. Up to 30 developmental/remedial hours are excluded from this calculation. Total attempted hours including repeated courses and transfer coursework are included in the student's maximum time frame calculation.
- Student Liability. Recipients of financial aid grants and loans
  who drop credits or withdraw may be required to return all or a
  portion of awarded Title IV funds. Further information regarding the
  return of Title IV funds is available on the NMSU web site at http://
  fa.nmsu.edu/resources/return-of-title-iv-funds/

#### **Financial Aid Suspension**

Students are suspended from receiving financial aid if they do not meet satisfactory academic progress (SAP) standards. Students on financial aid suspension will not receive any form of Federal or state financial aid

(grants, loans, work-study). Financial aid eligibility is reinstated when all standards of satisfactory progress are met.

#### **The Appeals Process**

Students suspended from financial aid may appeal the suspension if there are extenuating circumstances affecting their progress. Students who would like to appeal the suspension must submit an appeal form, available at http://dacc.nmsu.edu/fa, and all required documentation to DACC Financial Aid prior to the semester deadline. Deadlines for each semester can be found by calling the DACC Financial Aid Office. A committee will review the appeal and may grant reinstatement of financial aid based on extenuating circumstances that directly contributed to deficient academic performance. Appeals are evaluated on a term-by-term basis.

### **Veteran Students**

DACC degree and certificate programs are approved by the Department of Veterans Affairs (state approving agency) for enrollment of persons eligible to receive veteran education benefits.

For further information concerning approved programs and the application process, eligible persons should contact the DACC Veterans Program Office (V.A. Office), located in Room 107C of the DASR Building on the East Mesa Campus (575) 528-7081.

RESPONSIBILITY OF VETERAN STUDENTS. Students must be pursuing a degree or certificate in a specific program to be eligible to receive benefits. Admission procedures for veterans and other eligible persons are the same as those for all students. Degree plans from academic advisors must be submitted prior to any verification. For continued certification, students must submit an updated degree plan, registration document, and detailed class schedule to the DACC V.A. Office each semester. Any veteran or dependent receiving benefits who earns a punitive grade will be liable for over payment.

Veterans must notify the DACC V.A. Office when any one of the following

- 1. Dropping or adding course(s)
- 2. Withdrawing from course(s)
- 3. Discontinuing regular class attendance
- 4. Changing programs (academic majors)

V.A. educational benefits are payable for regular attendance in courses that are part of the veteran's program (major) curriculum. V.A. educational benefits are not payable for:

- 1. Classes not attended regularly
- 2. Classes that are dropped
- 3. Repeat of a course for which a passing grade was received
- Classes for which credit is received through successful completion of a proficiency test or grade by examination
- 5. Classes taken on an audit basis
- Classes taken that are not part of the veteran's program (major) curriculum

## **Distance Education**

The Schedule of Classes indicates which courses will be offered via distance education technologies during any given semester or term. NOTE: A \$25-per-credit fee is charged for courses that are taken online.

DACC online programs and the Virtual Learning and Instructional Technology (VLIT) Department is committed to the success of DACC's distance education efforts. The VLIT staff provides online course support through classroom training sessions and help-desk assistance for faculty and students.

Visit the VLIT website at http://dacc.nmsu.edu/vlit/, for helpful resources such as these:

- · Personal readiness survey for taking online courses
- Frequently Asked Questions (FAQ) database of the most commonly asked questions
- Schedule for student Canvas trainings at the beginning of each semester
- · Help desk and chat service links

The VLIT staff can be consulted by phone at (575) 528-7007 or in person. The VLIT office on the Central Campus is located in DACL 270, and on the East Mesa campus it is located in DAAR 203D.

Visit http://dacc.nmsu.edu/online-programs for information on how to become an online student and what programs are offered fully online.

# Student Services Offered at DACC First-Year Orientation

At First-Year Orientation events, students will attend information sessions, meet with an academic advisor, and register for classes. Students will also learn about college life and campus resources. For information, please contact the Orientation Advisor at (575) 527-7536 or via email at admissions@dacc.nmsu.edu.

## **Services for Students with Disabilities**

The Student Accessibility Services (SAS) at DACC coordinates accommodations for qualified students under the Americans with Disabilities Act (ADA, 1990) and section 504 of the Rehabilitation Act of 1973. This program may not be able to meet all needs and requests; however, a reasonable effort will be made to facilitate physical and programmatic access. To provide quality services, SAS procedures include self-identification of persons with disabilities and determination of their eligibility for services. Students with disabilities must request services and provide appropriate documentation from public schools, agencies, physicians, psychologists, and/or other qualified diagnosticians.

Qualified students may receive the following forms of free assistance/ accommodations: sign-language interpreters, note-taking assistance, readers, enlarged print, E-text, audio text, computer/software adaptations, alternative assessments and evaluations, alternative keyboards, accessible furniture, priority registration, and referral and liaison for many of these services.

More information may be obtained from the SAS office on the Espina Campus, DASH 117 (575) 527-7548. Students also may contact the East Mesa SAS office, DASR 104A (575) 527-7548, or the student services

specialists at the Gadsden Center (575) 882-6809 or the Sunland Park Center (575) 874-7787.

### **Tutoring Services**

Tutoring Services provides assistance to support and encourage students in becoming successful, confident, and active learners. Free tutoring is available for DACC credit-enrolled students through the Academic Readiness Centers located at the East Mesa Campus, Espina Campus, and Gadsden and Sunland Park centers. To obtain services or additional information, visit or call one of the centers:

- · Las Cruces East Mesa Campus, DAAR 201, phone (575) 528-7275
- Las Cruces Espina Campus, DASH 116, phone (575) 527-7646
- · Gadsden Center, DAGC 104, phone (575) 882-6806
- · Sunland Park Center, DASP 107, phone (575) 874-7806

## **Library Services**

The DACC Library provides two physical locations for students and members of the community. One is situated on the Las Cruces Espina Campus and the other one is on the Las Cruces East Mesa Campus. Visits to DACC satellites are also made; a schedule is posted at the start of each semester.

Library users enjoy an open atmosphere where they can access in-house and electronic materials, while being assisted by friendly staff. With its supportive learning environments and emphasis on Internet-based resources, the DACC Library provides research assistance, information literacy instruction, and other library services to DACC students at all of its campuses, as well as to distance learners.

The library website http://dacc.nmsu.edu/library/ is an information resource portal that provides seamless, integrated access to a wide variety of electronic databases and web-based resources. The portal also supports DACC's academic programs at all its locations and is accessible off campus, as well.

The DACC Library shares an online library catalog with all NMSU campus libraries. There is express delivery service among the campuses, and students can pick up materials from their most convenient location. Interlibrary loan services are available to all students for materials not owned by DACC or NMSU libraries.

Other online resources include databases containing magazine and newspaper articles; electronic book collections that provide access to more than 30,000 e-books on a wide range of subjects; and tutorials covering APA citation style and other "how-to" research topics. While off campus, students can access many of these resources by logging into the Library's EZProxy server using their NMSU Banner ID username and password.

The college ID serves as a library card for checking out books, which are loaned for three weeks, and audiovisual materials, which are loaned for one week. Extended loan periods are available to Crimson Scholars.

At the Espina Campus, the Library is located in the Learning Resources Building, DALR 260, and at the East Mesa Campus, the Library is located in the Academic Resources Building, DAAR 203. During the fall and spring semesters, both locations are open from 8 a.m. to 7 p.m. Monday through Thursday, 8 a.m. to 5 p.m. on Friday, and 10 a.m. to 2 p.m. on Saturday. Both library locations are closed on Sundays. Call (575) 527-7555 at the

Espina Campus or (575) 528-7260 at the East Mesa Campus for summer hours or for schedule updates. Holiday and interim hours will be posted.

### **Student Computer Access**

DACC has more than 1,700 computers for student use. Most are located in classrooms, where they are integrated into the teaching process. Additionally, all DACC campuses and centers have open computer laboratories, affording access to student email, Internet, and Canvas, as well as other services provided through NMSU's Information and Communication Technologies unit (see "Information and Communication Technologies (p. 25)," under "Student Services on the NMSU Campus"). Students will find software for word processing, spreadsheets, drawing and image processing, presentations, and scientific computation, as well as other tools to assist them in having a successful college career.

Wireless network access is provided at all DACC campuses and centers.

During the fall and spring semesters, hours for open computer labs are as follows.

- Espina (575) 527-7561 and East Mesa campuses (575) 528-7265: 8 a.m. to 8 p.m. Monday through Thursday, 8 a.m. to 5 p.m. Friday, and 10 a.m. to 3 p.m. Saturday; closed Sunday.
- Gadsden (575) 882-6802 and Sunland Park (575) 874-7783 centers:
   8 a.m. to 9:45 p.m. Monday through Thursday, 8 a.m. to 4:45 p.m.
   Friday, and 7:30 a.m. to 2 p.m. Saturday; closed Sunday.
- Chaparral Center (575) 824-2000: 8 a.m. to 9 p.m. Monday through Thursday and 8 a.m. to 5 p.m. Friday; closed Saturday and Sunday.
- Hatch Center. (575) 267-5660: 8 a.m. to 6 p.m. Monday through Thursday and 8 a.m. to 5 p.m. Friday; closed Saturday and Sunday. Summer hours are usually reduced.

These schedules are subject to change. Current hours of operation for all campuses and centers are posted on the Web at dacc.nmsu.edu/computer-labs (http://dacc.nmsu.edu/computer-labs).

## **Books and Supplies**

Students are responsible for buying their own textbooks, routine school supplies, and personal items. Two well-equipped bookstores managed by Barnes & Noble are located in DACL 170 on the Las Cruces Espina Campus and in DAAR 102 on the Las Cruces East Mesa Campus. They are arranged for self-service, with textbooks displayed by department, course number and section number. Textbooks for some courses may only be available at the specific campus where the course is being taught. The DACC Bookstores only carry textbooks for courses offered at DACC and do not carry textbooks for NMSU Main, Alamogordo, Carlsbad or Grants campus. With the exception of Grants campus, all branches of NMSU have their own campus bookstores which carry books for their specific campus or can be ordered from the bookstore website. In addition to textbooks, the bookstores sell calculators, educational supplies, and other types of merchandise.

For current bookstore hours or other information, call (575) 527-7692 for the Espina Campus Bookstore, (575) 528-7253 for the East Mesa Bookstore, or visit http://nmsu-lascruces.bncollege.com.

## **Student Government/Student Activities**

The Student Government Association of Doña Ana Community College is a dynamic and responsive student government that provides students and student organizations a foundation for enhanced learning and

leadership development through educational and social activities, communication, and programs.

The Student Government Association is located on the East Mesa Campus in DAEM 203. For more information, call (575) 528-7396 or visit http://dacc.nmsu.edu/sga/.

## **Campus Security**

Security staff is available to all students, faculty, and staff at the various DACC locations. If you have a security issue, need an escort, or require a guard for safety purposes, do not hesitate to call (575) 527-7777 from any DACC campus or center.

The Security Office, located on the DACC Espina Campus in DATS 153E (575) 528-7029, is open Monday—Friday, 8:00 a.m.—5:00 p.m. For more information, visit http://dacc.nmsu.edu/business-office/security/.

## Student Services on the NMSU Las Cruces (Main) Campus

This section describes the services offered on the NMSU campus that are most commonly used by DACC students. For a complete listing of NMSU student services, consult the NMSU Las Cruces Academic Catalog.

#### **ID Card Services**

The Aggie ID Card is the primary source of student identification on campus. Depending on the options purchased, this ID card can serve as a membership card for meals and as proof of eligibility for access to athletic events. It can hold Aggie Ca\$h, work as a key in some residential buildings, and provide access to other student services. Please visit http://idcard.nmsu.edu for more information.

Aggie Ca\$h is a pre-paid account that allows you to use your Aggie ID Card to make convenient purchases at locations all over campus without the need for cash. The Aggie ID Card can also be enhanced to act as a Wells Fargo debit card. For additional information, visit the ID Card Office on the first floor of Corbett Center on the NMSU Las Cruces Campus.

## **Parking Office**

A NMSU parking permit is required to park on DACC's Central Campus in parking lots or curbside on streets. Parking meters require payment. Free parking is available near the Pan American Center. The campus parking map is available online at http://park.nmsu.edu/. Parking regulations are enforced between the hours of 7:30 a.m. and 4:30 p.m. Disabled parking spaces, emergency/fire zones, service zones and yellow curbs are enforced 24 hours a day. Parking Regulations are available online at http://park.nmsu.edu/.

Information on purchasing a NMSU parking permit is available at http://park.nmsu.edu or at the Parking Department located at 1400 E. University Ave. (southwest corner of the Auxiliary Services Building between Barnes & Noble and Panda Express), Monday through Friday from 8:00 a.m. to 4:30 p.m. When visiting, you may enjoy free parking in designated spots just south of the building.

Aggie Transit is a free campus shuttle service available to all students. Bus route maps are available at http://park.nmsu.edu/.

Transportation and Parking Services is responsible for issuing parking permits, enforcing parking regulations, and developing parking lots, as well as maintaining information related to the university fleet.

## **Aggie Health and Wellness Center (AHWC)**

The Aggie Health and Wellness Center (AHWC) provides integrated comprehensive medical, psychological and recreational activity services to the students of New Mexico State University. The AHWC is located on the NMSU Las Cruces campus, with the main entrance located on the northeast corner of the building, at the corner of McFie and Breland Drive, across the street from Zuhl Library.

The AHWC is a nationally accredited out-patient ambulatory facility offering services in:

- Employee Assistance Program (EAP)
- · Health education, outreach and programming
- · Immunizations (travel and preventative)
- Medical clearance for NMSU research, education and employment purposes
- · Medical illness and prevention
- · Mental health and counseling
- · Treatment and case management of workers compensation injuries
- · Women's health

All DACC students enrolled in six or more credit hours will have the option to purchase access to AHWC services at the time of registration, or later at the Aggie Health and Wellness Center itself. Part-time foreign students, regardless of classification, must pay the fee for AHWC services.

For further, call (575) 646-1512, email campus\_health@nmsu.edu, or visit https://wellness.nmsu.edu/.

## Information and Communication Technologies (ICT)

ICT maintains computer labs throughout the Las Cruces Campus that provide PCs and Macs loaded with computer software to meet the academic needs of NMSU students. Access to other campus resources include wireless zones, account management, equipment checkout, and an online learning environment. Student admissions, registration, financial aid, and grades are easily accessible through the myNMSU portal. In addition, ICT offers student discounts on the purchase of computers.

For further information, call (575) 646-1840, write to help@nmsu.edu, or visit http://ict.nmsu.edu/.

Online student admission is available at http://prospective.nmsu.edu/. Registration functions, grade reports and e-mail may be accessed via the Web at https://my.nmsu.edu/.

## **TRIO Student Support Services Program**

The TRIO Student Support Services program helps ensure that program participants succeed at NMSU. Services include the following:

- MENTORING participants meet with a mentor each week for assistance in adjusting to college, learning and using campus resources, developing effective study skills, accessing financial aid, using academic peer advising, staying motivated, and dealing with personal issues associated with college.
- TUTORING individual tutoring is available by appointment in science, math, engineering, agriculture, social sciences, humanities, business, and foreign languages. Tutors are certified by the College Reading and Learning Association.

- TUTORING/COMPUTER LAB complete assignments, check e-mail, drop in for tutoring.
- CULTURAL ACTIVITIES participants receive tickets to cultural/ educational activities such as plays, dance productions and symphonies.
- EQUIPMENT LOANS laptops, tape recorders, and programmable calculators are available to participants.

To qualify for the program, the applicant must be a first-generation college student (neither of whose parents received a four-year baccalaureate degree), meet income guidelines set by the US Department of Education, demonstrate an academic need, or have a learning or physical disability. Admission to the TRIO Student Support Services program is highly competitive with only 350 slots available for eligible students. Students should apply early in Hardman Hall, room 210, on the NMSU Las Cruces Campus. Visit the TRIO web site at http://ssc.nmsu.edu/trio-student-support-services/, or call (575) 646-3136.

## Office of International and Border Programs (IBP)

The Office of International and Border Programs oversees the comprehensive internationalization of the university. It is the primary unit responsible for the welfare of incoming international students and outgoing education abroad students. IBP also represents the university with U.S. government agencies, foreign governments, international education professional associations and the private sector concerning international activities. The office also advocates for effective practices, policies and procedures to internationalize the university. The major program areas of the office are:

COMMUNITY OUTREACH AND PUBLIC SERVICE – IBP adheres to the land-grant philosophy by providing programs and services to increase international understanding and awareness in the local and campus community, including southern New Mexico and the state of Chihuahua, Mexico.

EDUCATION ABROAD PROGRAMS AND EXCHANGE STUDENT SERVICE – IBP's Education Abroad Office oversees all study, research, internship and service abroad programs, as well as coordinates faculty led study abroad programs through its Faculty Led International Programs (FLiP) office. This office also coordinates programs and services for visiting exchange students.

INTERNATIONAL INITIATIVES, DEVELOPMENT AND COOPERATION – IBP facilitates the interests of faculty who wish to participate in international interdisciplinary projects requiring technical assistance, training or public outreach. This includes project identification, proposal development, project management and development of international cooperative agreements with international entities or institutions.

INTERNATIONAL STUDENT AND SCHOLAR SERVICES (ISSS) – IBP's ISSS Office is charged with ensuring that the needs of NMSU's international students and scholars are met. This includes orientation, advising and institutional compliance with U.S. Department of State and U.S. Department of Homeland Security regulations as they pertain to the F and J visa programs.

US-MEXICO BORDER PROGRAMS – IBP is responsible for coordinating the university's involvement in US-Mexico cooperative projects including research, economic development and educational outreach.

For more information, contact the Office of International and Border Programs at (575) 646-7041, or visit their website: https://ibp.nmsu.edu.

## **NMSU Campus Dining**

Commuter students and those living on campus will find different meal plans that suit their lifestyles. A dining contract runs for the whole academic year, and charges are applied to a student's university account every semester. For more information visit the Web site http://dining.nmsu.edu/.

In addition to the meal plans, food service is available at various locations throughout the campus. Students may use cash, NMSU Aggie Ca\$h, the NMSU Enhanced Aggie ID Card, a credit card, and, in most areas, the Aggie Dining Dollars that are included with the meal plan package. Food service location hours are posted at http://dining.nmsu.edu/ under "Food Guide." Additional information can be obtained online at http://idcard.nmsu.edu/, or by contacting the ID Card Office at (575) 646-4835, or by visiting their office on the first floor of Corbett Center Student Union on weekdays between 8:00 a.m. and 4:30 p.m.

## Other Programs and Services at NMSU

- TRANSCRIPT EVALUATION, STUDENT RECORDS AND DETERMINATION OF RESIDENCY:
  - NMSU Office of the Registrar, (575) 646-3411 http://nmsu.edu/registrar
- HOUSING FOR SINGLE AND MARRIED STUDENTS: NMSU Housing and Residential Life, (575) 646-3202 http://housing.nmsu.edu/
- STUDENT ACCOUNTS INFORMATION: University Accounts Receivable, (575) 646-4911 http://uar.nmsu.edu
- ETHNIC PROGRAMS INFORMATION:
  - American Indian Program, (575) 646-4207 http://aip.nmsu.edu
  - Black Programs, (575) 646-4208 http://blackprograms.nmsu.edu
  - Chicano Programs, (575) 646-4206 http://chicano.nmsu.edu
- · CORBETT CENTER/CAMPUS INFORMATION:
  - Corbett Center Information Desk, (575) 646-4411 http://ccsu.nmsu.edu

# **DACC Locations East Mesa Campus**

2800 N. Sonoma Ranch Blvd. Las Cruces, N.M. (575) 528-7000

The East Mesa Campus is home to the following associate degree and certificate programs:

 the Associate of Arts (p. 67) and Associate of Science (p. 69) degree programs,

- · Business Management (p. 78),
- · Computer and Information Technology (p. 83),
- · Creative Media Technology (p. 89),
- · Criminal Justice (p. 97),
- · Culinary Arts (p. 100),
- · Drafting and Design Technologies (p. 113),
- · Early Childhood Education (p. 120),
- · Education (p. 123),
- · Emergency Medical Services (p. 136),
- · Fire Investigations (p. 146),
- · Fire Science Technology (p. 150),
- · Health Information Technology (p. 155),
- · Hospitality and Tourism (p. 160),
- · Hospitality Services Management (p. 162),
- · Law Enforcement (p. 97),
- · Library Science (p. 165),
- · Office Administration Technology (p. 174)
- · Paralegal Studies (p. 179), and
- Pre-Business (p. 187).

In addition, DACC Student Services is located on this campus, as well as central administration. The campus has a bookstore, library, computer labs, Student Success Center (student tutoring), and a 400-seat auditorium.

**BUS SERVICE TO THE EAST MESA CAMPUS:** During regular semesters, the DACC Shuttle provides free transportation for students between Mesilla Valley Mall and the East Mesa Campus. For current time tables, visit http://www.las-cruces.org/, select "Departments" on the top bar, and then click "RoadRUNNER Transit" under the "Transportation" heading.

## **Espina Campus**

3400 S. Espina St. Las Cruces, N.M. (575) 527-7500

Situated adjacent to New Mexico State University, the DACC Espina Campus is home to the following associate degree and certificate programs:

- Automotive Technology (p. 73);
- · Dental Assistant (p. 103);
- · Dental Hygiene (p. 105);
- · Diagnostic Medical Sonography (p. 108);
- · Electrical Programs (p. 129);
- Electronics Technology (p. 133);
- · General Engineering (p. 153);
- · Heating, Ventilation, Air Conditioning and Refrigeration (p. 157);
- · Patient Care Technician (p. 181);
- · Public Health (p. 188);
- Radiologic Technology (p. 190);
- · Respiratory Therapy (p. 193);
- Water Technology (p. 196); and
- · Welding Technology (p. 199).

Also located on this campus are a bookstore, library, computer labs, Student Success Center (student tutoring), Academic Readiness Center, and the Quintana Learning Center, which provides adult education and helps prepare students to undertake college-level studies. A full complement of student services is offered on this campus.

## **South County Centers**

#### **Gadsden Center**

1700 E. O'Hara Rd. (I-10 and State Hwy. 404) Anthony, N.M. (575)-882-3939

#### **Sunland Park Center**

3365 McNutt Rd. Sunland Park, N.M. (575)-874-7780

These centers offer freshman- and sophomore-level coursework in vocational, technical, developmental, and general education. A number of DACC certificates and associate degrees are offered, as well. The centers also provide concurrent enrollment (dual credit) programming for the Gadsden School District. ESL, GED, and citizenship classes for the border area are available through the Adult Education program, also housed at the centers. Refer to the section titled, "Adult Education (p. 203)," in this catalog for a full listing of services. These centers also provide a Student Success Center (student tutoring), computer labs, and library support services.

Attending one of the south county centers is equivalent to attending one of the Las Cruces campuses of DACC. The same procedures and regulations apply. Students attending the Gadsden Center or the Sunland Park Center may attend classes at any other DACC or NMSU campus without completing additional admissions procedures. Students may attend one or more campuses and/or centers simultaneously; however, the total credit-hour load may not exceed that stipulated by the normal class-load policy.

All students currently attending, or planning to attend, one of the south county centers also may use the student services and tutoring available at either of the Doña Ana Community College campuses in Las Cruces. An advisor is available at the south county centers to advise students as they make career, program, and scheduling choices.

#### **Chaparral Center**

755 Prescott Anthony Dr. Chaparral, N.M. (575) 824-2000

Located near the southeastern corner of Doña Ana County, the Chaparral Center, which opened in Spring 2012, is situated adjacent to Chaparral High School. The 6,200-square-foot center, which houses a computer lab and a computer classroom, offers freshman- and sophomore-level coursework, including dual-credit courses for high school students. It also is the site of the Adult Education program in Chaparral. Refer to the section titled "Adult Education (p. 203)" in this catalog for a full listing of services.

#### **Mesquite Center**

2345 E. Nevada St. Las Cruces, N.M. (575) 528-7479

Located at DACC's Workforce Center, the Mesquite Center focuses on preparing low-income students for further education, while also

developing work-related skills. Transitional classes and workshops involving work-readiness skills and college preparation allow students to eventually move on to college and careers. Classes in ESL and preparation for the high school equivalency diploma exams are offered on site through DACC's Adult Education Division.

#### **Workforce Center**

2345 E. Nevada Ave. Las Cruces, N.M. (575) 527-7776

The following associate degree and certificate programs are offered at this site:

- · Aerospace Technology (p. 65),
- · Automation and Manufacturing Technology (p. 70),
- · Building Construction Technology (p. 75), and
- Environmental and Energy Technologies (p. 141).

The Workforce Center also offers customer-driven, lifelong-learning opportunities, which serve as a bridge between our diverse community and the college. The aim is to be business-solution partners for Doña Ana County. DACC's Customized Training, Community Education (p. 203), Small Business Development Center (p. 205), and Truck Driving Academy (p. 203) currently occupy the Workforce Center. Together, these programs address everything from the start-up needs of small businesses to the larger training needs of established, growing businesses. Many business assessment tools are available, as well as training space and commercial space on a short-term, rental basis for outside organizations.

## The NMSU System Academic Regulations

The following regulations are effective with the publication of all the NMSU system catalogs, this includes the Las Cruces-Academic Catalog, Alamogordo Community College, Carlsbad Community College, Dona Ana Community College, and the Grants Community College catalogs. All regulations in this section of the catalog pertain to all the campuses housed with the NMSU System, this means that information for students pursuing Associate Degrees/Certificates, Bachelor's Degree, and Graduate Degrees/Certificates is within the section of the catalog.

The regulations section is broken down into different areas:

- · Academic Programs of Study
- Registration
- · Academic Performance and Progress
- Grading
- · Withdrawals
- Degree Applications, Graduation & Commencement
- · Academic Standing and Probation
- · Academic Misconduct and Grievances
- · The University Student Records Office

#### **Credits**

The unit of credit at DACC/NMSU is the semester hour, which is the equivalent of one hour's recitation (lecture) or a minimum of two hours of practice per week for one semester.

#### **Class Load**

The normal class load in a regular semester is 12 to 18 credits. An overload is more than 18 credits. A normal class load in summer school is 6 credits.

Written permission for the student to register for an overload must be obtained from an academic advisor. To be eligible to take an overload, the student must have a cumulative grade-point average for the two preceding semesters of 2.5 or above with no grade less than  $\mathcal{C}$ . A one-credit course in physical activity does not affect the calculation for determining an overload. Freshmen will not be permitted to assume an overload.

#### **Class Rank (Classification)**

A student's classification depends upon the number of credits completed toward graduation. Sophomore rank is achieved with successful completion of 28 credits; junior rank, 60 credits; senior rank, 90 credits.

#### **Satisfactory Progress**

A full-time student is making satisfactory progress when the cumulative number of credits earned at DACC/NMSU, divided by the number of semesters attended, equals at least 12. Part-time students must earn a proportional number of credits in the same time period for purposes of financial aid. In the case of new freshmen, this definition will not be applied until the beginning of the third semester of enrollment; however, for all other students, it will apply after one semester of enrollment. All students at the end of their second academic year must have a cumulative GPA of at least 2.0.

#### Basic Academic Skills Required for Transfer to Four-Year Institutions

Many colleges and universities, including New Mexico State University, require students transferring in from community colleges to demonstrate basic academic skills in both English and mathematics. In the case of NMSU, transfer students who are deficient in these basic skills will have one semester to acquire them. After that point, if they have not met both basic skills requirements, they will not be permitted to continue enrolling in upper-division courses (courses numbered 300 and higher).

Options for satisfying the basic skills requirements in English and mathematics are listed in the next two sections. Please note that completion of these requirements will not necessarily satisfy NMSU's general education requirements in English and mathematics. Consult the NMSU Undergraduate Catalog for more information.

#### Ways to Meet NMSU's English Basic Skills Requirement

- 30 ACT English Score Students may satisfy basic skills requirements in English by scoring 30 or higher on ACT English exams. However, students must still earn credit for ENGL 111G Rhetoric and Composition by one of these options:
- ENGL 111G Rhetoric and Composition Students may satisfy English basic skills by passing ENGL 111G Rhetoric and Composition with a grade of C or higher.
- CLEP Credit Students may earn credit for ENGL 111G Rhetoric and Composition by taking the College Level Examination Program subject exam in freshman college composition with a score of 57 (top quartile) or higher. See "Credit by College Level Placement Examination (p. 32)" later in this chapter for details.
- Advanced Placement Credit Students may receive advanced placement credit for ENGL 111G Rhetoric and Composition by scoring

- 3, 4, or 5 on the English Advanced Placement Exam. See "Advanced Placement" later in this chapter for details.
- Transfer Credits Students may receive credit for ENGL 111G Rhetoric and Composition by transferring 3 or more credits of college-level English composition, with a grade of *C* or above from accredited institutions. International students may be required to satisfy the requirements under "ENGL 111 M Rhetoric and Composition for International and Multilingual Students" below.
- Transfer Credits from Nonaccredited Institutions. Students may receive credit for ENGL 111G Rhetoric and Composition by transferring 3 or more credits of college-level English composition with a grade of *C* or higher from a nonaccredited institution, and by writing a theme which is judged adequate by the Department of English.
- ENGL 111 M Rhetoric and Composition for International and Multilingual Students – International students who took the TOEFL examination must complete ENGL 111 M Rhetoric and Composition for International and Multilingual Students with a satisfactory grade.
- Developmental Courses Students who score 12 or below on the ACT English exam must pass two developmental English courses (CCDE 105 N Effective Communication Skills, CCDE 110 N General Composition) before enrolling in ENGL 111G Rhetoric and Composition. Students who score 13 to 15 on the ACT English exam must pass one developmental English course (CCDE 110 N General Composition) before enrolling in ENGL 111G Rhetoric and Composition. Developmental courses are included on the transcript and will be included in the calculation of the GPA; however, credits in developmental courses will not count toward a degree.

#### Ways to Meet NMSU's Mathematics Basic Skills Requirement

- 23 ACT Mathematics Score Students may satisfy basic skills requirements in mathematics by scoring 23 or higher on ACT mathematics exams. However, students must still fulfill the general education math requirement.
- Coursework Students scoring below 23 on ACT mathematics exams may satisfy basic skills in mathematics by earning a grade of C or higher in one of the following courses or course combinations:
  - CCDM 112 N Developmental Algebra I and CCDM 113 N Developmental Algebra II;
  - · CCDM 114 N Algebra Skills;
  - MATH 111 Fundamentals of Elementary Mathematics I and MATH 112G Fundamentals of Elementary Math II;
  - any mathematics course numbered 120 or above.
     New students are placed in these courses according to their high school GPAs and their ACT scores in mathematics. However, new engineering students must take the mathematics placement exam (MPE), and any new student may choose to take the MPE to test towards a higher placement. Placement does not earn academic credit, and placement in a mathematics course numbered 120 or higher does not satisfy the basic skills requirement.
- Basic Skills Exam Students may take the Basic Skills Exam, which
  is offered twice a semester by the Department of Mathematical
  Sciences. A passing score will meet the basic skills requirement,
  although it will not appear as credit on the student's transcript.
- Advanced Placement Credit Students may receive credit for courses which may satisfy basic skills in mathematics by taking the

math Advanced Placement Exam. See "Advanced Placement" later in this chapter for details.

Developmental Courses – Students who score below 23 on the ACT mathematics exam and whose score on the math placement exam, if taken, does not qualify them for placement into university-level mathematics courses will be placed into the appropriate development mathematics course or courses (CCDM). Placement into CCDM course(s) is dependent upon the student's ACT score and high school GPA. Students must pass the CCDM course or courses before enrolling in university level mathematics courses. Developmental courses are included on the transcript and will be included in the calculation of the GPA; however, credits in developmental courses will not count toward a degree.

#### **Grading System**

Grades and credits can be accessed over the Web, but students must have an active *my.NMSU.edu* account in order to do so. Grade reports may be ordered via Web, but will not be automatically mailed to students. When ordered, grades will be mailed to an address chosen by the student. At the request of the student, the instructor will provide information on progress in the course prior to the last day to drop a course.

The DACC/NMSU system of grading is expressed in letters, which carry grade points used in calculating the cumulative grade-point average:

Letter Grade	Description	Grade Points per Unit of Credit
A+, A	For excellent work	4.0
A-	For excellent work	3.7
B+	For above-average work	3.3
В	For above-average work	3.0
B-	For above-average work	2.7
C+	For average work	2.3
С	For average work	2.0
C-	For average work	2.0
D+, D, D-	For below-average work	1.0
F	For failing work	0
N	Grade not submitted	NC
W	For withdrawal	NC
CR	Credit authorized, but no letter grade given	NC
IP	In progress (currently enrolled; course has not ended)	NC
RR	Substantial progress in skill- development course	NC
S	Satisfactory work (normally equivalent to a C or higher)	NC
U	Unsatisfactory work	NC
I	Incomplete	NC
AU	Audit	NC

#### **Grade Point Average**

A student's DACC/NMSU semester and cumulative GPAs will be based solely on courses taken at DACC/NMSU or under an approved National Student Exchange.

In computing the overall grade-point average, the total of credits in which the grades of A (or A+ or A-), B (or B+ or B-), C (or C+ or C-), D, or F have

been assigned is divided into the total number of grade points earned. (NOTE: Not all faculty choose to use pluses and minuses in their grading.)

Courses for which only credit (*CR*) but no letter grade is given and courses in which an *S* is earned may be counted toward graduation, but are not computed in the grade-point average. An *S* grade is normally equivalent to a grade of *C* or higher.

**REPEATING A COURSE.** A student may repeat a course in which a *D* or *F* grade has been earned. A computable grade (excluding *I*, *W*, *RR*, *AU*, *CR*, *S*, or *U*) in a repeated course may be substituted in the calculation of the grade-point average, though the original grade also remains on the transcript. The first occurrence with a *C* or better grade will count in earned/passed hours. Future attempts will not count in earned/passed hours. If a student repeats a course eligible for grade substitution in which the student has earned a *D* and then fails the course, the second grade of *F* will not be substituted for the original grade.

Neither credits nor grade points may be earned by repeating a course for which a grade of *C* or higher has already been received.

RR GRADE. The RR grade applies only to designated skill-development, undergraduate courses approved by the University Curriculum Committee (CCDE, CCDL, CCDM, and CCDR) and indicates the student has made substantial progress toward completing the requirements of the course. It carries neither penalty nor credit. The student must re-register and successfully complete the course in order to earn credit. The grade of RR may be received only once in any given course, and it remains on the student's transcript.

*S/U* **OPTION.** Students with 28 credits at DACC/NMSU under traditional grading, with an overall average of 2.5 or better, may exercise the *S/U* option. The following limitations apply:

- 1. No more than 7 credits per semester or 4 credits per summer session.
- 2. Not to exceed a total of 21 semester credits.

These limitations do not apply to honors courses or courses officially designated *S/U*.

Each course under this option must be requested during registration. The course must be taken outside the major. If the student changes majors, the new major department may require a traditional grade for a course previously passed with an *S* grade. The traditional grade change is made by the instructor or by a course challenge if the original instructor is no longer with the college.

Eligibility for *S/U* grading must be reestablished after adjusted credit has been approved. Non-degree students who do not meet the above requirements may take courses under the *S/U* option. However, these courses may not be applied toward an undergraduate degree at NMSU.

Each college of the university may designate courses in which the grading will be a basis of S or U for all students enrolled in the courses. Credits in such courses are not included in the 21-credit limitation.

**INCOMPLETE GRADE.** The grade of I (incomplete) is given for passable work that could not be completed due to circumstances beyond the student's control. The following regulations apply to removing or changing an I grade.

 Instructors may assign I grades only if the student is unable to complete the course due to circumstances beyond the student's control that develop after the last day to withdraw from the course. Examples of appropriate circumstances include documented illness, documented death or crisis in the student's immediate family, and similar circumstances. Job related circumstances are generally not appropriate grounds for assigning an I grade. In no case is an I grade to be used to avoid the assigning of *D*, *F*, *U*, or *RR* grades for marginal or failing work.

- 2. To assign an I grade, the instructor must complete the "I" Grade Information Form and have the form delivered to the course dean, together with the instructor's grade sheets for the semester. The instructor will state in writing on the "I" Grade Information Form the steps necessary to complete the remaining coursework or the instructor may indicate that the student will be required to re-enroll in the course to receive credit (in which case the I grade will not be removed). The student will sign this document or the course dean will send a copy of the document to the student's official permanent address as recorded in the Registrar's Office.
- 3. The student is entitled to have the I grade removed from the student's transcript only if the student completes the remaining coursework as specified on the "I" Grade Information Form, in a manner satisfactory to the instructor. The work must be completed within 12 months after the I grade is assigned and prior to the student's graduation, or within a shorter period of time if specified by the instructor on the "I" Grade Information Form. If the student fails to complete the coursework, the instructor may change the I grade to any appropriate grade (including D, F, or U) provided that the instructor stated that this would occur on the "I" Grade Information Form.
- 4. I grades can be removed from the student's transcript by the instructor only during the 12-month period following assignment of the I grade or prior to the student's graduation, whichever comes first. To remove an I grade, the instructor must complete a Change of Grade Form and submit the form at the VPAA Office. The instructor may assign whatever grade is appropriate for the entire course. This may include grades of *D*, *F*, or *U*. An I grade not changed by the assigning instructor within 12 months and prior to graduation shall remain an I grade thereafter.
- A student may re-enroll and receive credit for any course for which an
  I grade was previously received, but retaking the course will not result
  in a removal of the I grade from the student's transcript.

The effect of removing an I grade on a student's academic standing (academic warning, probation, or suspension) depends on the date the transaction is officially recorded on the student's academic record. If the transaction is recorded before the student begins another semester, the grade replacing the I is included in the grade-point average calculation that establishes the student's academic standing. If the transaction is recorded after the student begins another semester, the new grade's effect on academic standing is based upon its inclusion with grades for the semester in which the student is enrolled.

**AUDIT OPTION.** Regularly enrolled students, as well as nondegree students, may register for any course prior to the last day of registration as an auditor without credit with the consent of the instructor, provided the facilities are not required for regular students. The fee is the same as for credit courses. Audit courses are not considered in determining the maximum load except for students on probation. A student may not change from credit to audit after the last day to register, but instead may withdraw and continue to attend class with instructor permission.

#### **Independent Studies**

Independent study courses (including directed reading and special topics courses which do not carry a subtitle) are for students capable of self-direction who meet the requirements for the S/U option; i.e., those

students who are not eligible for the *S/U* option are also not eligible for independent study. Each college determines the maximum number of credits that may be earned in independent study courses.

#### **Adjusted Credit Option**

The adjusted credit option allows students who obtain a low grade-point average (less than 2.0 cumulative) during their first few semesters to get a fresh start. This option may be used only once and is not reversible. All courses carrying a grade of *S, CR, C*, or better earned prior to the grading period in which the student requests the adjusted credit option (including transfer courses) are included as adjusted credit. All allowable credits are designated on the permanent academic record as "adjusted credit" and are omitted from the calculations of the cumulative grade-point average.

A fee of \$10 is required for the submission of an adjusted credit option application. Application forms are available in the DACC Academic Advising Center, DASR 103 or from any DACC academic advisor. Students applying for this option must:

- 1. not hold a baccalaureate degree
- 2. be currently enrolled as a degree-seeking/nondegree undergraduate student
- 3. have a cumulative grade-point average of less than 2.0 at DACC/
- have successfully accumulated fewer than 60 transfer plus DACC/ NMSU credits
- 5. exercise the option only during the fall or spring semester before the last day to withdraw from DACC/NMSU.
- 6. pass an additional 30 graded credits before they may be awarded an associate's degree.

Other courses taken during the period of credit adjustment are not calculated in the cumulative grade-point average. The repeat rule for courses starts anew for students who have taken the adjusted credit option.

Credits covered by this option are shown on the transcript with an appropriate notation, and all coursework attempted is shown. In no circumstances will a transcript of this record be issued that does not include all courses attempted at this university.

Probationary status and eligibility for on-campus employment is not affected by the exercise of the adjusted credit option.

Students are eligible for university honors if the criteria for university honors are met for all courses taken at DACC/NMSU after the period of adjusted credit.

#### **Transfer Credits**

Credits from accredited postsecondary institutions are automatically evaluated after official transcripts are received by the DACC Admissions Office.

A transfer student may, on the basis of an evaluation of her/his transcripts, receive credit for courses taken at other postsecondary institutions in which a grade of *D* or higher was received. However, *D* grades at DACC/NMSU will not satisfy basic academic competency (basic skills) in English and mathematics. Additionally, individual programs may choose to only accept courses graded *C* or higher in their programs. Grades earned in courses taken at other institutions are not included in the calculation of the DACC/NMSU GPA.

Coursework from non-accredited institutions may be evaluated only after the student has completed 12 credits at DACC with a minimum GPA of 2.0. DACC has an established process for evaluating coursework completed at international institutions, non-accredited institutions/ training academies, and through high school articulation agreements. The student should initiate the request for evaluation of this coursework with the academic department chair or program director. If approved by the division dean and vice president for academic affairs, coursework can be applied toward certificate or associate degree completion.

TRANSFER CREDIT APPEAL PROCESS. All New Mexico public postsecondary institutions are required to establish policies for receiving and resolving complaints from students or from other complainants regarding the transfer of coursework from other public institutions in the state. A copy of NMSU's transfer credit policy may be obtained from the University Registrar's Office, or from the

Deputy Secretary for Academic Affairs Higher Education Dept. 2048 Galisteo St. Santa Fe, NM 87505-2100.

#### **Credit for Prior Learning or Military Experience**

Academic credit may be granted for substantial previous training in the student's major area of study. Contact the appropriate department for more information. Experience gained in the military can also be evaluated for course credit. Contact Academic Advising (575) 528-7272 for more information.

#### **Credit by Challenging Courses (Examination)**

Any enrolled student with a cumulative GPA of at least 2.0, currently attending classes, may, with permission of the appropriate division or department, challenge by examination any undergraduate course in which credit has not been previously earned except an independent study, research or reading course, or any foreign language course that precedes the final course in the lower division sequence. The manner of administering the examination and granting permission shall be determined by the division or department in which the course is being challenged.

Students may not enroll in a single course, challenge it by examination, and drop it during the drop/add period, unless they enroll in an additional course. In exceptional cases in which a student demonstrates outstanding ability in a course in which (s)he is already registered, (s)he may be permitted to challenge the course.

A student desiring to apply for special examination may obtain the necessary forms from the NMSU Office of the Registrar. The fee for challenging a course is the same as the approved tuition rate.

A grade of *C* or better is required for credit and will be recorded on the student's record as *CR*. Courses may not be challenged under the *S/U* option.

The special examination privilege is based on the principle that the student, exclusively, has the responsibility for preparing for a special examination.

#### **Credit by College-Level Examination Program**

Prior to or during a student's enrollment at DACC, credits toward general education requirements may be earned through the College-Level Examination Program (CLEP) of the College Entrance Examination Board. CLEP is a national program of credit by examination that offers the

opportunity to earn credits for college-level achievement regardless of how or where the course content was learned.

Earned CLEP credit will be treated as transfer credit without a grade, will count toward graduation, and may be used in fulfilling specific curriculum requirements.

A current copy of the NMSU CLEP policy, as well as test schedule information, is available at the Testing Services office in DASR 105 on the DACC East Mesa Campus (575) 528-7295).

#### **Short Courses**

Short courses are available during the academic year. See the current Class Schedule for special registration times and deadlines for payment. In order to register for a short course, a student must be eligible to attend DACC/NMSU. Please note that enrollment in short courses is prohibited if total credit hours would exceed 18 in a fall or spring semester or if they exceed 7 in a summer session.

#### **Definition of Prerequisite and Corequisite**

A prerequisite is an enforceable entry requirement for a particular course. Students must have successfully completed the prerequisite before enrolling in the subsequent course. A corequisite is a course that is required to be taken in conjunction with another course.

## Recognition for Academic Achievement Crimson Scholars Program

Outstanding students who meet the criteria listed in this section may be awarded the designation of "Crimson Scholar." Students who complete 38 credits as Crimson Scholars and have a cumulative GPA of 3.5 or above in the semester before graduation will be recognized as Crimson Scholars at commencement. Those having 45 Crimson Scholar credits and a cumulative GPA of 3.5 at the end of their last semester are entitled to have "Crimson Scholar Graduate" printed on their transcripts.

To qualify for the Crimson Scholar program, students must be degreeseeking undergraduates enrolled in three or more credits during each regular (fall/spring) semester at DACC/NMSU. Those who qualify will be automatically notified by letter during the semester in which they become eligible. Criteria vary according to class standing as follows:

**NEW FRESHMAN** (those having 27 credits or less) with an ACT composite score of 26 or better or an ACT score of 24 or better, and a 3.75 high school GPA are eligible. Such students must maintain a 3.3 minimum cumulative GPA to continue in the program until they complete 28 graded credits.

**CONTINUING FRESHMAN** are not eligible for the program until they have completed 12 or more credits at DACC/NMSU with a 3.5 minimum GPA.

**SOPHOMORES, JUNIORS, AND SENIORS** (those having 28 or more credits) must have a 3.5 minimum cumulative GPA to be eligible and must maintain that minimum GPA to continue in the program.

TRANSFER STUDENTS must have a 3.5 minimum cumulative GPA for 12 credits at their previous institution(s) to be eligible, and must maintain at least a 3.5 cumulative GPA to continue in the program. Transfer students who do not have a 3.5 minimum cumulative GPA at their previous institution(s) must complete 12 or more credits at DACC/ NMSU to establish eligibility and must maintain at least a 3.5 cumulative GPA to continue in the program.

Currently enrolled Crimson Scholars whose cumulative GPA drops below 3.5 or the minimum 3 credits per semester will be dropped from the program.

Additional information is available from the office of the vice president for student services, whose office is located in DASR 106B.

**NOTE:** Courses taken on an *S/U* or on an audit basis, as well as those for which an I was received, are not counted.

#### **Dean's List**

Following the close of the semester, the college will publish a list of students who have achieved honor standing in grades for the previous semester. To be eligible, a student must have been enrolled in 12 or more semester credits with a computable grade in each. The top 15 percent of eligible students in the college will be named to the Dean's List and notified by electronic letter.

#### **Meritorious Graduate**

The designation *Meritorious Graduate* is awarded to the top 15 percent of students receiving associate degrees in any fall or spring semester; the students must have completed 45 or more credits with computable grades at Doña Ana Community College.

#### **Attendance and Student Performance**

Students are expected to regularly attend all classes for which they are registered. Valid reasons for missing classes do not relieve the student of making up the work missed nor the responsibility of seeing the instructor about making up any missed work. Specific class attendance requirements are determined by the instructor of the course.

Students making satisfactory progress in their classes will be excused from classes when they are representing DACC during college-sponsored events (e.g., sponsored student-organization functions, educational field trips, and conferences). Authorized absences do not relieve the student of his or her class responsibilities. Prior written notice of the authorized absence will be provided to the instructor by the sponsoring faculty or staff advisor.

When the number of absences hinders a student's progress in a course, the instructor may initiate a statement of the student's excessive absences including a recommendation of retention or expulsion from the class. Based on the recommendation of the instructor and with the concurrence of the course division dean and the vice president for academic affairs (VPAA) a student will be dropped for persistent absences or for persistent failure to complete assignments. Similarly, a student may also be dropped from a class for engaging in behavior that interferes with the educational environment of the class. Any student who has been dropped from a class shall have the right to appeal that decision through the Student Academic Grievance Policy.

Only enrolled students for credit or for audit are permitted to attend classes. A student who has officially withdrawn from a course may continue to attend the course with the permission of the instructor for the remainder of the semester. Students not enrolled may visit classes only with the permission of the instructor.

#### **Veterans Attendance and Satisfactory Progress**

The Veterans Administration (V.A.) requires all veterans attending under Veterans Educational Assistance Benefits to make satisfactory progress and systematic advancement toward an educational objective, or be

liable for overpayments from the V.A. Satisfactory progress and regular class attendance are expected of such students.

If a veteran receiving benefits is suspended for academic reasons, benefits are terminated and will be restored only after readmission to DACC/NMSU.

A student receiving V.A. benefits who is pursuing an associate degree or certificate through a program offered by DACC should adhere to the curriculum of that program. Failure to do so will result in the student's being certified for less than full-time status or becoming liable for an overpayment.

#### **Academic Misconduct**

Students at DACC are expected to observe and maintain the highest academic, ethical, and professional standards of conduct. Any student found guilty of academic misconduct shall be subject to disciplinary action. Academic misconduct includes, but is not limited to the following actions:

- Cheating or knowingly assisting another student in an act of cheating or other forms of academic dishonesty;
- Plagiarism, which includes, but is not necessarily limited to, submitting examinations, themes, reports, drawings, laboratory notes, undocumented quotations, computer-processed materials, or other material as one's own work when such work has been prepared by another person or copied from another person;
- Unauthorized possession of examinations, reserve library materials, or laboratory materials;
- Unauthorized changing of grades on an examination, in an instructor's grade book, or on a grade report; or unauthorized access to academic computer records;
- Nondisclosure or misrepresentation in filling out applications or other university records in, or for, academic departments or colleges.

#### **Academic Appeals Board**

The community college has an academic appeals board, consisting of three faculty members and two students appointed by the vice president for academic affairs. Any student who believes that (s)he has been unjustly treated by a faculty member within the academic process may request a hearing before the academic appeals board. The steps and procedures for the student to follow appear under the heading, "Special Grievance Policy," in the *DACC Student Handbook*.

#### **Maintenance of Records**

Instructors and/or departments shall keep records used to compute individual grades for two years after the completion of a course. If a grade has been appealed, these records shall be kept for at least two years after completion of the appeal. Some units within the NMSU system may require that records be kept for longer periods.

### **Academic Standing**

Please see the section on incomplete (*I*) grades to determine the effect that removing I grades may have on academic standing.

ACADEMIC WARNING, PROBATION AND SUSPENSION. When students do not maintain adequate academic standing, they begin a progression from Academic Warning to Academic Probation I and II, and finally to Academic Suspension. Each stage imposes more structure and restrictions on the student in order to help the student return to normal

academic standing. Thus, the intent is not to punish, but to help the student enjoy academic success.

Since some of the restrictions imposed limit the number of credit hours that can be taken, students on Probation or Suspension may be subject to loss of financial aid. It is the responsibility of the student to determine what impact a particular change in academic standing could have on financial aid. Notification to students of Academic Warning, Academic Probation, or Academic Suspension appears on the student's grade report at the end of each grading period.

ACADEMIC WARNING. Issued only once, an Academic Warning is received when a student's cumulative GPA falls below 2.0 while the student is in good academic standing. The vice president of student services will send the student a letter detailing the consequences that will accrue should the cumulative grade point-average remain below 2.0 at the conclusion of the following semester.

While under Academic Warning, the student will be required to enter into a contract with their academic advisor that has the approval of the department chair. The contract may require the student to do any of the following:

- · Repeat a course in an effort to sharply increase the GPA.
- Enroll in a 3-hour special study skills/time management course specifically designed for those on Academic Warning for the first time, or an equivalent course approved by the vice president of student services.
- Take only courses related to the student's major, except for the special skills/time management course.
- · Obtain tutoring help.
- · See an academic counselor on a specified time schedule.
- Register for fewer credit hours if there are extenuating circumstances, such as work commitments.

Other requirements may be included in the contract, as well.

The vice president of student services may place the student on Academic Probation I should the student not adhere to the stipulations of the contract.

If, at the end of the first semester on Academic Warning, the student has a semester GPA greater than 2.0 but the cumulative GPA remains below 2.0, the student will remain on Academic Warning. If the cumulative GPA is raised to at least 2.0 by the end of the semester, the student is returned to regular status. If both the semester GPA and the cumulative GPA remain below 2.0 at the end of the semester on Academic Warning, the student is placed on Academic Probation I.

**SUMMER COURSES.** A student may use summer classes to try to get warning or probationary status removed. Under no circumstances may a student on Academic Warning or Academic Probation be allowed to register for an overload.

Academic warning status is continued if the student withdraws from the university. Probation or suspension status applies to all subsequent enrollments.

**ACADEMIC PROBATION.** The two stages in Academic Probation are described as follows:

ACADEMIC PROBATION I. If the student's semester GPA remains below 2.0 while on Academic Warning and/or the cumulative GPA remains below 2.0 at the conclusion of the semester, the student is moved from

Academic Warning to Academic Probation I. Under Academic Probation I the following conditions apply:

- The student cannot enroll in more than 13 hours of coursework during the semester. Note: Students who fall below 12 credits in any one semester may jeopardize their financial aid. In such an event, students should contact their division dean as soon as possible to try to implement corrective measures.
- 2. The student and the advisor will enter into a contract (which may take the form of an individualized education plan) having the approval of the vice president of student services. Should the student fail to adhere to the stipulations of this contract, the vice president of student services may place the student on Academic Probation II or Academic Suspension.
- If the student who is on Academic Probation is receiving educational benefits from the Veterans Administration, he or she must obtain counseling from the Office of Veterans Programs.

The student must maintain a semester GPA equal to or greater than 2.0 until the cumulative GPA reaches 2.0, at which time the student goes back to regular status. During this period, the student remains on Academic Probation I.

**NOTE:** Transfer students whose transcripts indicate less than a 2.0 GPA are admitted under special provisions and placed on Academic Probation I.

ACADEMIC PROBATION II. If, however, the student fails to maintain a semester GPA of at least 2.0 while on Academic Probation I, the student will be placed on Academic Probation II. Students who are already on Academic Probation II will remain in that status as long as the cumulative GPA is still less than 2.0. The following stipulations apply to those on Academic Probation II:

- 1. The student cannot enroll in more than 7 hours of coursework during the semester.
- The student and the advisor will enter into a contract approved by the vice president of student services that places further stipulations on Academic Probation II.

The vice president of student services may place the student on Academic Suspension should the student not adhere to the stipulations of the contract.

The student must maintain a semester GPA of 2.0 or higher until the cumulative GPA reaches a 2.0, at which time the student is placed on regular status. A student unable to maintain a semester GPA of 2.0 or higher while under Academic Probation II will be placed on Academic Suspension.

**CONTINUING IN PROBATIONARY STATUS.** Students may continue to enroll while on Academic Probation I or II provided they maintain a semester GPA of 2.0 or higher. They are continued on that same level of Academic Probation if they withdraw from the university while on Academic Probation.

**REMOVAL OF ACADEMIC PROBATION**. Such academic standing is removed when the cumulative GPA is raised to 2.0 or higher, with the following exceptions:

- 1. a transfer student may not remove probation by summer work alone;
- if an I grade is removed after the student has enrolled, the new grade's effect on academic standing is based on its inclusion with grades for the term for which the student is enrolled;

exercise of the Adjusted Credit Option does not change academic status until subsequent grades are earned.

ACADEMIC SUSPENSION. When a student does not achieve a semester 2.0 GPA or higher, and the cumulative remains below a 2.0 while under Academic Probation II, the student is placed on Academic Suspension. Students are not allowed to take NMSU courses while on suspension but must sit out a minimum of one semester and then petition the vice president of student services to be removed from Academic Suspension. At this time, the suspension status will be evaluated for possible removal. Should the suspension be lifted, the student is placed on Academic Probation II until such time that the cumulative GPA equals or exceeds a 2.0. At the discretion of the vice president of student affairs, the student will enter into a contract approved by the vice president of student services and the student's division dean, which sets stipulations for removal from suspension. Failure to adhere to the contract will return the student to Academic Suspension.

Under certain conditions, a student may be re-admitted to NMSU with provisional regular status while under Academic Suspension when satisfactory progress has been demonstrated at another college or university (see the NMSU Undergraduate Catalog). Credits earned at another university or college while under Academic Suspension from NMSU or another university or college, will be accepted at NMSU only after the student demonstrates satisfactory progress over a period of two semesters after being re-admitted or admitted to NMSU. Acceptance of transfer credits that count toward degree requirements is still governed by the rules established by the student's respective college or campus.

**EFFECT OF SUMMER ATTENDANCE.** Students suspended at the close of the spring semester may have their Academic Suspension rescinded if they attend any of the following summer sessions at NMSU or one of its community colleges. Such attendance must raise the cumulative GPA to 2.0 or better.

A certification of eligibility to attend summer sessions at NMSU after a spring semester Academic Suspension is available to the suspended student who wishes to attend summer sessions at other institutions.

#### **Disciplinary Probation and Suspension**

DACC/NMSU expects all students to conduct themselves as responsible citizens on campus and in the community. Repeated misconduct and major violations will cause the student to be subject to immediate suspension or expulsion from DACC/NMSU.

The general rules and regulations applicable to students are in the "Student Code of Conduct" contained in the *Student Handbook*.

#### **Privacy Rights**

The following information has been designated as directory information and is subject to release to the public under the Buckley Amendment (PL 98-380), the Family Educational Rights and Privacy Act of 1974: student's name, address, E-mail address, telephone listing, date and place of birth, major field of study, classification, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student.

Other information regarding disclosure of student data is posted in the DACC Student Services area in compliance with the Act. Requests for withholding directory information must be filed in writing with the NMSU Registrar's Office by the third Friday of class.

#### **Social Security Numbers in Student Records**

Social security numbers are collected from prospective and current students who wish to be employed on campus or apply for financial aid. Such students are required by law to provide their social security number for administrative use. Further, the university is mandated by federal tax regulations to provide tuition and fee payment information to the student and the Internal Revenue Service, so that applicable educational tax credits may be computed. The social security number will be necessary to submit this tax reporting. The social security number is a confidential record and is maintained as such by the university in accordance with the Family Educational Rights and Privacy Act (FERPA).

#### **Program/Degree Requirements**

DACC offers a number of degrees and certificates. Those awards and requirements are given in the Academic and career programs sections. For graduation with an associate's degree, a student must meet all of the criteria for the major elected. The requirements listed are the minimum for the degree; students are encouraged to undertake more extensive and broadening courses of study.

#### **Student Responsibility**

The ultimate responsibility for planning an academic program in compliance with university, college, and departmental requirements rests with the student. In addition, the student bears ultimate responsibility for understanding all matters of the Undergraduate Catalog.

NMSU offers Associate, Baccalaureate, Master's and Doctoral degrees. NMSU also offers Certificates at the associate and graduate levels. Requirements for specific degrees and other designations are set forth by this catalog for the NMSU-Las Cruces (main) campus and the corresponding catalogs for the NMSU Community Colleges (Alamogordo, Carlsbad, Dona Ana and Grants).

## **Additional Degree Designations**

As part of a degree program, students may also earn additional degree designations indicating fields of study such as majors, minors or concentrations. A major is defined as a recognized area of study in which there is an extensive and well-developed curriculum offered at the university, as well as adequate library resources and support services. A minor is based on courses that encompass a recognized field of study outside the student's major. A concentration is based on a collection of coursework in an area that is part of a major program of study. Degrees and additional designations awarded, limited to majors, minors, and concentrations, will be noted on the student's transcript.

## **Catalog Effective Period**

Each annual catalog edition is effective Summer Session I through Spring Semester and is considered active for a six year period for all campuses. Curricular requirements (course requirements and number of credits required) for a specific degree or other designation may be met by completing all of the course requirements as set forth by the catalog in effect at first matriculation, or any subsequent catalog, provided the selected catalog is considered active when the requirements for graduation are met. For all other matters, the current catalog is controlling. NMSU reserves the right to withdraw courses at any time, change fees, rules, calendar, curriculum, degree programs, degree requirements, graduation procedures and any other requirements affecting students. Except as otherwise stated here, changes will become effective whenever the proper authorities so determine and will apply to both prospective students and those already enrolled.

# Application for Degree/Graduation or Certificate

Upon completion of all requirements for degrees and certificates, students will not receive their degrees automatically. In order to receive the degree or certificate, students must submit an application and pay the required fee in the semester in which the student expects to graduate or complete the degree or certificate requirements. Specified in the academic calendar for each semester is the deadline for all applications. The application must indicate/ note all designations earned. After awarding of the degree, you cannot add any additional designations.

Students who will be completing two degrees/certificates in the same semester must apply for graduation and pay the fee for each degree separately. Students applying for graduate degrees or certificates must satisfy requirements as described in the Master's, Certificates, and Doctoral Degree sections below.

Students who do not meet requirements or elect not to graduate after filing an application need to re-apply in a subsequent semester and pay another fee.

## **Multiple Degrees and Designations**

A student may earn more than one degree or multiple degree designations by completing all of the requirements in an appropriate catalog for each degree or designation. Students completing requirements for more than one degree must apply for and pay the application fee for each degree to be awarded. Upon completion of all requirements, multiple majors for a single degree (e.g., B.A., Major in Ant; Major in Anthropology) and multiple bachelor's degrees (e.g., B.A. and B.S.) will be noted on the student's academic record/transcript and may also be granted at one commencement.

## **Degree Revocation**

The Board of Regents reserves the right to revoke a degree should it be determined upon investigation that the degree requirements were not properly met. A degree revocation must be in accordance with NMSU policy and related rules.

## **Honorary Degrees**

Ceremonial Honorary Degrees may be awarded in accordance with NMSU policy and rules as set forth in the NMSU Regents Policy Manual and the related Administrative Rules and Procedures.

## **Community College Certificate**

A Community College may offer two types of certificates, the Certificate of Achievement and/or the Certificate of Completion. Certificates may be awarded independently from any degree program.

#### Certificate of Achievement

The Certificate of Achievement is a program of study less than 16 credits and is not eligible for Federal financial aid. This Certificate provides employment related and/or career enhancing skills necessary to succeed in a job or a chosen field of study. These courses can be a subset of those required for a corresponding Certificate of Completion or Applied Associates Degree. These certificates are recorded on the student's transcript.

### **Certificate of Completion**

The Certificate of Completion requires a minimum of 16 credits (other Title IV requirements must be met to be eligible for financial aid) and has been approved through the academic review process. These courses can be a subset of those required for a corresponding Applied Associates Degree. These certificates are recorded on the student's transcript.

Requirements for certificates are found in the respective catalogs and sections concerning these programs. The following requirements apply to all certificates.

- Minimum Credit Hours: The number of credit hours varies from certificate to certificate. Students must successfully complete the total number of credit hours as outlined in the respective catalogs and sections describing these certificates.
- GPA requirement: Students must earn a minimum grade of C- in courses required for the certificate. In addition, students must have a cumulative GPA of 2.0 or better in all courses taken at NMSU or one of its community colleges.
- Residency: A minimum of 6 credits earned toward the certificate
  must be completed at NMSU or one of its community colleges. If the
  certificate requires fewer than 6 credits, all credits must be completed
  at NMSU or one of its community colleges.

### **Associate's Degree**

Associate's degrees are of two types. The academic associate's degree prepares students to transfer to a baccalaureate program and generally includes credits toward the first two years of a four-year degree. Academic associate's degrees include the Associate of Arts, the Associate of Science, and other named degrees that link to a specific major (the Associate of Education, for example). Other associate degrees, typically called Associate of Applied Science, prepare students for entry into the workforce. Credits for these programs may or may not apply toward a four-year degree. Students interested in transferring to NMSU or another four-year institution should check the appropriate sections of the university catalog for more information.

Requirements for the two-year associate degrees are found in the respective catalogs and sections concerning these degrees. The following requirements apply to all associates degrees:

- Minimum Credit Hours: a minimum of 60 credits (excluding "N" suffix courses). Some programs of study require coursework in excess of the 60 credit-hour minimum.
- GPA requirement: Students must have a cumulative GPA of 2.0 or better in all courses taken at NMSU or one of its community colleges. In addition, students must earn a C- or better in classes they take to meet the Basic Skills requirement (English 111g and one of several math course options),
- 3. **Residency** 15 of the last 30 credits earned toward the degree must be completed at NMSU.
- Major: All requirements for at least one major field of study as specified in the college and departmental sections of the respective catalog.

#### **Associate Major**

An associate major, consisting of at least 18 credits, may include courses from more than one department. Requirements for the Associate Majors are specified in the respective Community College Catalogs.

## **Baccalaureate Degree (Bachelor's Degree)**

A baccalaureate or bachelor's degree provides students with a broad educational base as well as knowledge in a specific major field. Each college has unique degree requirements that are listed in the college's designated section of this catalog. In addition to the College and Department requirements, students must complete each of the following degree requirements for every Bachelor's Degree awarded by NMSU:

- Minimum Credit Hours: a minimum of 120 credits (excluding "N" suffix courses)
- GPA requirement- a minimum cumulative GPA of 2.0 in all courses taken at NMSU
- New Mexico Common Core- 35-36 credits of state mandated general education courses (as specified in General Education section); such course are designed with a "G"
- New Mexico State University's Viewing a Wider World- 6 credits of Viewing a Wider World courses; such courses are designated with a "V", or alternatives as specified in the Viewing a Wider World section
- Upper Division Courses a minimum of 48 credits in courses numbered 300 or above.
- 6. Residency Of the last 36 credits earned toward award of the degree:
  - a. 30 credits must be completed at NMSU
  - b. 21 credits must be upper division (300 or above) and
  - c. 12 of the 21 upper division credits must be within the student's major.

NOTE: colleges or departments may require that more than 12 upper division credits be within the major and they may direct that a certain number of these credits be course specific.

Major – all requirements for at least one undergraduate major field
of study, other than a supplemental major, as specified in the college
and departmental sections of the catalog.

## Bachelor's Degree Designations

### **Undergraduate Major**

An undergraduate major consists of 24 or more credits within the major field, of which 18 credits must be upper-division courses, and may include courses from more than one department. Additional requirements for majors are specified in the college and department's designated sections of this catalog.

#### **Supplemental Major**

A supplemental major consists of 24 or more credits of interdisciplinary coursework, of which at least 18 credits must be upper-division (300-499), and no more than 9 credits may be from the student's major course of study. Additional requirements for supplemental majors are specified in the catalog listing for the field of study.

#### **Undergraduate Minor**

An undergraduate minor consist of 18 credits of course work, of which 9 credits must be upper-division (300-499). A minor encompasses courses that in a recognized field of study outside the student's major. At least 12 credits of a minor must be completed at NMSU. Additional requirements for minors are specified in the college and department's designated sections of this catalog.

### **Undergraduate Concentration**

A concentration consists of 12 or more credits of coursework in a specialty area that is related to a specific major field of study. At least 9 of the 12 credits must be upper-division (300-499), and at least 9 credits must be completed at NMSU. Additional requirements for concentrations

are specified in the college and department's designated sections of this catalog.

# Distance Education Bachelor's Degree Completion Program

A Bachelor Degree Completion Program allows students who have met the lower division requirements (100 and 200 level) of an undergraduate degree program to complete the remaining upper-division credits (300 and 400 level) through distance delivery courses offered by NMSU Las Cruces. Only selected degrees are available as degree completion programs. Students must complete all required lower-division (100 and 200 level) credits before they can be admitted to the Bachelor's Degree Completion Programs. The program(s) normally require two years of upper division (300 and 400 level) coursework.

## **Graduating with Honors**

For information about graduating with Honors, please refer to the Recognition of Academic Achievement section of this catalog.

## **Graduate Degrees**

All graduate degrees are subject to rules and regulations of the Graduate School. Degrees will be certified by the Graduate School only upon the complete review and clearance of the candidate's program of study.

## **Graduate Degree Designations**

#### **Graduate Major**

A graduate major may include courses from more than one department, but as a minimum it must consist of at least 30 graduate credits. Additional requirements may be imposed by the State of New Mexico and New Mexico State University as specified in this Catalog.

#### **Graduate Minor**

A graduate minor is based on at least 9 graduate credits in courses that encompass a recognized field of study outside the student's major. Departments may require certain courses be a part of a minor and may exclude other courses.

#### **Graduate Concentrations**

A concentration is a collection of coursework in a specific area that is part of a degree program of study at NMSU. At the graduate level at least 9 of these 12 credits must be numbered 500 or above. Only approved concentrations within a students' department or program may be noted on a transcript.

Concentrations will not be added to a transcript after a degree is awarded. In order for the approved concentration to be noted on the student's transcript, the following conditions must be met:

- Request the concentration at the time they file their official program
  of study
- 2. Identify the concentration on their official Application for Degree.

#### **Graduate Certificates**

A Graduate Certificate program requires 12-18 credits of course work that is interrelated and designed to develop a focused skill or area of expertise but does not culminate in the awarding of a degree. Courses that comprise a graduate certificate must be regular approved courses offered by the University and must be numbered 450 or above. A graduate certificate is indicated on the student's transcript.

### Master's Degree

New Mexico State University offers both academic and professional master's degrees. A link to the list of all master's degrees is provided in the Graduate School section of this catalog.

Underprepared students may be required to take additional general or discipline-specific undergraduate or graduate courses to prepare them for the advanced academic work necessary for success in graduate level courses in their chosen field.. This may result in an extended graduation date.

#### Admissions to the Master's Degree

The admission of a student into the Graduate School does not imply admission to candidacy for an advanced degree. The major department in which the student intends to become a candidate for a master's degree must determine the student's ability to pursue studies at the graduate level. Please see the Department(s) for specific requirements.

#### **Program of Study**

During the first semester of enrollment each new graduate student should prepare a complete program of study in consultation with the student's advisor.

#### **Application to Candidacy**

The program of study will formally list the curriculum requirements for degree completion and is required for application to candidacy. The program of study must be approved by the advisor, department, and academic dean and submitted to the Graduate School. The Program of study may specify the Catalog at the time of graduation, as long as the catalog is considered active. Otherwise, the current Catalog will be listed.

An Application for Admission to Candidacy must be filed with the Graduate School. This must be done before the completion of 12 credits of graduate coursework. The student must have a minimum cumulative GPA of 3.0 at the time the application is submitted. The application may specify the Catalog at the time of graduation, as long as the catalog is considered active. Otherwise, the current Catalog will be listed.

The student's program of study must:

- Meet the requirements of the chosen catalog, including the regulations of the Graduate School and of the major department.
- 2. Be signed by the student, the student's advisor, department head, minor faculty if applicable, and academic dean.
- List each course prefix/number, short title, credit hours and grades if available.

If the program of study does not comply with the departmental requirements or the potential degree audit, the program of study must be approved by the Dean of the Graduate School. . The Program of Study is not required for master's programs if defined within the Star Degree Audit.

#### **Credit Hour Requirement**

A minimum of 30 credits is required for the master's degree. Most master's degrees require at least 15 credits in courses numbered 500 or above. This includes thesis credits for any master's programs that include a thesis option. Master's programs involving a thesis, must include, either a minimum of 4 credits or a maximum of 6 credits of thesis. Please see the "Thesis" section for more information.

At least 15 credits for the master's degree must be for work in courses within the student's department. Additional credits may be selected from other fields to fit into a logical and justifiable program. However, courses

that are used to remove deficiencies or satisfy prerequisites cannot be counted as requirements for a master's degree.

#### **Coursework Requirement**

Students must take coursework from a variety of faculty. Students may not take more than half of the minimum credits required for a master's degree with the same professor, excluding thesis credits.

All graduate students are required to register for 1 credit of graduate coursework in their final semester. Please see the Tuition, Fees and Other Expenses section for more information.

#### **Thesis Option**

A thesis in the major field is recommended and may be required at the discretion of the department. A minimum of 4 credits and a maximum of 6 credits may be counted toward the requirements for a master's degree. The final examination shall consist of an oral defense of the student's thesis as well as a general examination of the candidate's field of study.

 Continuous Enrollment- once registered, a student must continue to register for a minimum of 1 credit in thesis or graduate coursework each regular semester until the thesis is approved by the Graduate School and the copies have been accepted by the Branson Library binding section.

#### **Graduate Committee for Thesis Option**

The graduate committee for the master's degree consists of a minimum of three faculty members who hold, at least, a master's degree and meet the following criteria:

#### 1. Committee chair.

- a. Must be from the student's home department
- b. Must be a graduate faculty member

#### 2. Committee member(s):

- a. May be from outside the student's home department
- Student's with a declared minor- may have the representative from a related area or be appointed by the Dean of the Graduate School.
- c. Must be a graduate faculty member

#### 3. Dean's Representative:

- a. Must be a representative from a related area or appointed by the Dean of the Graduate School
- b. Must be a graduate faculty member

#### **Finalizing the Master's Thesis**

After successful completion of the final examination, a copy of the thesis must be submitted to the Graduate School for format review no later than the deadline posted to the Graduate School website. The form and style of the thesis must comply with the regulations given in the Guidelines for Preparing a Thesis or Dissertation http://gradschool.nmsu.edu/theses-dissertations/. These guidelines also contain detailed information on the thesis approval process and binding. The thesis is not complete until copies have been accepted for binding by the binding section staff and until the online Library binding form has been completed and received in Branson Library

#### **Professional Degree and Non-Thesis Final Examination**

Each candidate will be given a final examination conducted by their graduate committee in accordance to the schedule provided by the Graduate School. It is the department's responsibility to ensure that the Report of Results for the Master's Professional or Non-Thesis Final Exam

form is submitted to the Graduate School at least ten working days after the exam

The final examination format for the professional degrees and nonthesis option will be determined by the department, with the approval of the Dean of the Graduate School. If a department does not specify an examination format, the final examination will consist of an oral defense of the candidate's field of study.

At the time of the final examination, a graduate student must have a cumulative GPA of at least a 3.0 and must be enrolled for a minimum of one credit hour in the final semester; or if the student is writing a thesis, he or she must have completed all course work for the master's degree.

NOTE: the cumulative GPA, will be calculated from NMSU graduate coursework only.

Any candidate who fails in the final examination may either.

- Be granted a second examination, written or oral, after a lapse of at least one semester, only with a recommendation from the student's advisor and approval from the Dean of the Graduate School.
- 2. Be excluded from further candidacy for the degree.
- Failure in the second examination disqualifies a candidate from obtaining the degree.

Students in professional or non-thesis options may be required to pay a special exam fee in lieu of registering for 1 credit of graduate coursework. Please see the Tuition, Fees and Other Expenses section for more information.

#### **Time Limit**

Students must complete the master's degree program within seven years (or eight successive summers) of the start of the degree, including completion of the master's thesis or final project. Any coursework more than seven years old at the time of the final examination will not be included in the program. Any exception to the time limit rule must have prior approval of the Dean of the Graduate School.

### Master's Accelerated Program (MAP)

The master's accelerated program provides an opportunity for academically qualified undergraduate students to begin working on a master's degree during their junior and senior years while completing a bachelor's degree. Typically, a bachelor's degree requires four years to complete and a master's degree requires an additional two years. The master's accelerated programs allow students the opportunity to complete a graduate program in an accelerated manner.

Undergraduate students may apply for acceptance to a Master's Accelerated Program available at New Mexico State University after completing 60 semester hours of undergraduate coursework of which a minimum of 25 semester credit hours must be completed at New Mexico State University and apply towards the undergraduate major. The grade point average must be a minimum of 3.0; departments participating in the master's accelerated program may have requirements that exceed these minimum requirements. It is the student's responsibility to meet with their financial aid advisor. Awards may be adjusted to reflect enrollment in an undergraduate/graduate program.

Graduate departments within the colleges may allow academically qualified undergraduate students to substitute a maximum of 12 graduate course credits for elective courses in an undergraduate degree program. Graduate programs have the discretion to use up to 12 credits of NMSU coursework (450 level or higher) that can logically be applied

towards the completion of master's program of study. A grade of B or higher in this coursework will be required .

#### **Program Participation Requirements:**

- 1. Students must obtain prior approval by the graduate program
- Student's course work must be general or discipline electives in the student's undergraduate course of study. No required courses from the undergraduate program will be accepted towards the Master's Accelerated Program.
- Students will enroll in approved graduate level courses. If course(s)
  requires instructor approval, it is the students responsibility to obtain
  necessary approval
- Students participating in MAP are required to submit a completed Master's Accelerated Program Referral Form to the Graduate School by the first Friday of classes, with all required signatures.
- 5. Students participate in the Developing New Scholars Program (DNSP) through the Graduate School. The DNSP program provides formal mentoring supporting application process to Graduate School. Upon awarding of the Bachelor's degree and formal admissions into a master's/graduate program at NMSU, the approved credits (up to 12) will be recorded on both the undergraduate and the graduate transcript.

### **Interdisciplinary Master's Degree**

Interdisciplinary studies, at New Mexico State University, are intended for individuals specializing in programs that require the integration of more than one discipline to fully engage in the field of study. The programs provide a mechanism to address emerging scholarship, innovation and research, as well as, allow graduate students to engage in emerging technologies that optimize their education outside the traditional disciplinary boundaries. An Interdisciplinary study takes advantage of traditional academic training within specific departments and also allows students to customize their own career preparation. In these programs, a coherent common core is expected and is intended to combine existing courses across disciplines to meet unique objectives.

The interdisciplinary studies option should not be used in cases where the applicants' objectives can be realized by admission to a specific department with a degree program, and inclusion of up to two minor areas in the program of study.

#### **Admission**

Students interested in pursuing an Interdisciplinary Master's Degree (IMAS) degree must meet with the Graduate School for advisement. The advisement session will include information on completing the IMAS admission application:

- 1. Develop a proposal for interdisciplinary studies
- 2. Create the IMAS graduate committee
- Once the student's graduate committee is designated, the committee can require additional materials such as a statement of interest, letters of recommendation, GRE or GMAT scores and a personal interview.
- Complete the IMAS referral form and procure committee members IMAS program approval.
- 5. Procure academic department head IMAS referral form approval.
- Submit IMAS referral form and proposal for interdisciplinary studies to Graduate School for admissions.

#### Degree(s) Awarded

Students receive a Master of Arts (MA) or a Master of Science (MS) and a concentration in the designated interdisciplinary study area.

Other conditions for being awarded a degree within the interdisciplinary studies program are:

- The student must present a written description of the program concept consisting of the following, as well as, the designated degree being sought and a name of the interdisciplinary area:
  - a. The objective of the program of study which should include, proposed areas of skill development and proposed courses in more than one graduate degree granting department at NMSU.
  - b. A justification for not using an existing degree program.
- The student's program of study must include a minimum of 30 graduate level credits and a maximum of 36 graduate level credits.
   Students may take six credits in departments that do not grant a graduate degree, but the courses must be numbered 450 or above and be pertinent to the program of study.
- 3. The majority of the departments involved in the student's program will be master's degree granting departments. The student is expected to take at least 15 credits in the primary area of study within one department. The department selected by the student will receive a copy of the student's application for admissions to the Graduate School. In addition, the student is required to select a minor area of study in another department that consists of at least 9 graduate credit hours.
- 4. The student will form a committee composed of members of the graduate faculty and select an advisor who will chair the committee. The chair must be from the primary department where the student has taken at least 15 credit hours listed in the proposal submitted. The other committee member must be from the department in which the student has selected a minor area of study from the approved list.
- 5. The student will be required to submit the Candidacy Form after they have satisfactorily completed 12 credits.
- The program will meet all requirements of a master's degree, with the interpretation, that "major field" includes courses from two or more departments and in the designated interdisciplinary study area.
- 7. The program of study will include the completion of a research thesis or project. The work may be submitted in the form of a publishable manuscript, technical report, thesis or creative option.
- The student may enroll on a part-time basis keeping in mind that coursework cannot be more than seven years old at the time of the final examination.
- The student will be administered a final comprehensive exam that is consistent with the department selected for the primary area of study. For example, if a department requires a written exam, the student in the interdisciplinary masters will also be required to take a written exam.
- 10. The final oral comprehensive exam will consist of questions pertinent to the area of study and the defense of the research thesis or project. In both cases, an integrated approach to the areas of study chosen should be followed.
- 11. All other rules for graduate study at NMSU must be followed.

#### **Thesis/Non-thesis Option**

As with any graduate student, the student in interdisciplinary studies can select to follow a thesis or non-thesis option. Students enrolled in the thesis option register for six thesis credits. Students not wishing to follow the thesis option will be required to complete a project report. The project

must reflect the interdisciplinary nature of the program which the student is pursuing.

#### **Comprehensive Exam**

Students in interdisciplinary studies take a comprehensive exam composed of questions designed by the student's committee. The committee consists of two individuals in the area of study, the dean's representative who must be outside of the department/program/interdisciplinary study option, and a committee chair.

### **Second Master's Degree**

A student who has earned one master's degree at NMSU may be allowed to count a maximum of six semester credits earned on the first degree toward a second master's degree, if those credits fit into a logical graduate program. The number of shared credits may be increased for joint degree programs.

#### **Teacher Licensure**

Students wishing to take graduate courses for licensure, renewal of licensure or for personal enrichment must be fully admitted to a department in order to do so. Undeclared students may not register for teacher licensure classes.

Endorsement is available at both the elementary and secondary levels in bilingual education, TESOL (Teaching of English as a Second Language), reading and special education. Endorsement is also available in early childhood education at the elementary level. Contact curric-instr@nmsu.edu for more information.

### **Specialist in Education**

The specialist in education degree is available for experienced members of the education profession who have completed the master's degree and have maintained a 3.3 grade-point average while pursuing this degree or its equivalent. Programs are available in curriculum and instruction, as well as, school psychology. Emphasis is placed on the development of the competencies needed for a professional specialization in a given field. Students must complete the general application for the Graduate School and they should also check with the admitting department for specific departmental requirements.

#### **Residency and Credit Requirements**

The specialist in education degree requires a minimum of 30 credits beyond the master's degree, including research, intern experiences and graduate courses. Twenty-four of these credits must be completed at NMSU to meet the campus residency requirements.

Students must maintain a 3.0 GPA, no more than 6 credits of C level work are allowed for this program.

#### **Program of Study**

It is recommended that during the first semester of enrollment each beginning graduate student should prepare a complete program of study with the student's advisor. The program of study can be tentative, should be kept in the student's file within the department, and is not considered an "Application for Admission to Candidacy."

#### **Major Field**

All course work taken for the degree should apply directly, through a logical program of study, to the specialty which candidate has selected. Each department is responsible for defining the required sequence of courses.

#### Candidacy

Following the successful completion of 12 credits beyond the master's degree, the student is eligible for admission to candidacy. With the achievement of candidacy, a committee is appointed to work with the candidate on the remainder of the program. The committee consists of three members of the graduate faculty in the College of Education.

#### Internship

Each candidate will earn from three to six semester credits in an internship. This experience will consist of supervised performance of duties related to the candidate's specialty. The student's department will determine the structure of the internship and a research project will be conducted in conjunction with the internship.

#### **Oral Examination**

The oral examination committee will consist of the student's committee and a dean's representative appointed from the graduate faculty by the dean of the Graduate School. This committee will conduct an oral examination at the conclusion of the research project and no earlier than the candidate's last semester of enrollment.

The examination will consist of a defense of the project along with general questions on subject matter related to the candidate's field of study. Any candidate who fails the oral examination may upon recommendation of the advisor and with the approval of the graduate dean, be granted a second examination after a lapse of at least one semester. Failure in the second examination disqualifies the candidate from obtaining the degree.

#### **Time Limit**

The specialist in education degree must be completed within seven years following admission to the program. Students cannot include any course work on their program of study that is more than seven years old at the time of the final oral examination.

#### **Doctoral Degrees**

The doctoral degree requires significant scholarly study beyond the master's program.

Prospective candidates are expected to hold bachelors or master's degrees from accredited institutions, based on curricula that include the prerequisites for graduate study in the department of their subject. To be considered for admission to a doctoral program, the applicant must have a grade-point average of at least 3.0. Prospective candidates are urged to consult the department in which they wish to study for information concerning specific requirements.

#### Professional Doctoral Degrees Doctor of Economic Development (DED)

Students enrolled in the Doctor of Economic Development are required to complete and pass a comprehensive examination. Since a dissertation is not required, students are expected to complete an internship experience and a project paper as defined by their program. They can embark on the project paper once they have completed and passed their comprehensive examination. Students are not required to take 700 level dissertation hours. However, they are expected to complete at least 12 credits at the 600 level including ECDV 694 (Internship) and ECDV 699 (Doctoral Project).

A project paper must be finalized using a similar submission process as the dissertation (see the "Finalizing the Doctoral Dissertation"). On the front page, after the title of the paper, the student should indicate that it is a project paper. Students completing projects papers do not need to complete the earned doctoral survey. The paper must be submitted

to the Graduate School for format review on or before the deadline. The form and style of the paper must comply with regulations given in the "Guidelines for Preparing a Thesis or Dissertation." These guidelines also contain detailed information on the dissertation/project paper- approval process as well as information on binding. Candidates are encourages to consult with the Graduate School on format, deadlines and procedures before final typing. The project paper is not complete until copies have been accepted for binding by the staff of Branson Library and until the microfilm agreement form has been completed and received in Branson Library.

#### **Doctor of Education (Ed.D)**

The degree of Doctor of Education demonstrates proficiency in a program of graduate study in which the emphasis is in preparation for performance in professional education. This program is intended primarily for students pursuing careers in which teaching, administration or school services are predominate rather than those in research. The Ed.D. Degree in curriculum and instruction is offered in the Department of Curriculum and Instruction; the degree in educational administration is offered in the Department of Educational Leadership and Administration.

The requirements for doctoral degrees in the two departments of the College of Education have the following distinguishing elements:

- The qualifying examination consists of a written and an oral section, both of which are administered prior to admission to the program. Acceptance for doctoral admission is equivalent to the successful completion of the qualifying examination. Residency of at least two consecutive semesters cannot commence until the semester after the qualifying examination is successfully completed.
- 2. Comprehensive examinations usually are administered three times annually. The written examination tests the major and related areas of concentration and is administered after successful completion of the orals within two weeks' time. A student who fails any part of the comprehensive examination may present him or herself for reexamination of the failed part of the exam before moving on to the next part.
- 3. The major area of study must be within the College of Education

A minimum of nine credits constitutes the related area. The courses can be taken in any department of the university with the approval of the student's committee. The related area must be specifically planned with the major and minor departments in order for the doctoral fields to be mutually supportive. Any transfer credit or predoctoral course work to be included in the related field must have the approval of both the major and minor department at the outset. Specified course work in both research and statistics is required for this degree. Other requirements are described in the departmental sections of this catalog.

#### **Doctor of Nursing Practice (DNP)**

Students holding a Bachelor's degree in Nursing are required to complete and pass all required course work for the DNP program, as well as, complete and pass their comprehensive examination. Since a dissertation is not required, they are expected to complete an internship experience and a project paper as defined by their program. They can embark on the project paper once they have completed and passed their comprehensive examination. They are not required to take 700 level dissertation hours. However, they are expected to complete at least 12 credits at the 600 level including NURS 698 (Advanced Clinical immersion) credits sufficient to complete the DNP Final Project.

Students who hold a Master's of Science in Nursing are required to complete the following:

- 1. All course work requirements
- 2. Their comprehensive exam (with passing marks)
- 3. The DNP Project.

Post- MSN DNP students must complete at least 6 credits at the 600 level, including NURS 698 credits sufficient to finish the DNP Project. Finalized projects must be uploaded to a national DNP Project repository approved by the Graduate Faculty of the School of Nursing in order to achieve the DNP degree.

#### Doctor of Philosophy (Ph.D.)

The Doctor of Philosophy degree requires distinguished attainment in both scholarship and original research. The doctoral degree requires significant scholarly study beyond the master's that is tailored to the needs and interests of the student. The degree is granted in recognition of the candidate's high attainments and ability in the special field, shown by work on the required examinations covering both the general and the special fields. The individualized program of study is designed to meet the campus residency requirement, includes a minimum of 30 graduate credits, and includes the preparation of a dissertation. A candidate for the Ph.D. degree is expected to maintain a higher level of work than the grade-point average of 3.0, plus at least 18 credits of dissertation work (700-level courses).

#### **Interdisciplinary Doctorate**

Students interested in pursuing an Interdisciplinary Doctorate (IDOC) degree program must meet with the Graduate School for advisement. The advisement session will include information on completing the IDOC admission application.

The following requirements for admission to the interdisciplinary doctorate degree program are:

- Students wishing to study in the interdisciplinary doctoral degree program must apply and be accepted into a doctorate-granting department
- A master's degree or equivalent program of study that includes at least 30 credits of graduate course work with a minimum cumulative GPA of 3.0.
- Twelve credits of graduate course work must be completed at NMSU in order to apply for admission into the interdisciplinary doctorate degree program. Additional course work is required for degree completion.
- 4. Evidence of outstanding academic achievement in graduate school.
- 5. A written description of the program concept prepared by the student consisting of:
  - a. Areas in which competency is required
  - b. Purposed readings and course work and how these relate to required competencies
  - c. Objectives and an outline for thesis research
  - d. Justification for not using an existing departmental degree program
- 6. Student must select an advisor from his/her department to help structure and chair a committee consisting of at least five faculty members from the graduate faculty list who are willing to work on the interdisciplinary degree program. The committee must include at least two members from each of the two doctorate-granting

- departments. The committee chair will convene a meeting to review and approve the proposed program.
- 7. The Graduate School will send an Admission Referral document, signed by all the committee members, to the heads of all the departments from which the student proposes to use more than 8 credits of course work, or from the department which the faculty are requested to serve on the proposed committee.
- 8. Once the Admission Referral document has been approved by all departments, the committee chair will convene a meeting of the committee to review the student's program and make changes as necessary. In addition, the committee will set the format and date for the qualifying exam. An effort should be made to incorporate the interdisciplinary nature of the program into the qualifying exam.
- 9. Students have satisfied the requirements for admission to the program once the qualifying exam has been passed and the respective department heads approve the Admission Referral memorandum. Formal acceptance into a doctoral program may be required in order to receive financial assistance.
- 10. The number of courses required for degree completion will vary depending on the student's program of study, please see the department for more specific requirements. However, Interdisciplinary doctorate degree students must meet the requirements for residency, registration, the comprehensive examination, the Final Examination, the dissertation and the declaration of approved minor.
- The dissertation work shall include at least 18 credits of a 700-level course.

#### **Completing your Doctoral Degree Program**

Any student who fails to abide by the regulations in this section will be considered withdrawn from the university. In order to resume their studies, the student must formally apply for readmission to the Graduate School and satisfy any requirements that are in effect at the time of reapplication.

#### **Declaration of Approved Minor**

Any doctoral applicant for candidacy may declare up to two approved minors in addition to the major area of study. Demonstration of competency in the minor area will be required at both comprehensive and final examinations.

### **Qualifying Examination**

Doctoral students must pass a qualifying examination that is scheduled by the student's advisor and is administered by the major department. Its purpose is to determine the areas in which the student shows strength or weakness, as well as the ability to assimilate subject matter presented at the graduate level. A student may not register for dissertation credits prior to the successful completion of the qualifying examination.

The following conditions apply to students who wish to take the qualifying examination:

- For students who enter the Graduate School with little or no previous graduate experience but wish to proceed directly to the doctorate, the qualifying examination should be taken after 12 credits of graduate work
- For students who enter with a master's degree or equivalent from another university, or another department, the qualifying examination should be taken before the completion of one semester of graduate work.
- For students who earn their master's degree at New Mexico State University and will continue in the same department, the department

may allow the master's final examination to serve as the doctoral qualifying examination or may require a separate examination.

Based on the result of the qualifying examination, the department will take one or more of the following actions:

- 1. Admit the student to further work toward the doctorate
- 2. Recommend that the program be limited to the master's degree
- 3. Recommend a re-evaluation of the student's progress after the lapse of one semester
- 4. Recommend a discontinuation of graduate work

In all cases, the Graduate School shall be notified by the department of the results of the qualifying examination.

Students will be admitted to the doctoral program once the qualifying examination is passed. The student's advisor and department head will then appoint the doctoral committee to prepare the student's preliminary doctorate program of study. The student must submit the program of study to the Graduate School immediately following admission into the doctoral program and before registering for additional coursework.

#### **Doctoral Graduate Committee**

The doctoral committee will be composed of at least four members of the graduate faculty who hold doctoral degrees. The following rules apply to the composition of the committee:

- The committee chair must be from a discipline within the student's major area.
- At least one additional member of the committee must also be from a discipline within the student's major area.
- If an approved minor is declared, at least one (but no more than two) members of the committee must be from the minor area.
- At least three committee members must be members of the graduate faculty and be from a doctorate-granting department
- · Only one member may be outside of the student's department.
- One member of the committee must serve as the dean's representative. In programs where more than one department participates, the dean's representative may not be from any of those departments. The dean's representative may be one of the following
  - · the member from the related area
  - · a member from the minor area
  - An independent member, not from the student's department, that is appointed by the Dean of the Graduate School.

Departments may structure committees that include more than the minimum number of members, as long as the following conditions are satisfied. No changes can be made to the doctoral committee membership without prior approval from the Dean of the Graduate School.

Additional voting and nonvoting members may be any person approved or appointed by the Dean of the Graduate School

All members of the committee will attend the comprehensive oral and final defense for the student's dissertation.

#### **Program of Study**

Students should file the Program of Study Form once they have:

 Completed 12 graduate credits while at NMSU that are beyond the master's degree · Successfully completed the qualifying examination

The Program of Study Form should be completed and submitted to the Graduate School before registering for any additional courses. The individualized program of study is designed to meet the campus residency requirement and includes a minimum of 30 graduate credits beyond the master's.

If the Doctoral degree requires a dissertation, at least 18 credits of dissertation work must be included. The professional doctoral degree includes a practicum or special project that culminates in a written report which demonstrates a command of the relevant scholarly literature and links it to the specific clinical or practical experience.

#### **Comprehensive Examination**

The Graduate School should receive the Program of Study and the Committee for Doctoral Students Form and the Doctoral Qualifying Examination Form.

Students will be admitted to the comprehensive examination only after the following conditions are met

- Completion of adequate course work, to the satisfaction of the major department and the Graduate School
- The graduate committee determines the student is adequately prepared for the examination
- Successful completion of all language requirements (where applicable)

Students must be registered for 3 credits of graduate course work during the semester in which they take the comprehensive examination. A student taking an oral examination during the summer must enroll for at least one credit for that term.

The Doctorate of Philosophy Examination or Professional Doctorate Examination Form must be on file at the Graduate School at least ten working days prior to the proposed date for the examination. The examination must be part written and part oral. The results of the oral examination will be reported to the Graduate School by the Dean's Representative of the committee.

Any student who fails the comprehensive examination may either be terminated from the doctoral program or upon recommendation of the committee and approval of the Dean of the Graduate School, be granted a second examination after a lapse of at least one semester.

NOTE: In general, there should be a time lapse of at least one year between the comprehensive and final oral examination. However, due to the type of research required and the method of administering the written comprehensive in some departments, such a time lapse is not always practical. In all cases there must be one semester between the comprehensive and the final oral examinations.

#### **Time Limit for the Comprehensive Examination**

If more than five years have passed since the date of the comprehensive examination, the candidate will be required to take another comprehensive examination before admission to the final examination.

#### Advancement to Candidacy

Advancement to Candidacy recognizes that the student has demonstrated the ability to sustain a level of scholarly competency commensurate with successful completion of degree requirements. Upon advancement to candidacy, the student is cleared for the final stages of

the graduate program which may include a dissertation, project or written examination.

For advancement to candidacy the following criteria must be met

- 1. Successful completion of the comprehensive examination
- 2. Recommendation of the graduate committee
- 3. Approval of the Dean of the Graduate School

Upon receiving advancement to candidacy, students must establish residency and follow the Dissertation Registration Requirements (see Residency Requirements below).

#### **Residency Requirements**

The minimum campus residency requirements for the doctoral degree include enrollment in a minimum of 9 credit hours of program course work, including a minimum of 3 credit hours of dissertation, in at least two semesters of classes taught at NMSU. In some cases the minimum credit hour enrollment for the two semesters required to establish residency may vary based on the instructional delivery of the program, and must have prior approval from the Dean of the Graduate School.

#### **Dissertation Registration during Fall/Spring Sessions**

After becoming a candidate, students must continue to register for at least 3 credits of dissertation or graduate course work, each spring/ fall semester until the dissertation is approved by the Graduate School and the dissertation format review has been completed. The total number of dissertation hours must be 18 credits. The doctoral committee can impose additional requirements for courses numbered 700.

A student who fails to abide by these regulations will be considered withdrawn from the university and in order to resume studies, must formally apply for readmission and satisfy the requirements in effect at the time of reapplication.

### **Dissertation Registration during Summer Sessions**

If the final examination is to be held during the summer or the dissertation is to be completed during the summer, students must register for one credit during the summer session in which the final examination will be held or the dissertation will be completed.

#### **Dissertation Leave of Absence**

Students may seek a leave of absence from their dissertation. A leave of absence requires that a student must get prior approval from the Dean of the Graduate School, which means the student must receive permission for the leave of absence before discontinuing their formal studies.

#### **Final Examination**

*NOTE:* If more than five years have elapsed since the date of the student's passed comprehensive examination, the candidate will be required to take another comprehensive examination before admission to the final examination.

Every student working toward the doctoral degree will submit a dissertation embodying the results of original research. The dissertation is expected to demonstrate the student's ability in independent investigation and to be a contribution to human knowledge. The dissertation shall display a mastery of the literature of the subject field, present an organized and coherent development of ideas with a clear exposition of results, and provide a critique of the limits and validity of the student's conclusions.

When a complete draft of the dissertation has been prepared, the student's doctoral committee (appointed after the qualifying examination) will conduct the final examination. The final examination is concerned primarily with the research work of the student as embodied in the dissertation, but it may be much broader and extend over the candidate's entire field of study. The intention of the final examination is to verify that the candidate has a satisfactory grasp of the major subject as a whole and has a general acquaintance with the fields of knowledge represented by the course of study. The final examination is oral and is open to the public.

The final examination must be completed in accordance with the schedule provided in the academic calendar. Ten working days before the examination is taken the department must submit the form requesting this examination to the Graduate School. This form may be found on the Web at http://gradschool.nmsu.edu/graduate-forms/ and is also available from the Graduate School and departmental offices.

Students must ensure that each member of the examining committee receives a copy of the dissertation, no later than seven working days before the date of the final examination.

Any candidate who fails the final oral examination may either be terminated from the doctoral program or upon recommendation of the committee and approval of the Dean of the Graduate School, be granted a second examination after a lapse of at least one semester. Failure in the second examination disqualifies the candidate from obtaining the degree.

#### **Finalizing the Doctoral Dissertation**

After successful completion of the final examination, a copy of the dissertation must be submitted to the Graduate School for format review no later than the deadline posted to the Graduate School website.

The form and style of the dissertation must comply with the regulations given in the Guidelines for Preparing a Thesis or Dissertation http://gradschool.nmsu.edu/theses-dissertations/. These guidelines also contain detailed information on the dissertation-approval process and binding. Candidates are encouraged to consult with the Graduate School on format, deadlines and procedures before final typing.

The dissertation is not complete until copies have been accepted for binding by the binding section staff and until the UMI agreement form and the online Library binding form has been completed and received in Branson Library.

Registration at NMSU is a process that includes: (1) academic advising with a faculty or staff member, (2) registering for classes, online or with your academic advisor, and (3) paying the tuition and fee bill. For first time freshman and transfer undergraduate students (at the Las Cruces campus), the registration process is through the Aggie Welcome/Transfer Student Orientations. For currently enrolled Undergraduate students and all Graduate students registration is through your advisor or online through the myNMSU portal. For detailed instructions and questions about registration which are not addressed on the website, please contact the University Student Records Office (USRO) (https://records.nmsu.edu).

## **Admission Requirement**

No person will be will be allowed to register for courses until formally admitted to NMSU through the Community College, International Programs, Undergraduate or Graduate Admissions processes.

## **Course Schedule**

Each semester and summer session, the University Student Records Office provides an online course schedule which can be accessed through myNMSU or the NMSU website. Note that not all courses listed in this catalog are offered every semester.

## **Registration Schedule by Classification**

Several groups of students (e.g. Crimson Scholars, Students with Disabilities, Veterans) receive priority dates for course registration. For other students, registration dates are determined by the student's current classification at the time of registration. A student's classification is determined by the number of credits completed, and does not include courses in progress. Freshmen have less than 29 completed credits. Sophomore rank is achieved with successful completion of 28 credits; junior rank 60 credits; senior rank 90 credits.

## **University Credits**

The unit of university credit is the semester hour, which is based upon one hour of lecture class or a minimum of two hours of practice/lab per week during one semester, and assumes a minimum of two hours additional, by the student, outside of class. The number of credits associated with each course is indicated in the course schedule.

## **Course Load for Undergraduate Students**

The full-time course load in a regular semester (fall or spring) for a main campus undergraduate students is 12-18 credits. A full-time course load for a summer term is 6 credits per session for a total of 12 credit hours. Some scholarships have a 15 credit course load eligibility requirement. Each student is responsible for meeting their own scholarship eligibility requirements.

An overload is classified as more than 18 credits for a regular semester and more than 12 credits for the summer term. A one-credit course in physical education or supplemental instruction will not create an overload. Registration for a course overload requires written permission from the Director of the Center for Academic Advising and Student Support or the Associate Dean for Academics in the student's college. A "Change of Schedule (https://registrar.nmsu.edu/files/2018/03/Change-of-Schedule\_Updated-02-02-18-1.pdf)" form is required and available from the University Student Records Office or on their website (https://records.nmsu.edu). Freshmen and students with a grade of D or F, or a cumulative grade-point average of less than 2.5, in either of the last two semesters, are not eligible for overloads. Concurrent enrollment in non-NMSU courses at other post-secondary institutions requires prior approval from the Associate Dean for Academics in the student's college, and these courses are counted as part of a student's class load.

## **Course Load for Graduate Students**

A full-time course load is 9 credits, with a maximum of 15 graded credits for a regular semester (fall or spring) and a maximum of 9 graded credits for the summer session.

## **Course Numbering**

The course numbering system at NMSU indicates the level of the course as follows:

Undergraduate courses are assigned numbers 100-499. Courses numbered 100-299 are referred to as "lower-division courses" and are primarily for Freshman and Sophomore level students. Courses numbered 300-499 are referred to as "upper-division courses" and are primarily for Junior and Senior level students.

Graduate courses are assigned numbers 500 or greater. Courses numbered 500-599 are primarily for graduate students working on a master's degree. Courses numbered 600-700 are primarily for students working on a doctoral degree.

Some graduate programs may accept courses numbered 450-499 for graduate credit. Graduate students should confirm eligibility with their program department head.

## **Prerequisites and Corequisites**

Some courses require advance or concurrently acquired specific knowledge and skills. Prerequisite(s) and corequisite(s) for each courses are indicated in the course description section of this catalog. Students must have completed (or be presently enrolled in the prerequisite(s)) courses in order to register for a course with prerequisites. Where a student was allowed to register for a course while completing the prerequisite(s), and then subsequently fails to successfully complete a prerequisite course, the student shall be dis-enrolled from the course requiring the prerequisite. In the case of a corequisite, a student must enroll in the courses during the same semester. In some instances, where a course has an enforced "pre/corequisite" the student can elect to either take the requirement before registering for the course, or take the courses at the same time.

## **Registration Changes**

Subject to any registration "holds" and any applicable deadlines, students may change their course registration online. Caution should be exercised as registration changes may negatively impact eligibility for scholarships, financial aid or athletic participation, the student's ability to progress through their degree program in a timely manner, and the student's obligations with respect to tuition and fees.

The University Student Records Office publishes an online schedule of "Important Dates for Students" for each semester. The student is responsible for reviewing and adhering to the Important Dates, including the deadlines to add, drop or withdraw from course(s) for the relevant semester.

Adding Courses: There are two different types of deadlines for adding courses:

- 1. Last day to add a class without instructor's signature during this period courses may be added online through myNMSU, or through your academic advisor (if necessary).
- Last day to add a class with instructor's signature during
  this period courses may only be added with "Change of
  Schedule (https://registrar.nmsu.edu/files/2018/03/Change-ofSchedule\_Updated-02-02-18-1.pdf)" form signed by the instructor
  (available online on the University Student Records Office website
  (https://records.nmsu.edu)).
  - \* Students taking classes online and who do not live in the Las Cruces Area must email the instructor, using the NMSU email, in order to get permission to be added to the course. If the instructor approves the addition, the approved response must be sent to either the student's academic advisor or to records ()@nmsu.edu (registrar@nmsu.edu) with the student's name, ID number and course CRN number they are wanting to add.

Withdrawing from Courses: There are two different types of deadlines for withdrawing from courses:

- Last day to drop without a "W" grade during this period, the student can drop the course and not have it appear on their official transcript in any form, and the student will have no financial obligation related to the course (students will receive a 100% refund if tuition has been paid for the course).
- Last day to drop with a "W" grade during this period, the student
  can withdraw from the course, but the course will appear on their
  official transcript with the withdrawal (W) designation as the grade,
  and the student will be responsible for the full tuition and fees related
  to that course.

Students are responsible for initiating official withdrawal from any course(s) they do not intend to complete. Students who experience extraordinary circumstances that prevent timely registration changes should consult with their Academic Associate Dean or the Registrar. For more information about the process for adding or withdrawing from a course(s), please speak with your academic advisor or contact the University Student Records Office.

Any student attending under Veteran Educational Assistance must notify the Military and Veteran's Programs office before processing registration changes to determine if changes will affect their enrollment status or benefits.

A student found insufficiently prepared for a course they are enrolled in may be transferred to a more elementary course in the same subject any day before the last day to withdraw from an individual course.

## **Waitlisting**

Waitlisting is available for all courses across the NMSU system, except for labs that are linked to a specific lecture class. Waitlisting is an electronic list of students who are waiting to register for a filled course. Once students are put onto the waitlist, the process to get into that course is as follows:

- A currently enrolled student must drop the course for a seat to become available.
- 2. The first student on the waitlist is notified through their NMSU email.
- 3. The notified student has 24 hours to login to their myNMSU and register themselves for the class.
- 4. If the first student fails to register within their allotted 24 hours, then the first student is dropped from the waitlist and the next student on the waitlist is notified. This continues until the empty seat is filled.

A student who fails to register for the class during their allotted 24 hours is automatically dropped from the waitlist and can add themselves back onto the bottom of the waitlist for that course.

Students cannot be added to the waitlist after the first day of classes. Instructor overrides can only be made after the second day of class, at which point the instructor's signature is required on the "Change of Schedule Form (https://registrar.nmsu.edu/files/2018/03/Change-of-Schedule\_Updated-02-02-18-1.pdf)" to add a course.

# **Graduate Registration Requirements for Summer**

Students who have scheduled their final examination, or who are completing their thesis during a summer session, must be registered for one credit hour during the same summer session. In order to graduate

during a summer session, the student must have filed the Application for Degree by the deadline posted on the Academic Calendar.

## **Repeating Courses for A Change in Grade**

See the Grading portion of the Academic Regulations section of this catalog.

## **Substitutions and Waivers**

Students registering for their final semester must have all course substitutions and waivers of required, for their degrees, courses approved before the last day of registration, during the semester in which the student expects to obtain the degree.

## **Auditing a Course (No Credit)**

An audited course is one in which the student registers for the learning experience but does not seek to earn academic credit for the course. A student seeking to audit a course must register and pay tuition and fees for the course and have the consent of the instructor to take the class in audit form. A student who has registered to audit a course may be dis-enrolled from the course at any time before the registration deadline expires if necessary to accommodate a student taking the course for credit. After the last day to register, the student cannot change the course option from audit course to a for credit bearing course.

Audited courses are not used in determining a maximum class load (overload) for undergraduate students in good academic standing, however, the audited course will be counted as part of the maximum allowable course load for graduate students and undergraduate students who are on academic probation.

## **Attendance and Student Performance**

Academic success is closely correlated to student participation and attendance. Accordingly, students are expected to regularly attend all their classes. Each course instructor will establish the specific attendance and course requirements. Only students who are currently enrolled in a course for either credit or audit are permitted to officially attend the classes. However, individual instructors may allow an occasional visitor and may allow a student who officially withdrew from the course to continue to attend for the remainder of the semester.

# **Absences from Class and Failure to Complete Assignments**

Students who must miss class due to accident or illness, or due to other circumstances beyond their control should consult the course syllabus and the instructor for guidance. Students may be administratively disenrolled from a course due to excessive absences (consecutive absences in excess of the number of class meetings held within a week or any number of absences which are impairing the student's performance), or for persistent failure to complete assignments. In such cases, the Instructor may recommend administrative dis-enrollment by providing a completed "Student Absence/Lack of Progress Report" form to the Academic Associate Dean. If the Academic Associate Dean agrees with the recommendation of the course instructor, the student will be dis-enrolled from the course. A dis-enrollment has the same effect as a voluntary withdrawal (see "Registration Changes" in this catalog). Any student who has been administratively dis-enrolled from a class may appeal that decision to the Dean of the College where the course was offered within 10 days after notification of the dis-enrollment.

Any absences due to the student's participation in a university sponsored event (e.g. ASNMSU president representing NMSU at legislative session, student athletes competing in NMSU scheduled athletic events, or students attending educational field trips and conferences) will be excused and deemed an "Authorized Absence". Authorized absences do not relieve the student of the course assignments or responsibilities and instructors may require students to complete course work before the absence. Prior to the student's absence, the sponsoring department will provide the instructor with written notice of the dates of expected absence.

## **Classroom Conduct**

Each instructor has the authority to establish and enforce reasonable rules of conduct in their courses. A student who engages in behavior that interferes with the educational environment of the class may be administratively dis-enrolled with the approval of the academic department head and academic associate dean for the course, and with notification to the Provost. Any student who has been administratively dis-enrolled from a class may appeal that decision to the Dean of the College where the course was offered within 10 days after notification of the dis-enrollment.

## **Student Performance Assessment**

Individual student performance and learning outcomes in a course are measured and evaluated by the course instructor and reported to the student in the form of grades. Each instructor has the authority to establish assignments and other assessments (such as exams and quizzes) and to assign grades based on the student's performance on those assessments. Final grades for the course are determined by the instructor and reported to the University Registrar as described in grading section of this catalog. Any student who believes that their academic performance has been evaluated unfairly may appeal the grade through the University's Academic Appeals process as provided in this Catalog.

## **Academic Program Assessment**

New Mexico State University is committed to providing its students with a quality education and a supportive learning environment. Academic Program Assessment is a continuous improvement process achieved by identifying a program's desired learning outcomes, evaluating the extent to which those outcomes are collectively achieved by students in the program, and then implementing changes to enhance and improve the collective program outcomes. For assessment to be effective, students must be actively aware of and engaged in assessment activities.

Academic Program Assessment requires participation of students who are expected to provide feedback on personal, professional and academic development and to participate in a variety of assessment exercises. Assessment activities may be a part of regular graded course assignments, or may require students to engage in other activities. Assessments may include course projects, exams, exit interviews, standardized tests, surveys, focus groups, etc. Data gathered through these assessments is published only in aggregate form. Learn more about NMSU's Academic Program Assessment at https://assessment.nmsu.edu/

## **Exam Week and Final Examinations**

NMSU designates the last week of each semester as "Exam Week" during which each course has only a single 2 hour meeting time for a mandatory culminating activity which may be a final examination or some other course related activity. The University Student Records

Office (USRO) establishes the Final Examination Schedule for each semester (http://registrar.nmsu.edu/final-examination-schedule/). Examinations are typically held in the course's usual lecture/lab room. Some departments hold Departmental Exams where all students for all sections of a particular course are required to take the final examination simultaneously. The date, time and location of the Departmental Exams are indicated on the Final Examination Schedule. For courses that were not scheduled to meet at the specific times listed under "Regular Class Time" on the USRO's Final Examination Schedule, the instructor and course department coordinate examination dates, times and locations with NMSU's Academic Scheduling office (575) 646-4790. Final exams for weekend courses are held at the regular class period on the last day of class.

The final exam or culminating activity must not be rescheduled for a different date, time or location, except with permission of the department head and the unanimous consent of the enrolled students. During the week before Exam Week, instructors are not allowed to hold examinations lasting more than one class period.

Any student having more than three examinations scheduled in any one day may, no later than the week prior to exam week, notify the instructor of the examination scheduled latest in the day to obtain an alternative date for that examination. (If the fourth exam is a departmental exam, the instructor of the third exam will make alternate arrangements for that exam upon request.)

Students who believe that their instructor(s) have not honored Exam Week requirements may appeal to the instructor's department head.

## **Developmental Evaluation**

The academic skill level of all entering first-time students at the time of registration is evaluated based upon ACT scores, SAT test scores, and if available, the NMSU Math Placement Exam score. The student's eligibility to enroll in university level English and Mathematics courses is dependent upon this evaluation. Any new student may choose to take the MPE to test towards a higher math placement than indicated by the ACT and high school graduation scores. All new engineering students must take the MPE. More information on the MPE is available from the Department of Mathematics website. https://www.math.nmsu.edu/msc/MPE/overview.html. Students who have not demonstrated adequate preparation for university level courses are required to take developmental courses. Developmental courses are included on the transcript and will be included in the calculation of the GPA, but the developmental course credits do not count towards a degree.

- Developmental Courses in English Students who score below 15 on the ACT English exam will be placed into appropriate developmental English course or course(s) (prefix CCDE) before enrolling in ENGL 111G (http://nmsu.smartcatalogiq.com/en/2016-2017/Undergraduate-Catalog/Courses/ENGL-ENGLISH/100/ENGL-111G). Students who score below 13 on the ACT English will require two developmental courses before enrolling in ENGL 111G (http://nmsu.smartcatalogiq.com/en/2016-2017/Undergraduate-Catalog/Courses/ENGL-ENGLISH/100/ENGL-111G).
- Developmental Courses in Math Students who score below 23 on the ACT mathematics exam, and who did not achieve a qualifying score on the NMSU Math Placement Exam (MPE), will be placed into the appropriate development mathematics course or courses (prefix CCDM). Placement into CCDM course(s) is dependent upon the student's ACT score and high school GPA. Students are not allowed to enroll in any other math courses at NMSU until successfully completing any requisite CCDM course(s). (As an alternative to the math developmental course(s),

students may complete AS 103 with a C- or better, which does earn credit toward a degree.)

## **Basic Academic Skills**

All undergraduate students must demonstrate Basic Academic Skills in both English and mathematics before enrolling in any upper-division course (numbered 300 or higher). These requirements ensure that each student in the upper-division courses has the ability to succeed without compromising the learning experience of other students. The completion of the Basic Academic Skills requirements does not necessarily result in the award of academic credit nor satisfaction of university general education requirements in English and mathematics. (Students should consult the General Education Courses and Requirements section in this chapter for these requirements.)

Transfer students with 45 or more credits are allowed to enroll in upperdivision courses for only one semester before satisfying the Basic Academic Skills requirements. The Basic Academic Skills requirements may be satisfied in a variety of different ways as listed below:

# English Basic Skill Demonstration Options (achieve one of the following):

- · ACT English Score of 30
- Coursework ENGL 111G, or equivalent, completed with a grade of Cor higher.

Equivalents: the following are deemed equivalents to ENGL 111G for the purpose of satisfying Basic Academic Skills in English:

- ENGL 111GH completed with a grade of C- or higher
- ENGL 111 M required for International students who took the TOEFL examination
- CLEP Exam score of 57 or higher in freshman college composition
- · English Advanced Placement (AP) Exam score of 3, 4, or 5
- English Composition Transfer Credits 3 or more credits with a grade of C- or above, transferred from accredited postsecondary institutions (International students may be required to take ENGL 111 M as noted above.)

Credits from Non-accredited Institutions - As a general rule, NMSU does not accept credits from non-accredited institutions. Students with 3 or more credits of college-level English composition with a grade of C-or higher from a non-accredited institution may, however, challenge the Basic Academic Skills requirement in English and English 111G course requirement by submitting a theme paper written under the supervision of, and demonstrating achievement of English 111G learning outcomes as determined by, the Department of English.

# Mathematics Basic Skill Demonstration Options (achieve one of the following):

- · ACT Mathematics Score of 23
- Coursework any one of the following courses or course combinations completed with a grade of C- or higher in each course:
  - MATH 111 and MATH 112G
  - Any mathematics course numbered 120 or above (prefix MATH)
  - · Any one statistics course: A ST 251G, STAT 251G or STAT 271G
- Basic Skills Exam Passing Score offered twice a semester by the Department of Mathematical Sciences

Calculus AB, Calculus BC or Statistics Advanced Placement (AP)
 Exam score of 3, 4, or 5

IMPORTANT NOTE: Basic Academic Skills Demonstration fulfillment options may not appear on the transcript, result in the award of academic credit, or satisfy general education requirements. The Basic Academic Skills requirements are used solely for the purpose of determining eligibility for enrollment in upper-division courses. All students should seek to complete the Basic Academic Skills requirements as early in their academic program as possible. Students who postpone completion of Basic Academic Skills may be unable to progress toward degree completion in a timely manner.

# Independent Study and Directed Reading Courses

Independent study courses and directed reading (other than those designated in the catalog with a subtitle), are for students capable of and sufficiently motivated to undertake self-directed study with limited oversight of a faculty member. Only students who have completed at least 28 credits at NMSU under traditional grading, with a cumulative GPA of 2.5 or better, are eligible to enroll independent study courses. No student is entitled to enroll in independent study and enrollment requires the consent of an instructor who agrees to supervise and evaluate the student's learning activities in the course. Students seeking enrollment in an independent study course should prepare an independent study proposal to present to individual faculty member(s) in the relevant discipline for consideration. At a minimum, the proposal should include the topic of study, a brief survey of the literature or other resources on the topic, and a description of the proposed written product or other tangible outcome of the independent study. The relevant academic department for the discipline may have additional requirements. Each college determines the maximum number of credits that may be earned in independent study

## **Adjusted Credit Option**

The adjusted credit option provides eligible undergraduate students who earned a low grade-point average (less than 2.0 cumulative) during their first few semesters to reset their GPA calculation. This option may be used only once and is not reversible. These are the consequences of exercising the Adjusted Credit Option:

- 1. All of the student's academic history pre-dating the request, including all NMSU course credits previously attempted or completed, transfer coursework, CLEP, ACT, advanced placement, special examination, and/or military service are included in the adjustment and designated as "ADJUSTED CREDITS" on the transcript. These credits are no longer be included in the calculation of the cumulative grade point average.
- Courses carrying an academic grade of S, CR, C- or better, earned prior to the grading period in which the student requested this option, are treated as earned academic credit and need not be repeated, except where a higher grade is required in the student's academic program.
- Courses carrying an academic grade of U, CD, D or F, earned prior to the grading period in which the student requested this option, remain on the student's transcript, but no academic credit is provided for these courses. The student must repeat these courses to obtain academic credit.
- The student's academic transcripts will continue to reflect all coursework, including courses falling under the adjusted credit

- option. In no circumstances will a transcript be issued that does not include all courses attempted at this university.
- 5. The student's current academic status, eligibility for employment, and financial aid may be impacted. Probationary status and eligibility for on-campus employment are not affected by the exercise of the adjusted credit option.
- 6. The repeat rule for courses starts anew.
- The student will not be eligible for award of an associate degree until earning thirty (30) or more additional credits after exercise of the Option.
- 8. The student is eligible for University honors at graduation upon completing a minimum of 60 academic credits at NMSU, after the adjusted credit option is exercised, with a resulting grade point average which satisfies University regulations for honors.

After carefully considering the consequences indicated above, eligible students may exercise the Adjusted Credit Option by paying a fee of \$10 and submitting an adjusted credit option application to the University Student Records Office. Application forms are available on the University Student Records Office website and can be approved by the Director of the Center for Academic Advising and Student Support or the Associate Dean for Academics in the student's college or the Academic Vice President at the Community Colleges. Only students meeting the following criteria are eligible to exercise the Option:

- 1. No awarded baccalaureate degree
- 2. Enrolled as a degree-seeking or non-degree undergraduate student
- 3. Cumulative grade-point average of less than 2.0 at NMSU
- Fewer than 60 credits accumulated (including both transfer and NMSU credits)

# Credit by College Level Examination Program (CLEP)

Prior to or during a student's enrollment at NMSU, credits may be earned through the College Level Examination Program (CLEP) of the College Entrance Examination Board. CLEP is a national program of credit by examination that offers the opportunity to earn credits for college level achievement wherever or however the student learned. Earned CLEP credit will be treated as transfer credit without a grade, will count toward graduation, and may be used in fulfilling specific curriculum requirements. A current NMSU CLEP policy as well as test schedule information is available through Testing Services DACC East Mesa, RM 210. Testing Services may be reached at: (575) 528-7294.

## **Credit by Examination**

Any enrolled student with a cumulative GPA of at least 2.0 currently attending classes may, with permission of the appropriate department, challenge by examination any undergraduate course in which credit has not been previously earned except an independent study, research or reading course, or any foreign language course that precedes the final course in the lower-division sequence. The manner of administering the examination and granting permission shall be determined by the department in which the course is being challenged. Students may not enroll in a single course, challenge it by examination, and drop it during the drop/add period, unless they enroll in an additional course. In exceptional cases in which a student demonstrates outstanding ability in a course in which he is already registered, he may be permitted to challenge the course. A student desiring to apply for special examination may obtain the necessary forms from the University Student Records

Office. The fee for challenging a course is the same as the approved tuition rate. Courses may not be challenged under the S/U option. The special examination privilege is based on the principle that the student, exclusively, has the responsibility for preparing for a special examination.

## **Credit for Military Service**

New Mexico State University will award academic credit to United States military personnel for courses and Military Occupational Specialties (MOS), based on the American Council of Education Guide (ACE) as well as through national standardized tests, such as CLEP, AP, PEP and DANTES. Credit for military-training is in accordance with NMSU Faculty Senate Legislation Proposition 24-07/08, which was passed in May 2008. Military Training and Military Occupational Specialties (MOS) must have a recommendation evaluation by ACE (in the ACE Guide) for credit to be awarded. Courses accepted for transfer credit become part of the student's official NMSU transcript and academic record. If a student wishes to appeal a decision regarding the acceptance of military training/education and/or MOS for academic credit, the student must submit a written statement of appeal to the Dean of the College to which the student has applied. The Dean will review the merits of the appeal and render a decision. The decision of the Dean is final.

Only Primary MOS (s) are eligible for academic credit in the initial review and evaluation. Credit for Duty and/or Secondary MOS may be eligible for academic credit if the student petitions the college's Associate Dean. Primary MOS is the primary specialty of a soldier and reflects the broadest and most in-depth scope of military experience. Veterans, active-duty personnel, National Guard and Reservists who are current students or students applying for admission to New Mexico State University may be granted academic credit on a case-by-case basis upon evaluation of military transcripts - the Joint Service Transcript (jst.doded.mil) and the Community College of the Air Force transcripts. Course equivalencies and credit hours awarded for a particular NMSU degree are determined by colleges and/or academic departments. Credit hours may be awarded for specific courses toward degree requirement, or as elective credit. The number of credit hours awarded will be determined by the college and/or academic department.

NOTE: Students submitting military transcripts for credit evaluation must keep in mind the Maximum Time Frame policy. See Financial Aid (https://catalogs.nmsu.edu/nmsu/general-information/financial-aid-scholarship-services) Section.

## **Graduate Course Deficiencies**

Students who have been admitted with departmental deficiencies may be required to take diagnostics tests and additional qualifying examinations. They must complete satisfactorily, in a manner specified by the major department, all undergraduate course deficiencies as prescribed by the department responsible for the graduate program. Courses taken to satisfy deficiencies will be listed on the undergraduate transcript; however, these course grades will not be calculated in the student's graduate GPA or graduate hours. With the permission of the student's advisor and the head of department, courses to meet undergraduate deficiencies may be taken under an S/U option (with S being a grade satisfactory to the professor), and such courses will not affect the maximum number of S/U graduate credits permitted.

## **Short Courses for Graduate Students**

Short course(s) that are numbered 450 and above have been approved to carry graduate credit. Graduate students must be registered for the short course(s) to receive graduate credit. Concurrent enrollment of graduate

students in regular and short courses for the fall/spring semesters is allowed, provided the combined total credits does not exceed 15. All short courses carrying one semester credit will be graded on an S/U basis and these credits will be counted toward the student's limit of S/U credits.

## **Challenging Graduate Courses**

A graduate student may challenge a graduate course by examination, please see the Graduate School for more information.

## **University Grading System**

Each course department or instructor establishes the system for assessing student performance in achieving course learning objectives. Students should consult the course syllabus for a description of the grading system used in each course. At the conclusion of each course, instructors are required to report a final grade reflecting the instructor's assessment of each student's performance. Shortly after the end of the term, students can access their grades through the MyNMSU portal. No other grade notification will be issued. The final grade is reported on the student transcript. Instructors may elect whether to use fractional grading (the use of the plus and minus) in assigning final letter grades.

The NMSU system for final grades is expressed in letters, which carry grade points that are used in calculating the cumulative grade-point average, as shown in this table:

Letter Grade	Grade Points per Unit of Credit
A+	4.0
A	4.0
A-	3.7
B+	3.3
В	3.0
B-	2.7
C+	2.3
C	2.0
C-	2.0
D+, D, D-	1.0
F	0
W- Withdrawal	0
N- Grade not submitted	0
CR- Credit authorized, but not letter grade	0
IP- In progress	0
RR- Progress in undergraduate course	0
PR- Progress in graduate thesis	0
S- Satisfactory work <sup>1</sup>	0
U- Unsatisfactory work	0
I- Incomplete work	0
AU- Audit	0

S grades are grades that are satisfactory to the professor and are normally equivalent to the letter grade of C- or higher.

Any courses for which only CR, S or PR is awarded, but no traditional letter grade is given, will be included in the total number of earned hours but is not computed in the grade-point average. Traditional letter grades are those which are used in the grade point average determination: A+,

A, A-, B+, B, B-, C+, C, C-, D+, D, D- and F. In computing the overall grade-point-average, the total credits in which grades of A+ through F have been assigned is divided into the total number of grade points earned.

# Midterm and Six-Week Early Performance Grades

A Six-Week Early Performance Grade (sometimes referred to as Midterm Grade) for courses numbered 100-299 will be posted and available to students through the MyNMSU portal. The purpose of the early grade posting is to ensure that students have an opportunity to address any performance issues. Students should be mindful that the Six-Week Early Performance Grade reflects a students' performance on only that portion of the total coursework that has been graded at that time. Any student who is doing poorly, or not as well as they would like, should meet with the instructor to discuss how they can improve. Students who have concerns about their progress in multiple courses or who are considering withdrawal from course(s) must meet with their academic advisor.

In courses numbered 300 or higher, the posting of Early Performance Grades is optional and may occur through the online course management system rather than the MyNMSU portal. However, prior to the last day to withdraw from a course, upon request, instructors will provide information to students about their progress in the course.

## **Retention of Grading Records**

Individual assignments and exams that are not returned to students should be retained by the instructor or department through the end of the subsequent regular semester. The records used to compute individual final grades should be retained for two years after the completion of a course. If a final grade is appealed, these records are kept for at least two years after the completion of the appeal. Departments, colleges or the library may require that records be kept for longer periods.

## Minimum Grade Requirement for Undergraduate Students

Undergraduate degrees require a cumulative GPA of 2.0 or higher for degree completion. Although D+, D, or D- can be considered passing, some departments have higher grade requirements for the courses within their program and/or their program as a whole. Students should check with their departments regarding specific course grading requirements for their particular degree program.

# Minimum Grade Requirement for Graduate Students

Graduate degrees require a cumulative graduate G.P.A. of 3.0 or higher. Although B- and C grades (including C+ and C-) earned at NMSU may be counted toward the requirements for a graduate degree in some programs, this grade does not reflect acceptable graduate-level performance and may cause the cumulative G.P.A. to fall below the 3.0 required for graduate students. Some departments have higher grading requirements for courses in their programs. Students should check with their departments regarding specific course grading requirements for their particular degree program.

Courses in which a student earns a D or F grade do not ever satisfy graduate degree requirements; however these grades will be calculated in determining the students' cumulative grade-point average. To obtain

academic credit, students must retake courses in which a grade of D or F was earned.

## S/U Grading

S/U grading allows the student to attempt to earn course credit without having a course grade included in their grade point average calculations. Under S/U grading, the instructor assigns an S grade for satisfactory achievement of the course learning objectives (normally equivalent to the letter grade of C- or higher) and a U grade for unsatisfactory performance in the class.

#### **Designated S/U Courses**

Each academic college may designate courses in which the grading will be on a basis of S or U for all students enrolled in the courses. Credits in designated S/U courses are not included in the limitations on the number of S/U credits a student may take, and are not subject to the student eligibility requirements described below.

#### Election of the S/U Grading Option - Undergraduate Students

In courses other than those designated as S/U for all students, eligible individual students may elect the S/U Grading Option, subject to the regulations stated below. To be eligible for the S/U (satisfactory/ unsatisfactory) Grading Option, undergraduate students must meet the eligibility requirements and obtain approval of an academic advisor. Eligibility requires completion of 28 credits at NMSU under traditional grading, with an overall average of 2.5 or better. (Upon approval of the adjusted credit option, students must re-establish eligibility.) Nondegree seeking students may take courses under the S/U option without regard to eligibility requirements. However, these courses may not be subsequently applied toward an undergraduate degree at NMSU.

The S/U option must be elected as part of the course registration and may not be added once the course registration period closes. Other than honors courses and courses officially designed as S/U, the following limitations apply to courses in which the S/U option is elected:

- 1. No more than 7 credits per semester or 4 credits per summer session.
- 2. Not to exceed a total of 21 credits towards a degree.
- 3. Not a required course for the student's major.

Students electing the S/U option should be mindful that upon a change of majors, the new major department may require a traditional grade for a course within that major that was previously completed with an S grade. In such cases, the student may request that the original instructor process a change of grade form to apply a traditional grade, however, if more than 2 years have elapsed or if the instructor is no longer at NMSU, such a change will not be possible and the student may be required to retake the course or obtain a traditional grade through a course challenge.

# **Election of the S/U Grading Option Election - Graduate Students** With an approval from their advisor and department head, graduate students in good academic standing may elect the S/U option, at the time of registration, for courses taken outside the major department, subject to the regulations stated below:

- 1. No more than a total of 6 credits of elected S/U courses are permitted in the master's degree.
- Doctoral candidates may take an additional 6 credits under the S/U option after application to candidacy.

## **I Grade Designation**

The letter grade of I (incomplete) is given for passable work that could not be completed due to circumstances beyond the student's control that develop after the last day to withdraw from the course. In no case is an I grade to be used to avoid the assigning of D, F, U or RR grades for marginal or failing work. Examples of appropriate circumstances include documented illness, documented death or crisis in the student's immediate family, unexpected military deployment and similar circumstances. Other job related circumstances are generally not appropriate grounds for assigning an I grade. Students requesting an I grade are responsible for providing satisfactory evidence of such circumstances. (In the case of medical records, instructors should review the information provided, note that adequate medical documentation was provided for review, and return the documentation to the student. Under no circumstances should the instructor retain any medical records or indicate the specifics of any medical condition in the academic records.) The refusal to grant an I grade may be appealed in the same manner as any other final grade.

To assign an I grade, the instructor must complete the "I grade Information Form" and have the form delivered to the associate dean of the course college. The instructor must indicate on the form whether the student will be given the option to complete the remaining coursework and have the I grade changed to the earned letter grade. If so, the instructor should indicate the steps necessary to complete the remaining coursework. The I grade form should either be signed by the student in person, or the associate dean must send a copy of the document to the student's official permanent address, as recorded in the University Student Records Office, with a notation on the form that the student was not available for signature.

The I grade will be permanent in instances where (1) the instructor did not provide an option to complete the coursework, (2) the instructor left NMSU prior to completion of the coursework and grade change, or (3) the student failed to complete the coursework by the relevant deadline, and the instructor did not indicate that the I grade would be changed to the earned grade upon failure to complete. In such instances, the student will be required to re-enroll in the course to receive credit (in which case the permanent I grade and the subsequent earned letter grade will both appear on the transcript).

The student is entitled to have the I grade removed from the transcript only if, within 12 months or any earlier deadline established by the instructor on the "I Grade Information Form" and prior to graduation, the student completes the remaining coursework, as specified on the Form, in a manner satisfactory to the instructor. If the student fails to complete the coursework, the instructor may change the I grade to any appropriate grade (including D, F or U) only if the instructor stated that this would occur on the "I Grade Information Form." The instructor should assign whatever grade was earned for the entire course.

To change the I grade, the instructor must complete a "Change of Grade Form," obtain the signature of the associate dean for the course, and submit the form to the University Student Records Office.

## **RR Grade**

The RR grade may be assigned only in undergraduate developmental courses (CCDE, CCDL, CCDM & CCDR) and indicates that the student has made substantial progress toward completing the requirements of the course. It carries neither penalty nor credit, so a student must re-enroll and successfully complete the course in order to earn credit. The grade

of RR may be received only once in any given course, and is a permanent notation on the student's transcript.

## **W** Grade Designation

The W grade is assigned only in courses when the student withdraws or is administratively dis-enrolled from the course after the last day to drop the course. The W grade is permanent.

## **Effect of Change of Grade**

The effect of a change of grade on a student's academic standing (scholastic warning, probation or suspension) depends on the date the transaction is officially recorded on the student's academic record. If the transaction is recorded before the student begins another semester, the grade change (such as replacing the I grade with an earned grade) is included in the grade-point average calculation in order to establish the student's academic standing. If the transaction is recorded after the student begins another semester, for the purpose of calculating academic standing, the new grade is included with any other grades earned for the semester in which the grade change is processed.

### **Repeating Courses for a Change in Grade**

Undergraduate students: may repeat courses, for a change in grade, when the original grade earned was a D or F. Once a grade of C- or better is earned, the course will then be substituted in the calculation of the grade-point-average and students will no longer be able to repeat that course for change of grade purposes. Student transcripts will continue to show the grade awarded for each course attempt. If the student's original grade was a D and he/she repeats the course, but receives a F, the second grade will not be substituted for the original. Repeat options apply only to eligible courses that were completed prior to the time a student was awarded a degree at NMSU.

**Graduate students:** may repeat courses to achieve a higher grade, but the grade assigned for each attempt will remain on the transcript and will be counted in the grade point average calculation.

## **Grade Point Average**

Grade point average (GPA) calculations are based solely on courses taken at NMSU or under an approved National Student Exchange.

## **Grading in Graduate Research**

In grading both master's and doctoral research, thesis and dissertation work in progress, the instructor reports for each enrollment period the grade PR (progress) or U (unsatisfactory) rather than a traditional letter grade. These assigned grades are permanent notations on the student's transcript. Only those credits graded PR (Progress) accumulate toward the minimum number of research credits required.

PR indicates that the student has devoted an adequate amount of time to the work scheduled but does not indicate the quality. U indicates that the student has stopped work or is doing work of unacceptable quality.

At the conclusion of the final oral examination, or when the thesis/ dissertation is submitted for the final signature of the graduate dean, the instructor will report the final S or U grade for that semester. If the thesis/ dissertation and the performance in the final oral examination are found to be acceptable, the instructor will report an S (satisfactory) grade. If the thesis/dissertation or the performance in the final oral examination is found to be unacceptable, the instructor will report an U (unsatisfactory) grade.

If a student accumulates a total of two U (unsatisfactory) grades in courses numbered either 598, 599, 600, 699 or 700, the student will be placed on provisional status. If three U (unsatisfactory) grades are reported for these courses, the student will be dismissed from the Graduate School

## Withdrawal from a Single Course

Any student wishing to formally withdraw from a single course, after the last day to drop has passed, can do so through their Academic Advisor or the University Student Records Office. All such withdrawals will be registered on the student's transcript with the "W" grade indication.

For students wishing to withdrawal from all courses, please see the section on Withdrawal from NMSU.

# **Leave of Absence from the Graduate School**

Students who are working on advanced degrees and plan to have an interruption in studies, for a calendar year, should request for a leave of absence through their department head. The student must submit a formal letter through their department head to the Dean of the Graduate School, an email will not be accepted. The request should include the beginning date and the anticipated ending date for the period of absence.

A graduate student on leave of absence will be expected not to use university facilities and place no demands upon the university faculty and staff, and, therefore will pay no fees. Time spent in the "leave-of-absences" status will not be counted toward the advanced degree time limits.

A graduate student who fails to register for one calendar year without obtaining a leave of absence from the Graduate School will be considered withdrawn from the university, by the Graduate School. In order to resume their studies after such absences, the student must go through the formal readmission process.

## **Administrative Withdrawals**

An administrative withdrawal is initiated for a student who is representing the university at an official out-of-town event and becomes effective when the student returns from the event or five class days after the signed drop slip gets to the dean's office.

## **Military Withdrawal**

New Mexico State University understands that our military and Veteran students may be called to active duty, specialized training, or disaster relief efforts with little notice. U.S. active duty military students wishing to withdraw from all their classes must present their orders and their request for full withdrawal, as indicated below. However, the below policy does not pertain to a student's basic and/or annual training. A student who has an order for training is encouraged to formally request, through the proper military chain of command, a postponement of their orders until the summer or the end of the semester they are currently enrolled in. If a student's request for postponement is denied, the student may then follow the below steps but must provide documentation that their postponement request was formally denied.

All NMSU students that have been called up for active duty must take the following steps in order to withdraw from all their classes:

- Military and Veterans Programs (MVP): VA students ordered to Active
  Duty must provide a copy of orders to the MVP office, in Corbett
  Center Student Union, Room 244. To assist in reporting accurate
  information to the VA Regional Office, student should also provide, in
  writing, last day of class attendance.
- NMSU Registrar: All students presenting their orders to the University Student Records Office, (575) 646-3411, will receive a military withdrawal from classes and a full tuition and fees refund for that semester.
- Bookstore: Students who still have their receipts for textbooks
  purchased the semester in which they are called to active duty will be
  given a full refund for these textbook purchases when they present
  their orders. (575) 646-4431.

### **Student Medical Withdrawal**

A student medical withdrawal applies to a student who becomes seriously ill, injured or hospitalized and is therefore unable to complete an academic term for which they are enrolled. This action applies to all courses a student is registered for in the affected semester(s). The student cannot select which courses they want to withdraw from and which they want to remain registered for when exercising this option. The students' attending physician must provide a letter, on official letterhead with an original signature, stating the date(s) within the semester that the student was under medical care and must withdraw because of that medical condition. This letter must be submitted within the semester or no later than one academic year after the end of the term for which the withdrawal is being requested.

Once the information is reviewed a final determination will be made if the student is eligible for the consideration of tuition or other refunds (students receiving funds awarded by the University Financial Aid and Scholarship Services should be aware of policies regarding withdrawal from the University). At the Las Cruces campus, medical withdrawal begins and ends at the University Student Records Office. At all other campuses, medical withdrawal begins at the Student Services Office but is ultimately finalized with the University Student Records Office on the Las Cruces campus.

# Medical Conditions of a Family Member Withdrawal

A student who is withdrawing because of a medical condition of an immediate family member must submit a letter from the family member's attending physician. This action applies to all courses a student is registered for in the affected semester(s). The student cannot select which courses they want to withdraw from and which they want to remain registered for when exercising this option. It must be on official letterhead with an original signature, stating the date(s) within the semester that the student's immediate family member was under medical care and that the student must withdraw to attend to the immediate family member's medical condition. This letter must be submitted within the semester or no later than one academic year at the end of the term for which the withdrawal is being requested.

Immediate family member, in this instance, includes a spouse; a domestic partner, as defined in the NMSU Policy Manual 7.04; a child, parent or legal guardian; a sister or brother and a grandparents or a grandchild. Familial relationships that are created by law are also included (i.e. mother/father in law; half or step siblings); any other relationships can be considered on a case-by-case basis.

Once the information is reviewed a final determination will be made if the student is eligible for consideration of tuition or other refunds (Students receiving funds awarded by the University Financial Aid and Scholarship Services should be aware of policies regarding withdrawal from the University.) At the Las Cruces campus, medical withdrawal begins at the University Student Records Office. At all other campuses, medical withdrawal begins at the Student Services Office.

## Withdrawal from NMSU

Withdrawal from any NMSU campus is an official procedure that must be:

- 1. Initiated by the student (using the Withdrawal form)
- 2. Have all necessary signatures (as indicated on the form)
- 3. Be approved and processed through the Registering Office, located on the Las Cruces Campus

Students who withdraw from all courses for the semester should do so in person through the University Student Records Office. However, students who are unable to come in person may submit an e-mail using their NMSU e-mail account to records@nmsu.edu (). Students who leave without following the official procedure are graded appropriately by the instructor.

Applicable dates for the last day to withdrawal are published on the approved university academic calendar or under important dates at: http://registration.nmsu.edu.

A student who withdraws from all classes for the semester will retain access to their NMSU account per current policy but will lose access to other services and privileges available to enrolled students.

Financial information concerning drops and withdrawals can be found at http://uar.nmsu.edu/withdrawals/. Financial Aid Recipients should contact University Financial Aid and Scholarship Services before withdrawing. Students receiving funds awarded by the University Financial Aid and Scholarship Services should be aware of policies regarding withdrawal from the University.

The Federal Higher Education Act requires the University to calculate a Return of Federal Student Aid Funds for students who withdraw (officially or unofficially) from all classes on or before the 60 percent attendance point in the semester. Using a pro-rata schedule, the percentage of the semester attended is used to calculate the amount of the student's earned versus unearned Federal student aid funds. The unearned portion of Federal student aid funds will be returned to the appropriate aid program(s). Students withdrawing from classes are responsible for payment of any balance due after the required return of Federal student aid funds.

## **Graduation Requirements**

For specific graduation requirements for any degree offered at NMSU please see the Degrees, Majors, Minors and Other Academic Programs of Study (http://catalogs.nmsu.edu/nmsu/regulations-policies/#academicprogramsofstudytext) section, as well as the departmental sections for those requirements. These requirements will include the minimum GPA, total credits and specific course requirements for graduation.

## **Applying for a Degree**

Any students that are in their final semester of classes are considered degree candidates and are required to submit an "Application for Degree" as well as pay graduation fees for each degree being sought. The

application for Degree form is available online through the MyNMSU website. It must be completed and submitted by the designated deadline for that semester. The fees for the Las Cruces campus are all listed in the Tuition, Fees and other Expenses (http://catalogs.nmsu.edu/nmsu/essential-information-students/tuition-fees-other-expenses) section of the catalog, once a student submits the application the fee will be included in the total cost for the semester or session in which the candidate anticipates completing their degree requirements.

If degree requirements are not completed during the semester/ session the student originally applied for, the student must then reapply and pay the appropriate fees. A \$25 late fee applies to applications received after the application deadline, and no applications will be accepted after the posted deadline date.

A student must specify which catalog they are using for their degree requirements in order for the university to determine if the requirements are met and if a degree can be certified. The latest date for substitution or waiver of required courses for degree candidates is two weeks after the last date of registration for regular or summer terms.

# Attendance at the Commencement Ceremony

Commencement is a symbolic ceremony. Participation in commencement does not, in itself, mean that a student is considered an NMSU graduate. In order to be awarded a degree, a student must fulfill university requirements as determined by academic colleges. The degree will reflect the graduation date from the application for degree in which all degree requirements were determined by the academic colleges.

The academic colleges will confirm the students eligibility to participate in the commencement ceremony that is held at the close of the fall and spring semesters. Eligible candidates who are in the process of completing their final degree requirements and degree recipients from the previous summer session will participate in the fall ceremony. Students who are in the process of completing their final degree requirements in the spring must attend the spring ceremony. However, Bachelor degree candidates that wish to participate in a spring commencement, prior to completing degree requirements in summer school may do so if they meet the following conditions:

- 1. Receive permission the Dean of their college
- 2. Show a minimum cumulative grade-point average of 2.0
- 3. Only need 12 or fewer credit hours to complete their degree requirements
- These remaining credit hours must be offered in the upcoming summer schedule of classes
- Submit a degree application and approved petition form (available in the Dean's office) by the last day to apply for a degree in the spring semester.

## **Academic Regalia**

Each college may approve distinctive symbols to be worn by the top 10 percent of its graduates at commencement. Only one symbol may be worn by each graduate. In addition, the student with the highest honors in each college may wear a crimson-colored gown. No other symbolic additions to academic regalia are allowed without the approval of the Academic Deans Council.

## **Diploma**

All fees and bills owed the university must be paid in full before a student may receive a diploma or official transcripts. The degree title and major(s) will be printed on the diplomas, in accordance to the degree application award, determined by the academic colleges. Academic honors will also be printed on the diplomas below the degree and major(s). The name on the diploma will reflect the student's current official NMSU records. Name changes are only processed for currently admitted students.

Diplomas will be mailed to graduates approximately eight weeks after the individual colleges certify the degree requirements and the final grades have been processed by the University Student Records Office. The diploma will be mailed to the address specified on the degree application, unless an address change was requested before the last day of the semester.

## **Undergraduate Academic Standing**

When a student does not maintain adequate academic standing, he/ she is placed in Academic Warning. If the student's academic standing does not improve, the placement progresses to Academic Probation I. Continued unimproved academic standing moves a student into Academic Probation II, then finally, Academic Suspension. Each stage imposes more structure and limitations on the student in order to help them return to normal academic standing. The intent is not to punish, but to help the student return to normal academic standing and success. Since some of these limitations involve limitations on the number of credit hours, students on Probation or Suspension may be subject to loss of financial aid. It is the responsibility of the student to determine the impact of their changed academic standing on their financial aid. Notification to students of academic warning, probation, or suspension appears on the student's grade report at the end of each grading period.

## **Undergraduate Academic Warning**

Issued only once, the first time a student's cumulative GPA falls below a 2.0 while in good academic standing. The relevant Associate Dean for Academics or Campus Academic Officer (CAO) will send the student a letter detailing the consequences should the cumulative grade point remain below a 2.0 at the conclusion of the semester. A student on Academic Warning remains eligible for all extracurricular activities as governed by the rules of the specific activity.

While under Academic Warning the following restrictions apply:

- The student may be required to enroll in a 3-credit hour special study skills/time management course specifically designed for students on Academic Warning, or an equivalent course approved by the appropriate associate dean or CAO of their campus.
- Students will be required to enter into a contract with their advisor, approved by their department head that places further stipulations on Academic Warning. The contract may include, but is not limited to the following:
- The student may be required to take at least one repeat course to try to improve their GPA.
- Except for the special study skills/time management course, the student's coursework may be restricted to their major.
- 5. The student may be required to get tutoring help.
- The student may be required to see an academic counselor on a specified time schedule.

The number of credit hours a student may register for may be restricted (due to extenuating circumstances such as the student's workload commitments).

The associate dean or CAO may place the student on Academic Probation I should the student not adhere to the stipulations of the contract

If the student's semester GPA is less than a 2.0, and the cumulative GPA remains below a 2.0 at the end of the semester on Academic Warning, the student is placed on Academic Probation I. If the semester GPA is greater than 2.0 but the cumulative GPA is still less than 2.0, the student will remain on Academic Warning. If the cumulative GPA is greater than a 2.0 at the end of the semester then the student is returned to good academic standing.

## **Undergraduate Academic Probation I**

This occurs when a student under Academic Warning has a semester GPA less than 2.0, and the cumulative GPA remains below 2.0 at the conclusion of the semester or if the student maintains a semester GPA greater than 2.0 while on Academic Probation I but the cumulative GPA is still less than 2.0.

Under Academic Probation I the following conditions apply:

- The student cannot enroll in more than 13 hours of coursework during the semester. Note: Students falling below 12 credits in any one semester will jeopardize their financial aid. Should this occur, students should see the associate dean in their college as soon as possible to try to implement corrective measures.
- 2. The student will enter into a contract or individualized education plan with their advisor and approved by the associate dean or CAO that place further stipulations on Academic Probation I. The associate dean or CAO may place the student on Academic Probation II or Academic Suspension should the student not adhere to the stipulations of the contract.
- Students on Academic Probation receiving educational benefits from the Veterans' Administration must obtain counseling from the Military & Veterans Programs Office.
- Students admitted under special provisions whose transcripts indicate less than a 2.0 GPA are admitted on Academic Probation I.

The student must maintain a semester GPA equal to or greater than 2.0 until such time that the cumulative GPA is greater than 2.0 at which time the student goes back to good academic standing. Until the transition happens the student remains on Academic Probation I. The student will be placed on Academic Probation II if he/she is unable to maintain a 2.0 semester GPA, and the cumulative remains below a 2.0 GPA, while under Academic Probation I. A student on Academic Probation I remains eligible for all extracurricular activities as governed by the rules of the specific activity.

## **Undergraduate Academic Probation II**

Academic Probation II is issued in two ways.

- The first is when a student falls below a semester 2.0 GPA and the cumulative GPA remains below a 2.0 while on Academic Probation I.
- The second is when a student maintains a semester GPA greater than 2.0 while on Academic Probation II but the cumulative GPA is still less than 2.0.

The following restrictions are in place for student's in Academic Probation II:

- The student cannot enroll in more than 7 credit hours of coursework during the semester.
- As with rule 2 under Academic Warning and Academic Probation I and at the discretion of the associate dean or CAO, the student will be required to enter into a contract with their advisor, approved by the associate dean or CAO, to place further stipulations on Academic Probation II.

The associate dean or CAO may place the student on Academic Suspension should the student not adhere to the stipulations of the contract.

The student must maintain a semester 2.0 GPA or higher until the cumulative GPA reaches a 2.0 or higher at which time they are placed on good academic standing. A student unable to maintain a semester GPA of 2.0 or higher, and the cumulative remains below 2.0 GPA, while under Probation II will be placed on Academic Suspension. A student on Academic Probation II remains eligible for all extracurricular activities as governed by the rules of the specific activity.

#### **Continuing in Probationary Status**

Students may continue to enroll while on Academic Probation I or II provided they maintain a semester GPA of 2.0 or higher. If they withdraw from the university while on Academic Probation, they continue on that same level of Academic Probation.

#### **Removal of Academic Probation**

Such academic standing is removed when the cumulative GPA is raised to 2.0 or higher, with the following exceptions:

- 1. a transfer student may not remove probation by summer work alone;
- if an I grade is removed after the student has enrolled, the new grade's effect on academic standing is based on its inclusion with grades for the term for which the student is enrolled;
- 3. exercise of the Adjusted Credit Option does not change academic status until subsequent grades are earned.

## **Academic Suspension**

When a student does not achieve a semester 2.0 GPA or higher, and the cumulative remains below a 2.0 while under Academic Probation II, they are placed on Academic Suspension. Students under Academic Suspension are not allowed to take NMSU courses while under suspension. Students on Academic Suspension must sit out a minimum of 1 semester and then petition the Provost or designee to be removed from Academic Suspension. At this time the suspension status will be evaluated for possible removal. Should the suspension be lifted, the student is placed on Academic Probation II until such time as the cumulative GPA equals or exceeds a 2.0. At the discretion of the Provost or designee, the student will enter into a contract approved by the Provost or designee and the student's Dean or CAO, setting stipulations to have the suspension removed. Failure to adhere to the contract will return the student to Academic Suspension.

Under certain conditions, a student may be re-admitted at NMSU under regular status while under Academic Suspension when satisfactory progress has been demonstrated at another college or university (see Readmission- Degree Seeking). Credits earned at another university or college while under Academic Suspension from NMSU or another university or college will be accepted at NMSU only after the student

demonstrates satisfactory progress over a period of two semesters after being re-admitted or admitted to NMSU. Acceptance of transfer credits that count toward degree requirements is still governed by the rules established by the student's respective college or campus.

### Rescinding Academic Suspension for Summer Attendance

A student may use summer classes to try to get warning or probationary status removed. Students suspended at the close of the spring semester may have their Academic Suspension rescinded if they attend summer session at NMSU or one of its Community College colleges. Such attendance must raise the combined spring semester and summer GPA to 2.0 or better. Under no circumstances may a student on Academic Warning or Academic Probation be allowed to register for an overload. Academic Warning status is continued if the student withdraws from the university and the probation or suspension status applies to all subsequent enrollments.

A certification of eligibility to attend summer sessions at NMSU after a spring semester Academic Suspension is available to the suspended student who wishes to attend summer sessions at other institutions.

# **Graduate Academic Probation and Suspension**

Graduate Academic Standing is based on both the student's semester GPA and cumulative GPA. The student must maintain a cumulative GPA of 3.0 or higher to remain on Graduate Academic Good Standing.

**Graduate Academic Probation I**: A graduate student is placed on Graduate Academic Probation I when a graduate student's semester GPA is above a 3.0 and the cumulative GPA drops below 3.0; or when the semester and cumulative GPA's drop below 3.0 and the previous academic standing is Graduate Academic Good Standing.

**Graduate Academic Probation II**: Is issued when a graduate student semester GPA and the cumulative GPA drops below as 3.0 and the previous academic standing is one of Graduate Academic Probation I or Graduate Re-admit on Probation I.

#### **Graduate Academic Suspension:**

If the graduate student is unable to maintain a semester GPA of 3.0 or higher and the cumulative remains below 3.0 GPA while under Graduate Academic Probation II, the student will then be placed on Graduate Academic Suspension.

Students on Graduate Academic Suspension are barred from enrolling in graduate level courses at NMSU while on Suspension. Graduate students on Graduate Academic Suspension must sit out a minimum of one semester. Graduate students on suspension who wish to continue Graduate School after suspension must re-apply to the department and Graduate School. The student must also petition College Academic Dean or the Graduate School Dean, based on the major and degree the student is pursuing to be removed from Graduate Academic Suspension. At this time the graduate academic suspension status will be evaluated for possible readmission to the department. Should the suspension be lifted, the graduate student is placed on Graduate Academic Probation II or Graduate Re-admit on Probation II until such time that the graduate cumulative GPA equals or exceeds 3.0.

If you have questions about your academic standing, please contact your department academic advisor or Graduate Dean's office.

## **Student Academic Code of Conduct**

The Student Academic Code of Conduct (SACC), applicable to both undergraduate and graduate students, provides procedures for the review and resolution of alleged or suspected academic misconduct within a reasonably prompt time frame. The full SACC is found in the university's published Administrative Rules and Procedures (ARP), specifically ARP 5.10 and ARP 5.11.

While it is important to refer to the detailed governing rules in the ARP, the process is summarized as follows: An institution-wide Academic Conduct Officer is responsible for processing each case of alleged academic misconduct. The accused student is provided notice of the allegation and has the right to participate during the fact finding process.

The student may contest the investigative findings or sanction before a neutral third party hearing panel member. Either party to the matter has the right to a final appeal of the findings or a Level II sanction to the Office of the Provost.

The SACC distinguishes between Level I Sanctions and Level II sanctions, depending upon the severity of the offense and other factors. The Level 1 sanction includes a formal warning. Offenses by graduate students and repeat offenses, even if less serious are subject to a Level II Sanction. Level II sanctions include a notation of academic misconduct on the student's academic transcript.

The full policy, examples of academic misconduct, report form and a flowchart of the procedures for resolving alleged student academic misconduct is available at:

#### **Policies**

- ARP 5-10 (https://arp.nmsu.edu/5-10)
- ARP 5-11 (https://arp.nmsu.edu/5-11)

#### **Examples of Academic Misconduct and Report Form**

- ARP Appendix 5.10-A (Examples) (https://arp.nmsu.edu/wp-content/uploads/sites/26/2018/01/Appendix-5-10-A.pdf)
- ARP Appendix 5.11-B (Form) (https://arp.nmsu.edu/wp-content/ uploads/sites/26/2018/01/Appendix-5-11-B.pdf)

#### Flowchart of Procedures

 ARP Appendix 5.11-A (https://arp.nmsu.edu/wp-content/uploads/ sites/26/2018/01/Appendix-5-11-A.pdf)

## **Privacy Rights**

The following information has been designated as directory information and is subject to release to the public under the Buckley Amendment (PL 98-380), "The Family Educational Rights and Privacy Act of 1974." student's name, class level, college and major, dates of attendance, degree(s) earned, honors and awards, address, telephone number, NMSU email address, Aggie ID number, most recent previous educational institution attended, place of birth, and some information about students involved in recognized activities and sports.

Other information regarding disclosure of student data is posted on the University Student Records Office website (https://records.nmsu.edu) and in the University Student Records Office (USRO), in compliance with the Act.

Requests for withholding directory information must be filed in writing with the USRO. A student may choose to hide his/her address and phone number from the campus phonebook through the myNMSU portal. This

will only hide the information from the public but the records will still be officially kept within the USRO.

# **Social Security Numbers in Student Records**

As required by law, social security numbers are collected from prospective and current students who are either applying for admission to the university or plan to seek employment on campus. The social security number is a confidential record and is maintained as such by the university in accordance with the Family Educational Rights and Privacy Act.

In addition, the university is mandated by federal tax regulations to provide tuition and fee payment information to the student and the Internal Revenue Service so that applicable educational tax credits may be computed. The social security number is required for tax reporting purposes.

## **Change in Demographic Information**

Students wishing to make a legal name change, citizenship change, social security number update or a gender update can do so through the University Student Records Office (USRO). All students will need to fill out the "Demographic Change form" located at https://registrar.nmsu.edu/forms/ and provide one of the following documents to the USRO. Legal name changes will only be processed for students currently enrolled at NMSU or any of its Community Colleges.

- Legal name change: students will need one legal documentation with the new name on it. This can be a Government Issued ID (drivers license, state card or valid passport), a Birth Certificate, a Court Order, a Marriage Certificate/Divorce Decree or a Certificate of Naturalization/I551 Card. Note: Documentation is not required to add/ delete hyphen, space, apostrophe, or to abbreviate a middle name to initial.
- 2. Citizenship change: Certificate of Naturalization or I551 card.
- Social Security Number Update: students will need to provide an original signed Social Security Card. Unsigned cards will not be accepted.
- Gender Update: students will need to bring a Government Issued ID (drivers license, state ID card or valid passport) and a Revised Birth Certificate

Students may update their "preferred name", which is the name used in lieu of a student's legal name, on certain documents, such as, the email display name, learning management system, the phonebook, class rosters and advisee lists. This can be done by the student through the myNMSU portal and does not need to be done at the USRO.

For more information about the specific documents that are needed please contact the Registar's Office at (575) 646-3411.

# **Changes in Residency Status for Tuition Purposes**

The University Student Records Office (USRO) does not determine the laws and rulings for determining Residency, these are state laws that the USRO simply administers. An individual must establish legal residency in New Mexico before he or she is entitled to pay in-state tuition rates.

The student's initial residency status is determined at the time of admission, any changes to this status must be initiated by the student

through the USRO. A continuing student, classified as a non-resident, who has satisfied the requirements to establish residency may submit a Petition for In-State Residency Tuition Classification along with the required supporting documentation to the USRO Office. Petitions must be filed on or before the third Friday of the semester for which the student is requesting resident tuition.

For specific information about the process of petitioning for In-State Residency or for information about who is eligible for residency for tuition purposes please visit the https://registrar.nmsu.edu/residency/ website or the University Student Records Office on the Las Cruces campus.

## **Official Transcripts**

An official transcript is the University's certified statement of your complete NMSU academic record in chronological order by semester and year. It includes the student's coursework, grades and any degrees that were awarded. Any credit hours earned through transfer work are listed as the equivalent course at NMSU. Grades are not transferred, nor are they used to calculate the NMSU grade point averages. Official transcripts will not be released if the student is in debt to the university.

Transcripts can either be ordered in person at the University Student Records Office or online at https://registrar.nmsu.edu/transcripts/, there will be a fee for these that may vary depending on the total number of transcripts ordered and the type of delivery method that is selected. A student can request two types of transcripts an electronic one, which is sent as a secured PDF or a printed hard copy that can be delivered in a sealed envelope.

The name that will appear on the student's transcript will match the name on the student's official NMSU record. Name changes will only be processed for students currently enrolled at NMSU or any of its Community Colleges.

## **Purging of Student Files**

All academic files for students who attend NMSU are kept for five (5) years following the student's final term enrolled. Only archival documentation will be retained. The files of students who do not enroll within one year after being admitted are destroyed.

## **Graduation Requirements**

A student may specify choice of either the current catalog at the time of admittance or a subsequent catalog, provided the selected catalog is not more than six years old when (s)he satisfies the requirements for graduation. In all other cases, the student will be subject to the current catalog.

Students planning to graduate must clear all of their accounts with the DACC Cashiers Office. Delinquent accounts due to outstanding balances for tools, books, and personal materials should be cleared in the community college's Cashiers Office, located in DASR 102B.

## **Graduation with Honors**

See the section titled, "Recognition for Academic Achievement (p. 28)."

### To Graduate with an Associate Degree

To earn an associate degree, students must complete a minimum of 60 semester credits and have a GPA of 2.0 or greater in all courses taken at NMSU or any of its community colleges (individual programs may have other GPA requirements). However, ENGL 111G Rhetoric and Composition, and basic scores in mathematics must be completed with a grade of *C* or better. The last 15 credit hours must be taken through the NMSU system, which includes DACC. Any incomplete grade must be made up before the student is awarded an associate degree. Be sure to see the section titled "Filing Notice of Candidacy for a Degree or Certificate (p. 58)," which appears later in this chapter, for additional information.

#### To Graduate with a Certificate

Students must successfully complete the total program as outlined in the course catalog and have a GPA of 2.0 or greater. Any incomplete grade must be made up before the student is awarded the certificate. Be sure to see the section titled "Filing Notice of Candidacy for a Degree or Certificate (p. 58)," which appears later in this chapter, for additional information

### Filing Notice of Candidacy for a Degree or Certificate

Students are required to file Application for Degree for an associate degree or certificate and pay the graduation fee for each degree or certificate sought. This fee (\$25 for an associate degree; \$10 for a certificate) must be paid by the end of the semester or session in which the candidate anticipates completing degree requirements.

Filing an Application for Degree is accomplished by completing the appropriate online application.

- For an associate degree, go to the following web page and follow the instructions given there: https://ssb.nmsu.edu/pban/ nmsugraduation.p\_appdeg
- For a certificate, go to the following web page and follow the instructions given there: http://dacc.nmsu.edu/students/certificateof-completion-application/

Once the application is submitted electronically, the appropriate charge(s) will appear on the student's account, usually within 48 hours. Payment may then be made either in person at the DACC Cashiers Office, located in DASR 102B, over the telephone by credit card (575) 527-7513, or by accessing the student's account online via myNMSU. If degree requirements are not completed during the semester or session for which the student paid the fee, the student must reapply and pay any additional fees that may apply.

Students can apply for their associate degree through their myNMSU account. Certificate applications are available on the DACC website. A \$25 late fee applies to degree applications received after the first deadline, and no applications will be accepted after the final deadline. These deadlines are published in the *Schedule of Classes*.

The latest date for substitution or waiver of required courses for candidates for degrees is two weeks after the last date of registration for regular or summer terms. All fees and bills owed the university must be paid before a student may receive a diploma or transcript of credits. Graduation fees must be paid as listed in the section, "Tuition and Fees (p. 20)."

### **Diploma**

Diplomas will be mailed to graduates approximately eight weeks after final grades have been processed by the Registrar's office, concluding a final degree audit by the individual Colleges. The diploma will be mailed to the address specified on the degree application, unless an address change has been requested before the end of the semester.

The name on the diploma will reflect the student's current official NMSU records. Name changes are processed only for currently admitted students. The degree title and major(s) will be printed on the diplomas, in accordance to the degree application award, determined by the academic colleges. Academic honors will also be printed on the diplomas below the degree and major(s).

All fees and bills owed the university must be paid in full before a student may receive a diploma or transcript of credits.

### **Recognition of Degrees and Certificates**

Degrees and certificates earned are recorded on the academic record, as are majors where applicable. Minors are also recorded for students completing all requirements for the bachelor's or graduate degree as of May 10, 1980.

### **Transcript of Credits**

Recognition of degrees earned is made on the official transcript (academic record) of students completing all requirements for a degree or certificate. The official transcript is available in printed or electronic form

Printed copies of the transcript may be requested either at the NMSU Registrar's Office (575) 646-3411) or online, fees may apply. For more information, visit https://registrar.nmsu.edu/transcripts/. No transcript of credits will be released if the student owes a debt to DACC/NMSU.

#### **Attendance at Commencement**

DACC certifies eligibility to participate in commencement exercises for students planning to receive an associate degree or a certificate.

DACC holds commencement exercises at the end of the spring semester in May. Eligible candidates for degrees and certificates are encouraged to participate in the commencement ceremony. Students wishing to participate in spring commencement prior to completing degree requirements in the following summer session should call (575) 527-7530 for specific requirements.

## Developmental Studies, College Studies and General Education Courses

# **Developmental Studies Mission and Value Statement**

Our mission is to provide general education and developmental instruction designed to meet individual educational goals and foster lifelong learning.

By providing rigorous curriculum through interdisciplinary instruction that honors and recognizes the academic and workforce needs of our diverse community of lifelong learners, the General Studies Division

- · Is student-centered, and
- Encourages students to become risk-taking and self-motivated learners.

## **Developmental/College Studies Courses**

The Developmental Education courses at DACC are certified through the National Association of Developmental Education (NADE). Our developmental courses ascribe to the NADE's philosophy:

Helping under-prepared students prepare, prepared students advance, and advanced students excel (NADE 2001-2006).

Developmental courses are designed to help students acquire the skills and attitudes necessary for college success. Developmental Studies includes English, math, reading, language, and study skills.

They are identified by an "N" that appears after the course number. Developmental Studies courses are included on the transcript and will be calculated in the academic grade point average, but do not count toward a degree.

On the other hand, College Studies courses do carry academic credit and are designed to help students acquire the attitudes and strategies necessary for college success.

Students' placement in developmental studies courses will be determined by one or more of the following instruments: ACT assessment, Accuplacer, and locally developed tests. Students must achieve a *C* or better in courses with "CCD-" prefixes to continue with the next course.

Course descriptions appear near the end of this catalog and are listed by course prefix (the letters appearing before a course number). The various prefixes represent different areas of study as shown:

- · CCDE: Developmental English
- CCDL: Developmental Language (English as a Second Language)
- · CCDM: Developmental Mathematics
- · CCDR: Developmental Reading
- · COLL: College Studies

## **General Education Courses**

General Education at NMSU provides all students with a broad foundation and common framework upon which to develop knowledge and skills, social consciousness and respect for self and others; thus enabling them to function responsibly and effectively now and in the future.

General education courses taught at DACC are lower-division, university-level courses that are the same as those taught at NMSU. They are identified by the "G" that appears after the course number. In addition to meeting DACC graduation requirements, they may also be used to meet requirements for bachelor's degree programs at NMSU.

DACC students are given priority in enrollment for general education courses taught at the Central and East Mesa campuses. The priority enrollment period ends two weeks prior to the beginning of each semester or summer session. Non-DACC students enrolled in the NMSU system may register for these courses after the priority enrollment period has ended.

## TRANSFER OPTIONS

Many of the credits earned at Doña Ana Community College can be applied toward degrees at New Mexico State University, as well as at other colleges and universities. It must be noted, however, that courses are not automatically accepted for transfer credit, and they frequently must be evaluated by the receiving institution before transfer credit can be given. Because of such uncertainties, it is imperative for students considering transferring to another college or university to consult with their academic advisor prior to enrolling in courses at DACC.

The menu items on the left, under "Transfer Options," link to information about courses and programs for which there are established transfer agreements.

## Transfer Among New Mexico Institutions of Higher Education

The following core matrix of approved courses are guaranteed to transfer and meet general education requirements at any New Mexico public college or university. The New Mexico Common Core courses commonly offered at DACC are listed here. For a complete list of all NMSU courses that meet the New Mexico General Education Common Core, consult the current NMSU Undergraduate Catalog.

# The New Mexico Common Core Requirements

General Education at NMSU provides all students with a broad foundation and common framework upon which to develop knowledge and skills, social consciousness and respect for self and others, thus enabling them to function responsibly and effectively now and in the future. General education courses at NMSU can be identified by the G suffix.

The New Mexico General Education Common Core includes designated general education courses guaranteed to transfer to any New Mexico public college or university. A complete list of approved courses can be found on the New Mexico Higher Education Department website at www.hed.state.nm.us (http://www.hed.state.nm.us). The current approved NMSU courses are listed below under each of the five general education areas.

In accordance to state law (Chapter 21, Article 1B NMSA 1978), the New Mexico Higher Education Department has established policies to guarantee successful transfer of completed core courses between New Mexico postsecondary public institutions.

## Lower Division General Education Course Transfer Curriculum

The NMSU Prefix and Course Number will be listed first, the New Mexico Transfer Curriculum number will then be listed in parenthesis' followed by the course title and credit hours.

(	Code	Title	Credits
4	AREA I: Communic	eations	9-10
,	Select one course		
1	English Compositio	n-Level 1	
	ENGL 111G	Rhetoric and Composition	4
	ENGL 111GH	Rhetoric and Composition Honors	4

ENGL 111 M	Rhetoric and Composition for International and Multilingual Students	4
English Composition	-Level 2	
ENGL 203G	Business and Professional Communication	3
ENGL 211G	Writing in the Humanities and Social Sciences	3
ENGL 218G	Technical and Scientific Communication	3
ENGL 311G	Advanced Composition	3
ENGL 318G	Advanced Technical and Professional Communication	3
Oral Communication		
AXED 201G	Effective Leadership and Communication in Agricultural Organizations	3
COMM 253G	Public Speaking	3
COMM 265G	Principles of Human Communication	3
HON 265G	Principles of Human Communication Honors	3
Area II: Mathematic	•	3-4
A ST/STAT 251G	Statistics for Business and the Behavioral Sciences	
MATH 112G	Fundamentals of Elementary Math II	3
MATH 121G	College Algebra	3
MATH 142G	Calculus for the Biological and Management Sciences	3
MATH 190G	Trigonometry and Precalculus	4
MATH 191G	Calculus and Analytic Geometry I	4
MATH 192G	Calculus and Analytic Geometry II	4
MATH 192GH	Calculus and Analytic Geometry II Honors	4
MATH 210G	Mathematics Appreciation	3
MATH 291G	Calculus and Analytic Geometry III	3
STAT 271G	Statistics for Psychological Sciences	3
Area III: Laboratory		8
AGRO/HORT 100G	Introductory Plant Science	
ANTH 130G & 130GL	Human's Place in Nature: Introduction to Biological Anthropology and Human's Place in Nature Laboratory	4
ASTR 105G	The Planets	4
ASTR 110G	Introduction to Astronomy	4
BIOL 101G	Human Biology	4
& 101GL	and Human Biology Laboratory	
BIOL 110G	Contemporary Problems in Biology	4
BIOL 111G	Natural History of Life	4
& 111GL	and Natural History of Life Laboratory	
BIOL 211G & 211GL	Cellular and Organismal Biology and Cellular and Organismal Biology Laboratory	4
C S 171G	Introduction to Computer Science	4
CHEM 110G	Principles and Applications of Chemistry	4
CHEM 111G	General Chemistry I	4
CHEM 112G	General Chemistry II	4
E S 110G	Introductory Environmental Science	4

FS	TE 164G	Introduction to Food Science and	4	LING 200G	Introduction to Language	3
		Technology		PHLS 150G	Personal Health and Wellness	3
	TE 263G	Food Science I	4	PSY 201G	Introduction to Psychology	3
FW	/CE 110G	Introduction to Natural Resources	4	S WK 221G	Introduction to Social Welfare	3
05	00 1110	Management	4	SOC 101G	Introductory Sociology	3
	OG 111G	Geography of the Natural Environment	4	SOC 201G	Contemporary Social Problems	3
	OL 111G	Introductory Geology	4	W S 201G	Introduction to Women s Studies	3
	OL 212G	The Dynamic Earth	4	W S 202G	Representing Women Across Cultures	3
	N 205G	Life, Energy, and Evolution		Area V: Humanitie	es and Fine Arts <sup>1</sup>	
	N 219G	Earth, Time, and Life	4	ART 101G	Orientation in Art	3
	YS 110G	The Great Ideas of Physics	4	ART 110G	Visual Concepts	3
	YS 120G	Introduction to Acoustics	4	ART 295G	Introduction to Art History I	3
	YS 211G	General Physics I	4	ART 296G	Introduction to Art History II	3
	211GL	and General Physics I Laboratory		DANC 101G	Dance Appreciation	3
	YS 212G 212GL	General Physics II and General Physics II Laboratory	4	ENGL 115G	Perspectives on Literature	3
	YS 215G	Engineering Physics I	4	ENGL 116G	Perspectives on Film	3
	15GL	and Engineering Physics I Laboratory	4	ENGL 220G	Introduction to Creative Writing	3
	YS 216G	Engineering Physics II	4	ENGL 244G	Literature and Culture	3
	16GL	and Engineering Physics II Laboratory		HIST 101G	Roots of Modern Europe	3
PH	YS 221G	General Physics for Life Sciences I	4	HIST 102G	Modern Europe	3
& 2	21GL	and Laboratory to General Physics for		HIST 110G	Making History	3
		Life Science I		HIST 111G	Global History to 1500	3
	YS 222G	General Physics for Life Sciences II	4	HIST 112G	Global History Since 1500	3
& 2	22GL	and Laboratory to General Physics for		HIST 201G	Introduction to Early American History	3
		Life Sciences II	15	HIST 202G	Introduction to Recent American History	3
Area I	V/V- Social/B	ehavorial Sciences and Humanities/Fine	15	HIST 211G	East Asia to 1600	3
	V: Social/Reha	vorial Sciences <sup>1</sup>		HIST 212G	East Asia since 1600	3
		Survey of Food and Agricultural Issues		HIST 221G	Islamic Civilizations to 1800	3
	TH 120G	Human Ancestors	3	HIST 222G	Islamic Civilizations since 1800	3
	TH 125G	Introduction to World Cultures	3	HON 208G	Music in Time and Space	3
	TH 201G	Introduction to Anthropology	3	HON 216G	Encounters with Art	3
	TH 202G	World Archaeology	3	HON 220G	The World of the Renaissance:	3
	TH 203G	Introduction to Language and Cultural	3		Discovering the Modern	
7.11	2000	Anthropology	_	HON 222G	Foundations of Western Culture	3
CE	P 110G	Human Growth and Behavior	3	HON 227G	Plato and the Discovery of Philosophy	3
CJ	1101G	Introduction to Criminal Justice	3	HON 228G	Religion and the State	3
EC	ON 201G	Introduction to Economics	3	HON 229G	The New Testament as Literature	3
EC	ON 251G	Principles of Macroeconomics	3	HON 230G	Bamboo and Silk: The Fabric of Chinese	3
ECO	ON 252G	Principles of Microeconomics	3		Literature	
GE	OG 112G	World Regional Geography	3	HON 234G	The Worlds of Arthur	3
GE	OG 120G	Culture and Environment	3	HON 239G	Medieval Understandings: Literature and	3
GO	VT 100G	American National Government	3	110110400	Culture in the Middle Ages	0
GO	VT 110G	Introduction to Political Science	3	HON 242G	Claiming an American Past	3
GO	VT 150G	American Political Issues	3	HON 270G	Theatre: Beginnings to Broadway	3
	VT 160G	International Political Issues	3	MUS 101G	An Introduction to Music	3
НО	N 232G	The Human Mind	3	MUS 201G	History of Jazz in Popular Music: A Blending of Cultures	3
НО	N 235G	Window on Humanity	3	PHIL 100G	Philosophy, Law and Ethics	3
НО	N 237G	Archaeology: Search for the Past	3	PHIL 101G	The Art of Wondering	3
	N 248G	The Citizen and the State: Great Political	3	PHIL 101G PHIL 124G	Philosophy of Music	3
		Issues		PHIL 124G PHIL 136G	The Quest for God	3
НО	N 249G	American Politics in a Changing World	3	PHIL 130G PHIL 201G	Introduction to Philosophy	3
JOI	UR 105G	Media and Society	3	PHIL 201G	Informal Logic	3
				IIILZIIG	informal Logic	3

-	Total Credits		35-37
	THTR 101G	The World of Theatre	3
	PHIL 223G	Ethics	3

For Areas IV and V of the NM Common Core, students can take 6-9 credits of each area for a total of 15 credits.

### Alternatives for Meeting General Education Requirements

Students taking nine or more credits in a specific subject area, even though the courses are not designated as General Education courses, will have met the general education requirements for that subject area. For example, a student may complete ART 150 Drawing I, ART 155 2-D Fundamentals and ART 156 3-D Fundamentals (9 hours) and thereby satisfy one course from the Area V: Humanities and Fine Arts category, even though none of those courses carries a G suffix. Please check with the Center for Academic Advising and Student Support.

# **Transferring Courses Within Degree Programs**

To facilitate the transfer of courses within certain degree programs, New Mexico colleges and universities have collaborated to develop transferable discipline modules. These are made up of an agreed-upon number of hours and courses. When discipline module courses are taken in addition to the 35-hour general education core, the total number of hours in a transfer module are approximately 64.

### **Student Responsibility in the Transfer Process**

New Mexico's colleges and universities have collaborated to produce guides to assist students who plan to transfer before completing a program of study. Course modules are designed to help students select courses carefully so that they may transfer with little or no loss of credit. However, planning for effective transfer with maximum efficiency is ultimately the student's responsibility. Responsible transfer planning includes early and regular consultation with the intended degree-granting institution to assure that all pre-transfer coursework will meet the requirements of the desired degree.

### **Transfer Credit Appeal Process**

All New Mexico public post-secondary institutions are required to establish policies for receiving and resolving complaints from students or from other complainants regarding the transfer of coursework from other public institutions in the state. A copy of NMSU's transfer credit policy may be obtained from the University Registrar's Office, or from:

Deputy Secretary for Academic Affairs Higher Education Dept. 2048 Galisteo St. Santa Fe, NM 87505-2100

# **Applying DACC Credit Toward Bachelor's Degree Programs**

Many DACC courses may be accepted at NMSU and other New Mexico public colleges and universities. When planning to apply DACC credits toward a bachelor's degree program, it is best to consult with advisors at both DACC and the university that has been selected for continued study.

## **Articulated Programs of Study**

A DACC program is said to be "articulated" when, with adequate planning, a majority of the credits earned in the DACC program may be used to satisfy degree requirements for a baccalaureate degree at another institution. Articulation plans have been developed for the following DACC programs:

- Any associate degree earned at DACC may be applied in its entirety toward the Bachelor of Applied Studies or Bachelor of Individualized Studies degrees offered by the NMSU College of Arts and Sciences.
- · Associate of Arts Degree to the NMSU College of Arts and Sciences
- Associate of Science Degree to the NMSU College of Arts and Sciences
- Computer- and technology-related associate degree programs to the NMSU Information and Communication Technology bachelor's degree program in the Engineering Technology Department, College of Engineering
- Computer- and technology-related associate degree programs to programs leading to the Bachelor of Applied Science in Operations Management and Supervision and the Bachelor of Applied Science in Career and Technical Teacher Education at Western New Mexico University
- Criminal Justice to the Department of Criminal Justice in the NMSU College of Arts and Sciences
- Early Childhood Education and Education programs to the NMSU College of Education
- General Engineering to bachelor's degree programs in the NMSU College of Engineering
- Hospitality Services Management to the School of Hotel, Restaurant and Tourism Management in the NMSU College of Agricultural, Consumer and Environmental Sciences
- New Mexico Common Core Certificate to any New Mexico public college or university
- Pre-Architecture to the UNM School of Architecture and Planning and Texas Tech University
- · Pre-Business to the NMSU College of Business
- Public Health to the Department of Health Science, NMSU College of Health and Social Services

### **Partially Articulated Programs**

A significant number of the credits earned in the following associate degree programs at DACC will apply toward meeting bachelor's degree requirements of specified departments at NMSU:

- Any associate degree in allied health to the Department of Health Science in the College of Health and Social Services
- Aerospace Technology to the Mechanical Engineering Technology bachelor's degree program in the NMSU College of Engineering
- Automation and Manufacturing Technology to the Mechanical Engineering Technology bachelor's degree program in the NMSU College of Engineering
- Business Management to the Department of Agricultural Economics and Agricultural Business in the College of Agricultural, Consumer and Environmental Sciences
- Civil/Survey Technology (Drafting and Graphics Technologies Program) to the Civil Engineering Technology bachelor's degree program in the NMSU College of Engineering

- Computer- and technology-related associate degree programs to the Information Engineering Technology bachelor's degree program in the Department of Engineering Technology, NMSU College of Engineering
- Creative Media Technology to the Creative Media degree program at the NMSU Creative Media Institute
- Electronics Technology to the Department of Engineering Technology in the NMSU College of Engineering
- Hospitality and Tourism to the School of Hospitality, Restaurant, and Tourism Management, College of Agricultural, Consumer and Environmental Sciences
- Nursing to the Department of Nursing, College of Health and Social Services
- Career Technical Education programs. Those planning to teach at the secondary level may apply between 18 and 32 credits of technical subject matter earned in the following DACC programs toward the technology teaching licensure program offered within the bachelor of science degree program in Agricultural and Extension Education (College of Agricultural, Consumer and Environmental Sciences):
  - · Automation and Manufacturing Technology;
  - · Automotive Technology;
  - · Building Construction Technology;
  - · Computer and Information Technology;
  - · Creative Media Technology;
  - · Drafting and Design Technologies;
  - · Electrical Programs;
  - · Electronics Technology;
  - · Environmental and Energy Technologies;
  - · Heating, Ventilation, Air Conditioning and Refrigeration;
  - · Water Technology;
  - · Welding Technology; and
  - · the Associate of General Studies program.

**NOTE:** Students who plan to transfer to another institution should always consult that institution's catalog for the most current information.

# ACADEMIC AND CAREER PROGRAMS

Doña Ana Community College offers associate degrees and certificates in the academic and career areas appearing in the list below. The names of some of the specializations listed differ from those of the programs administering them. In such cases, the name of the administering program is provided in parentheses.

A superscripted "A" means that an associate degree is offered. A superscripted "C" means that a certificate is offered.

Information about each career or academic program and its various degrees and certificates may be accessed from the navigation menu at the left

- Advertising Representative <sup>C</sup> (Business Management Program)
- Aerospace Technology A, C
- Alternative Fuels <sup>C</sup> (Environmental and Energy Technologies Program)
- Architectural Technology A, C (Drafting and Design Technologies Program)
- Associate in General Studies <sup>A</sup>
- Associate of Arts <sup>A</sup>
- Associate of Science <sup>A</sup>
- Automation and Manufacturing Technology A, C
- Automotive Technology A, C
- Basic Firefighter <sup>C</sup> (Fire Science Technology)
- ${}^{\circ}$  Basic Manufacturing and Bridge  ${}^{\mathbb{C}}$  (Automation and Manufacturing Technology Program)
- Basic Solar <sup>C</sup> (Environmental and Energy Technologies Program)
- Biomedical Electronics <sup>C</sup> (Electronics Technology Program)
- Building Construction Technology <sup>C</sup>
- Business Fundamentals <sup>C</sup> (Business Management Program)
- Business Management A, C
- Children's Literature <sup>C</sup> (Library Science Program)
- Civil/Survey Technology A, C (Drafting and Design Technologies Program)
- Community Health Worker C
- Computed Tomography <sup>C</sup> (Radiologic Technology Program)
- Computer Information Technology A, C
- Corrections/Law Enforcement <sup>A</sup>
- Creative Media Technology A, C
- Criminal Justice <sup>A</sup>
- Culinary Arts <sup>A</sup>

- Customized Study in Library Science <sup>C</sup> (Library Science Program)
- Dental Assistant <sup>C</sup>
- Dental Hygiene <sup>A</sup>
- Diagnostic Medical Sonography A, C
- Digital Audio <sup>C</sup> (Creative Media Technology Program)
- Digital Graphics Technology A, C (Creative Media Technology Program)
- Digital Video <sup>C</sup> (Creative Media Technology Program)
- $\,^{ ext{C}}$  Drafting and Graphics Technology  $^{ ext{C}}$  (Drafting and Design Technologies Program)
- Early Childhood Education A
- Education <sup>A</sup>
- Electrical Apprenticeship A, C
- Electrical Lineworker <sup>C</sup> (Electrical Programs)
- Electronics Technology <sup>A</sup>
- Emergency Medical Services <sup>A</sup>
- EMT-Basic <sup>C</sup> (Emergency Medical Services Program)
- EMT-Intermediate <sup>C</sup> (Emergency Medical Services Program)
- Environmental and Energy Technologies A
- Energy Conservation <sup>C</sup> (Environmental and Energy Technologies Program)
- Energy Evaluation <sup>C</sup> (Environmental and Energy Technologies Program)
- Film Crew Training <sup>C</sup> (Creative Media Technology Program)
- Fire Investigations <sup>A</sup>
- Fire Science Technology <sup>A</sup>
- First Responder Pre-Hospital <sup>C</sup> (Emergency Medical Services Program)
- Fundamentals of Library Science <sup>C</sup> (Library Science Program)
- Game Design <sup>C</sup> (Creative Media Technology Program)
- General Electronics Technology <sup>C</sup>
- General Engineering <sup>A</sup>
- ${}^{\circ}$  Geographical Information Systems  ${}^{\circ}$  (Drafting and Design Technologies Program)
- Graphics and Animation <sup>C</sup> (Creative Media Technology Program)
- Health Information Technology A, C
- Heating, Ventilation, Air Conditioning, and Refrigeration A
- Hospitality Services Management <sup>A</sup>
- Hospitality and Tourism <sup>A</sup>
- $\,^{\circ}$  HVAC/R (Refrigeration)  $^{\circ}$  (Heating, Ventilation, Air Conditioning, and Refrigeration Program)

- · Library Science A
- Licensed Practical Nurse <sup>C</sup> (Nursing Program)
- Mechanical Drafting & Solid Modeling <sup>A, C</sup> (Drafting and Design Technologies Program)
- Medical Billing <sup>C</sup> (Business Office Technology Program)
- Medical Transcription <sup>C</sup> (Business Office Technology Program)
- New Mexico General Education Common Core <sup>C</sup>
- Nursing <sup>A</sup>
- Nursing Assistant <sup>C</sup> (Health Care Assistant Program)
- Office Administration Technology A, C
- Paralegal Studies <sup>A</sup>
- Paramedic <sup>C</sup> (Emergency Medical Services Program)
- Patient Care Technician C
- Pre-Architecture A
- Pre-Business <sup>A</sup>
- Public Health A
- Radiologic Technology <sup>A</sup>
- Residential HVAC <sup>C</sup> (Heating, Ventilation, Air Conditioning, and Refrigeration Program)
- Respiratory Therapy <sup>A</sup>
- Solar Energy Technology <sup>C</sup> (Environmental and Energy Technologies Program)
- Specialized Topics in Library Science <sup>C</sup> (Library Science Program)
- Water Technology A, C
- Web Design <sup>C</sup> (Creative Media Technology Program)
- Welding Technology A, C

## **Aerospace Technology**

Aerospace Technology - Associate of Applied Science Degree

Aerospace Technology - Certificate of Completion - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

Aerospace technology refers to the construction, testing, and maintenance of aircraft and space vehicles. Technicians may be involved in the assembly, service, testing, operation, and repair of systems associated with dependable and reusable space launch vehicles and related ground support equipment. The successful candidate in this new field will possess a very broad range of technology-based skills.

The curriculum includes the core skills used in spaceflight technology, as well as instruction in commercial spaceflight requirements. It also prepares students for the nationally recognized SpaceTEC certification examination, which qualifies graduates for opportunities at Spaceport

America and emerging local aerospace-related industries in southern New Mexico. The broad skills and knowledge students acquire in this program also are applicable to jobs in electronics and manufacturing.

Students may complete the Aerospace Technology program on a parttime basis by taking classes during the evening or during the day.

## **Additional Graduation Requirements**

To receive either an associate degree or a certificate of completion, students are required to obtain a Career Readiness Certificate in the areas of Applied Math, Reading for Information, and Locating Information, at the appropriate level for their respective certificate or degree. To facilitate success in obtaining their Career Readiness Certificate students will be required to take 1 credit of OETS 102 Career Readiness Certification Preparation. A program advisor can provide additional information.

Aerospace Technology - Associate of Applied Science (p. 66)

Aerospace Technology - Certificate of Completion (p. 67)

# AERT 105. Aerospace Engineering PLTW 4 Credits (2+4P)

Introduce the student to Aerospace Engineering (AE) concepts and history. Studied topics include History of Flight, Aerodynamics, Rocket Science, Orbital Physics, Systems Engineering and Life Support/Environmental Systems. Restricted to: Community Colleges only.

# AERT 111. Basic Electricity and Electronics 3 Credits (2+2P)

Fundamentals of electricity and electronics, basic circuit devices, meters, transistors, integrated fiber optics, and industrial application topics. Minimum math proficiency of CCDM 103 or CCDM 104 required or math placement into CCDM 114 or higher. Restricted to: Community Colleges only. Crosslisted with: ELT 105

## AERT 121. Introduction to the Aerospace Workplace 4 Credits (2+4P)

The course covers space history, regulations, controls, aerospace industry terminology and acronyms as well as hands-on activities related to tools, procedures, and standard practices. Restricted to: Community Colleges only.

# AERT 122. Aerospace Safety and Quality 3 Credits (2+2P)

Covers identification of hazards, personal protective equipment, safe practices, and protection of personnel, property, and equipment in the aerospace environment. Basic principles of quality assurance engineering and quality control relating to work processes will be discussed. Restricted to: Community Colleges only.

## AERT 211. Electromechanical Devices 4 Credits (2+4P)

Theory and application of electromechanical devices and digital control circuits. Includes AD and DA converters, pneumatics, hydraulics, programmable logic controllers, DC, AC and stepper motors, and servomechanisms. Crosslisted with: MAT 240.

Prerequisite(s): ELT 160.

## AERT 212. Materials and Processes (Basic Metallurgy) 3 Credits (2+2P)

Basic Metallurgy: Aluminum and its alloys (Alclad), hardening, tempering, annealing, anodizing, magnetism, titanium, copper, stainless steel, surgical steel, safety wire, iron rust. Metallurgical Processes: Welding and soldering. Inspection Fundamentals: Eddy currents, magnetic particles (ferrous and non-ferrous metals), ultrasonic, x-ray, visual, corrosion and corrosion control, and vacuum bagging. Restricted to: Community Colleges only.

## AERT 213. Aerospace Fluid Systems 3 Credits (2+2P)

This course includes a familiarization of fluid system components, characteristics, and applications. Cryogenic and hypergolic materials and high pressure systems are also covered. Restricted to: Community Colleges only.

## AERT 214. Aerospace Systems 3 Credits (2+2P)

This course provides an introduction to expendable and reusable spacecraft systems including hydraulic, pneumatic, electrical, propulsion, mechanical, HVAC, and ECLSS (Environmental Control and Life Support System). How systems interact with computer and data acquisition systems is also covered. Restricted to: Community Colleges only.

## AERT 221. Inspection Requirements and Planning Metrology 3 Credits (2+2P)

Course teaches the benefits of inspection, quality control, material conditions. Also covers measurements, including temperature, ultrasonic, vibration and more. Restricted to: Community Colleges only.

## AERT 222. Electromechanical Systems 3 Credits (2+2P)

Principles and applications of preventive and corrective maintenance procedures on industrial production machines using systems technical and maintenance manuals to develop troubleshooting procedures using systems block and schematic diagrams. Pre/ Crosslisted with: MAT 245. Prerequisite(s)/Corequisite(s): AERT 221 or MAT 240. Prerequisite(s): ELT 160.

## AERT 224. Aerospace Tests and Measurements 3 Credits (2+2P)

This course covers electrical and mechanical testing procedures (primarily non-destructive testing), equipment, measurements, and instrumentation involved in aerospace systems. Verification of tool and equipment calibration is also covered. Pre/ Restricted to: Community Colleges only.

Corequisite(s): AERT 221.

### **AERT 225. Cooperative Experience**

#### 1-3 Credits (1-3)

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. Consent of instructor required. Graded: S/U. Restricted to: Community Colleges only.

#### **AERT 255. Special Topics**

#### 1-4 Credits (1-4)

Specific topics to be announced in the Schedule of Classes. Restricted to: Community Colleges only.

### **AERT 290. Independent Study**

#### 1-3 Credits (1-3)

Individual studies in areas directly related to aerospace. Consent of instructor required. Restricted to: Community Colleges only.

Name: Luis Meza, Department Chair

Office Location: DAWD 116A

Phone: (575) 527-7564

Website: https://dacc.nmsu.edu/aert/

# **Aerospace Technology - Associate of Applied Science**

## (70 credits)

#### **Core Requirements**

Core nequirements		
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 203G	Business and Professional Communication <sup>1</sup>	3
or ENGL 218G	Technical and Scientific Communication	
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
MATH 190G	Trigonometry and Precalculus (transfer track) <sup>1</sup>	4
or ELT 120	Mathematics for Electronics	
PSY 201G	Introduction to Psychology 1	3
or SOC 101G	Introductory Sociology	
Select one of the fol	llowing:	4
PHYS 211G & 211GL	General Physics I and General Physics I Laboratory	
PHYS 215G & 215GL	Engineering Physics I and Engineering Physics I Laboratory <sup>1</sup>	
<b>Technical Requirem</b>	ents <sup>2</sup>	
ELT 105	Basic Electricity and Electronics	3
Select one from the	following:	3
MAT 105	Introduction to Manufacturing	
MAT 107	Computer Integrated Manufacturing PLTW	
MAT 102	Print Reading for Industry	3
MAT 106	Applied Manufacturing Practices	3
MAT 110	Machine Operation and Safety	3
AERT 121	Introduction to the Aerospace Workplace	4
or AERT 105	Aerospace Engineering PLTW	
AERT 122	Aerospace Safety and Quality	3
ELT 110	Electronics I	4
MAT 240	Electromechanical Devices	4
AERT 212	Materials and Processes (Basic Metallurgy)	3
or WELD 120	Basic Metallurgy	
AERT 213	Aerospace Fluid Systems	3
AERT 214	Aerospace Systems	3
AERT 221	Inspection Requirements and Planning Metrology	3
MAT 245	Electromechanical Systems	3
AERT 224	Aerospace Tests and Measurements	3

OETS 102	Career Readiness Certification Preparation	1
Total Credits		70

- Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.
- A final grade of C or better is required in all 100-level technical courses to progress to 200-level technical courses.

# **Aerospace Technology - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (32 credits)

### Technical Requirements

ELT 105	Basic Electricity and Electronics	3
Select one from th	e following:	3
MAT 105	Introduction to Manufacturing	
MAT 107	Computer Integrated Manufacturing PLTW	
MAT 102	Print Reading for Industry	3
MAT 110	Machine Operation and Safety	3
AERT 121	Introduction to the Aerospace Workplace	4
or AERT 105	Aerospace Engineering PLTW	
AERT 122	Aerospace Safety and Quality	3
AERT 213	Aerospace Fluid Systems	3
AERT 214	Aerospace Systems	3
AERT 221	Inspection Requirements and Planning Metrology	3
AERT 224	Aerospace Tests and Measurements	3
OETS 102	Career Readiness Certification Preparation	1
Total Credits		32

A final grade of *C* or better is required in all 100-level technical courses to progress to 200-level technical courses.

## **Associate in General Studies**

Associate in General Studies Degree

(575) 527-7519

The Associate in General Studies degree program is intended for those wishing to tailor an associate degree to their own specific needs. It allows students to include courses from a variety of program areas. It is not intended, however, to be a substitute for the Associate of Arts or Associate of Science degree programs, which prepare students for transfer to bachelor's degree programs.

Students who have previously earned an associate degree from DACC or from any other institution are ineligible to receive the Associate in General Studies degree. Similarly, the Associate in General Studies degree

will not be awarded concurrently with any other associate degree offered by DACC.

Requirements for this degree are as follows:

- Complete a total of 66 credit hours (excludes noncredit courses, such as those with an "N" suffix);
- 2. Complete English and mathematics basic skills (See Basic Academic Skills for Associate Degree (p. 28));
- 3. Achieve a 2.0 cumulative GPA; and
- 4. Complete the last 15 hours at any DACC center or NMSU campus. Credits gained through CLEP or ACT, challenge credit, and/or credit from another college/university or correspondence school may not be used to fulfill this 15-hour requirement.

Under the SOCAD agreement, military personnel and their families are exempt from the requirements described in item 4 above.

Name: Brad Mazdra, Director of Academic Advising

Office Location: DASR 103D

Phone: (575) 527-7519

Website: http://dacc.nmsu.edu/ags/

## **Associate of Arts**

**Associate of Arts Degree** 

The Associate of Arts degree allows students to complete many of the general education requirements for a bachelor's degree while still at Doña Ana Community College. Students should take electives that apply toward the requirements of their chosen bachelor's degree.

## **Associate of Arts (60 credits)**

Students must complete 60 credits with a minimum GPA of 2.0. The last 15 credits must be completed at DACC or another campus of NMSU. New Mexico Common Core (p. 60) courses are can be found in the section titled, "Transfer Among New Mexico Institutions of Higher Education".

#### Area I: Communications

Select one from the following: 1, 2

College Algebra

**MATH 121G** 

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
	d Common Core Area I course listed in rent NMSU Catalog	
Select one from the	following:	3
ENGL 203G	Business and Professional Communication	
ENGL 211G	Writing in the Humanities and Social Sciences	
ENGL 218G	Technical and Scientific Communication	
• • •	d Common Core Area I course listed in rent NMSU Catalog	
COMM 253G	Public Speaking	3
or COMM 265G	Principles of Human Communication	
• • •	d Common Core Area I course listed in tion in the current NMSU Catalog	
Area II: Mathematics/Algebra		

MATH 210G	Mathematics Appreciation <sup>3</sup>	
A ST 251G	Statistics for Business and the Behavioral Sciences	
STAT 251G	Statistics for Business and the Behavioral Sciences	
or other Approv	ved Common Core Area II course listed in the Catalog	
Area III: Laboratory	Sciences	
Select two from th	ne following: <sup>2</sup>	8
ASTR 105G	The Planets	
ASTR 110G	Introduction to Astronomy	
BIOL 101G & 101GL	Human Biology and Human Biology Laboratory	
BIOL 111G & 111GL	Natural History of Life and Natural History of Life Laboratory	
BIOL 211G & 211GL	Cellular and Organismal Biology and Cellular and Organismal Biology Laboratory	
C S 171G	Introduction to Computer Science	
CHEM 110G	Principles and Applications of Chemistry	
CHEM 111G	General Chemistry I	
CHEM 112G	General Chemistry II	
GEOG 111G	Geography of the Natural Environment	
GEOL 111G	Introductory Geology	
GEOL 212G	The Dynamic Earth	
PHYS 110G	The Great Ideas of Physics	
PHYS 120G	Introduction to Acoustics	
PHYS 211G & 211GL	General Physics I and General Physics I Laboratory	
PHYS 212G & 212GL	General Physics II and General Physics II Laboratory	
PHYS 215G & 215GL	Engineering Physics I and Engineering Physics I Laboratory	
PHYS 216G & 216GL	Engineering Physics II and Engineering Physics II Laboratory	
or other Approv the current NM	ved Common Core Area III course listed in SU Catalog	
Area IV & V: Social,	/Behavioral Sciences and Humanities Fine Arts	
	n of 15 combined credits from Areas IV and credits in one of the two areas: <sup>2</sup>	15
	Behavioral Sciences:	
	the following: <sup>2</sup>	
ANTH 120G	Human Ancestors	
ANTH 125G	Introduction to World Cultures	
ANTH 201G	Introduction to Anthropology	
ANTH 202G	World Archaeology	
ANTH 203G	Introduction to Language and Cultural Anthropology	
C EP 110G	Human Growth and Behavior	
C J 101G	Introduction to Criminal Justice	
ECON 201G	Introduction to Economics	
ECON 251G	Principles of Macroeconomics	
ECON 252G	Principles of Microeconomics	
GEOG 120G	Culture and Environment	

	GOVT 100G	American National Government
	GOVT 110G	Introduction to Political Science
	JOUR 105G	Media and Society
	LING 200G	Introduction to Language
	PHLS 150G	Personal Health and Wellness
	PSY 201G	Introduction to Psychology
	S WK 221G	Introduction to Social Welfare
	SOC 101G	Introductory Sociology
	SOC 201G	Contemporary Social Problems
	W S 201G	Introduction to Women s Studies
	W S 202G	Representing Women Across Cultures
	or other Approved the current NMSU	d Common Core Area IV course listed in J Catalog
	Area V: Humanitie	es and Fine Arts:
	Select 2-3 from th	ne following: <sup>2</sup>
	ART 101G	Orientation in Art
	ART 110G	Visual Concepts
	ENGL 116G	Perspectives on Film
	ENGL 220G	Introduction to Creative Writing
	ENGL 244G	Literature and Culture
	HIST 101G	Roots of Modern Europe
	HIST 102G	Modern Europe
	HIST 110G	Making History
	HIST 201G	Introduction to Early American History
	HIST 202G	Introduction to Recent American History
	MUS 101G	An Introduction to Music
	MUS 201G	History of Jazz in Popular Music: A Blending of Cultures
	PHIL 100G	Philosophy, Law and Ethics
	PHIL 101G	The Art of Wondering
	PHIL 136G	The Quest for God
	PHIL 201G	Introduction to Philosophy
	PHIL 211G	Informal Logic
	PHIL 223G	Ethics
	THTR 101G	The World of Theatre
	other Approved C Irrent NMSU Catal	ommon Core Area V course listed in the og
-1		

#### **Electives**

Take the appropriate number of electives to reach 60 credits. IMPORTANT: Electives should be selected in consultation with an academic advisor, the NMSU Catalog and the bachelor's degree requirements to ensure course transfer. Second language courses are recommended if they are required by the intended bachelor's degree.

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PLEASE NOTE THE FOLLOWING: Nine or more credits, all under one prefix, may be substituted for a single general education (G) course with the same prefix. For example, ART 150, 155, 156 (totaling 9 credits) could be used in place of the general education course, ART 101G in the NMSU system.

**Total Credits** 60

A minimum grade of C- is required.

- Check applicable university catalog to determine appropriate course(s) for intended bachelor's degree.
- May not apply to all NMSU B.A. degree programs.

Name: DACC Academic Advising

Office Location: DASR 103 Phone: (575) 528-7272

Website: http://dacc.nmsu.edu/aad/

## **Associate of Science**

#### Associate of Science Degree

The Associate of Science degree allows students to complete many of the general education requirements for a bachelor's degree while still at the community college. Students should take electives that apply toward the requirements of their chosen bachelor's degree. The science electives may be taken at DACC or at NMSU.

## **Associate of Science (60 credits)**

Students must complete 60 credits with a minimum cumulative gradepoint average of 2.0. The last 15 credits must be completed at DACC or any other campus of NMSU. New Mexico Common Core (p. 60) courses can be found in the section titled, "Transfer Among New Mexico Institutions of Higher Education".

#### Area I: Communications

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
Select one from the	e following:	3
ENGL 203G	Business and Professional Communication	
ENGL 211G	Writing in the Humanities and Social Sciences	
ENGL 218G	Technical and Scientific Communication	
COMM 253G	Public Speaking	3
or COMM 265G	Principles of Human Communication	
•	s may also be met by other approved I courses listed in the current NMSU	
Area II: Mathematics	s/Algebra	3
Select one course f	rom the following: <sup>1</sup>	
MATH 121G	College Algebra	
MATH 142G	Calculus for the Biological and Management Sciences	
MATH 190G	Trigonometry and Precalculus	
MATH 191G	Calculus and Analytic Geometry I	
MATH 192G	Calculus and Analytic Geometry II	
MATH 291G	Calculus and Analytic Geometry III	
A ST 251G	Statistics for Business and the Behavioral Sciences	
STAT 251G	Statistics for Business and the Behavioral Sciences	
STAT 271G	Statistics for Psychological Sciences	
Area III: Laboratory S	Sciences	
Select two courses	from the following:	8

ASTR 105G	The Planets
ASTR 110G	Introduction to Astronomy
BIOL 101G & 101GL	Human Biology and Human Biology Laboratory
BIOL 111G & 111GL	Natural History of Life and Natural History of Life Laboratory
BIOL 211G & 211GL	Cellular and Organismal Biology and Cellular and Organismal Biology Laboratory
C S 171G	Introduction to Computer Science
CHEM 110G	Principles and Applications of Chemistry
CHEM 111G	General Chemistry I
CHEM 112G	General Chemistry II
GEOG 111G	Geography of the Natural Environment
GEOL 111G	Introductory Geology
PHYS 110G	The Great Ideas of Physics
PHYS 120G	Introduction to Acoustics
PHYS 211G & 211GL	General Physics I and General Physics I Laboratory
PHYS 212G & 212GL	General Physics II and General Physics II Laboratory
PHYS 215G & 215GL	Engineering Physics I and Engineering Physics I Laboratory
PHYS 216G & 216GL	Engineering Physics II and Engineering Physics II Laboratory

Other approved Common Core Area III courses listed in the current NMSU Catalog. Check applicable university catalog to determine appropriate course(s) for intended bachelor's

#### Area IV & V: Social/Behavioral Sciences and Humanities/Fine Arts

Select a minimum of 15 combined credits from Areas IV and

Select a minimum of 15 combined credits from Areas IV and V, with at least 9 credits in one of the two areas:				
Area IV: Social/Behavioral Sciences:				
Select 2-3 courses from the following:				
ANTH 120G Human Ancestors				
ANTH 125G Introduction to World Cultu	res			
ANTH 201G Introduction to Anthropolog	ју			
ANTH 202G World Archaeology				
ANTH 203G Introduction to Language a Anthropology	nd Cultural			
C EP 110G Human Growth and Behavi	or			
C J 101G Introduction to Criminal Ju-	stice			
ECON 201G Introduction to Economics				
ECON 251G Principles of Macroeconom	nics			
ECON 252G Principles of Microeconom	ics			
GEOG 120G Culture and Environment				
GOVT 100G American National Government	nent			
GOVT 110G Introduction to Political Sci	ence			
JOUR 105G Media and Society				
LING 200G Introduction to Language				
PHLS 150G Personal Health and Wellne	ess			
PSY 201G Introduction to Psychology				
SOC 101G Introductory Sociology				

SOC 201G	Contemporary Social Problems
S WK 221G	Introduction to Social Welfare
W S 201G	Introduction to Women s Studies
W S 202G	Representing Women Across Cultures

Other approved Common Core Area IV courses listed in the current NMSU Catalog. Check applicable university catalog to determine appropriate course(s) for intended bachelor's degree.

Area V: Humanities and Fine Arts:

Select 2-3 course	es from the following:
ART 101G	Orientation in Art
ART 110G	Visual Concepts
ENGL 116G	Perspectives on Film
ENGL 220G	Introduction to Creative Writing
ENGL 244G	Literature and Culture
HIST 101G	Roots of Modern Europe
HIST 102G	Modern Europe
HIST 110G	Making History
HIST 201G	Introduction to Early American History
HIST 202G	Introduction to Recent American History
MUS 101G	An Introduction to Music
MUS 201G	History of Jazz in Popular Music: A Blending of Cultures
PHIL 100G	Philosophy, Law and Ethics
PHIL 101G	The Art of Wondering
PHIL 136G	The Quest for God
PHIL 201G	Introduction to Philosophy
PHIL 211G	Informal Logic
PHIL 223G	Ethics
THTR 101G	The World of Theatre

Other approved Common Core Area III courses listed in the current NMSU Catalog. Check applicable university catalog to determine appropriate course(s) for intended bachelor's degree.

## Science, Technology, Engineering, Mathematics and Health (STEM-H) Electives

Select any course from within the following STEM prefixes (minimum of 21 credits): <sup>2</sup>

IMPORTANT: STEM-H electives should be selected in consultation with an academic advisor, the NMSU Catalog and the bachelor's degree requirements to ensure course transfer.

A E, A EN, A ST, AERT, AGRO, AHS, ANSC, ARCT, ASTR, AUTO, AXED, BCHE, BCIS, BCT, BIOL, CE, CS, C D, CHEM, CHME, CMI, CMT, DAS, DHYG, DMS, DRFT, E E, E S, E T, ELT, ENGR, ENVE, EPWS, FIRE, FSTE, FWCE, GENE, GEOG, GEOL, GERO, GPHY, HIT, HNDS, HORT, HVAC, I E, ICT, INMT, M E, MAT, MATH, MOLB, NA, NSC, NURS, OEBM, OECS, OEEM, OEET, OEGR, OEGS, OEMN, OETS, PE P, PHLS, PHTH, PHYS, RADT, RESP, RGSC, SMET, SOIL, SP M, STAT, SUR, SURG, TCEN, TOX, WATR, WELD, WERC, WSAM

In addition the following courses will meet STEM electives: ANTH 130G/130GL, 202G, 205, 316, 318, 355, 357V, 362, 378, 388, 389, 398, 402, 414, 419, 431, 434/L, 467, 472, 473/L, 474/L, 477, 488; HON 205G, 219G, 305V, 306V, 308V, 322V, 330V, 342V, 378V, 411V; PSY 310, 342, 374, 375, 376

Additional College Elective (should be chosen in consultation with an academic advisor and the bachelor's degree requirements.)

Total Credits 60

- A minimum grade of C- is required.
- Not all prefixes are offered at DACC.

Name: DACC Academic Advising

Office Location: DASR 103

**Phone:** (575) 528-7272

Website: http://dacc.nmsu.edu/aad/

# **Automation and Manufacturing Technology**

**Associate of Applied Science Degree** 

Certificates of Completion - Important information about the educational debt, earnings, and completion rates of students who attend these certificate programs can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

- · Automation and Manufacturing Technology
- · Basic Manufacturing and Bridge

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Electromechanical automation and manufacturing is an evolving, high-tech field, with applications in such areas as aerospace, food processing, and the pharmaceutical industry. It offers some of the highest salaries in the industrial sector, along with ample opportunities for rapid advancement. Automation and manufacturing technicians are responsible for production operation, as well as equipment monitoring, adjustment, maintenance, and repair in both routine and emergency situations.

Using modern industrial production equipment, DACC's Automation and Manufacturing Technology program provides training for desirable entry-level positions in electromechanical automated processes, as well as skills upgrading for those already working in the field. The program encourages the development of problem-solving skills, enabling students to adapt quickly to rapidly changing conditions brought on by automation and new technologies. The program is based on skills standards established for the high-tech manufacturing industry by the American Electronics Association's Workforce Skills Project, among others.

Students learn systems interfacing and automation using digital control circuits, programmable logic controllers (PLC), and computer-controlled interfaces. Hands-on preventive and corrective maintenance procedures are taught in modern laboratory facilities using the same state-of-the-art, automated production equipment found in the manufacturing industry.

The curriculum includes first-year DC, AC, digital logic, and solid-state electronic-circuit analysis courses from the Electronics Technology program.

Whether taking classes or working on a job site, students enrolled in this program will be required to perform the same job duties and be able to meet the same physical requirements that they will as a graduate in the field. Depending where they find employment, graduates may be required

to lift and carry 50 pounds safely, to work safely using hand and power tools, to work safely on electrical equipment, to ascend and descend ladders, and to stand, squat, stoop, or kneel for long periods of time.

## **Additional Graduation Requirements**

To receive either an associate degree or a certificate of completion, students are required to obtain a Career Readiness Certificate in the areas of Applied Math, Reading for Information, and Locating Information at the appropriate level for their respective degree option. To facilitate success in obtaining their Career Readiness Certificate, students will be required to take 1 credit of OETS 102 Career Readiness Certification Preparation. A program advisor can provide additional information.

Automation and Manufacturing Technology - Associate of Applied Science (p. 72)

Automation and Manufacturing Technology - Certificate of Completion (p. 73)

Basic Manufacturing and Bridge - Certificate of Completion (p. 73)

## MAT 102. Print Reading for Industry 3 Credits (2+2P)

Reading, interpretation, and revisions of industrial technical drawings common to manufacturing, Aerospace, machine parts, electrical, hydraulic, and Pneumatic drawings. Interpretation of engineering drawings and related shop calculations. Introduction Crosslisted with: AERT 113. Restricted to: Community Colleges only.

## MAT 105. Introduction to Manufacturing 3 Credits

Introduction to manufacturing evolution from basic assembly process to modern automated processes. Covers history, employability, soft skills, quality measurements, teamwork concept, production requirements, and considerations in plan layout and design. Minimum math proficiency of CCDM 114 required or math placement into MATH 120 or higher. Restricted to: Community Colleges only. Crosslisted with: AERT 112

# MAT 106. Applied Manufacturing Practices 3 Credits (2+2P)

Course will illustrate how various products are manufactured along with associated process. Mechanical behavior such as bending, cold worked, strained, work hardened, and heat transfer will be emphasized as well. In lab, students will learn how to make selected products starting from prints to complete projects including quality control. Crosslisted with: AERT 114. Restricted to: Community Colleges only.

# MAT 107. Computer Integrated Manufacturing PLTW 3 Credits (2+2P)

Applies principles of robotics and automation to Computer Aided Design (CAD) design. The course builds on computer solid modeling skills developed in Introduction to Engineering Design, and Design and Drawing Production. Students use Computer Numerical Control (CNC) equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing, and design analysis are included. Restricted to: Community Colleges only.

## MAT 108. Metrology, Safety and Quality Control for Manufacturing 3 Credits (2+2P)

Use of measuring tools in manufacturing process and quality control. These tools include: vernier and digital micrometers, calipers, height gauges, hole gauges, pin gauges, electrical pressure/flow, temperature measuring, stress/strain measurements, and non-destructive testing (eddy currents, magnetic particle, ultrasonic, bubble emission, x-ray, Gamma ray, radiography, visual inspection, ring test, taping & Zyglo). Instruction to use of coordinate machine while covering the safety issues that pertains to these types of tools and equipment. Restricted to: Community Colleges only.

## MAT 110. Machine Operation and Safety 3 Credits (2+2P)

Introduction to the operation and safety aspects of various types of machinery and equipment, including both mechanical and electrical machines, Rigid Tubing, and Flexible Lines. Maintenance and safety operation of industrial equipment will also be covered. Restricted to: Community Colleges only. Crosslisted with: AERT 115

#### MAT 130. Applied Industrial Electricity I 4 Credits (3+2P)

Electrical safety, AC and DC circuits, use and care of common measuring instrumentation, schematic and wiring diagrams, electromagnetism, National Electric Code branch circuits. Restricted to: Community Colleges only.

Prerequisite(s): MATH 120 or ELT 120 or OETS 118.

## MAT 135. Applied Industrial Electricity II 4 Credits (3+2P)

Relationship between motor power, speed, and torque, basic application of relay circuits, motor control circuits, inductance and capacitance factors, transformers, solid state devices circuits and applications.

Restricted to: Community Colleges only.

Prerequisite(s): MAT 130.

# MAT 145. Electromechanical Systems for Non-Majors 4 Credits (3+3P)

Electromechanical system interfacing. Principles and applications of preventive and corrective maintenance procedures on automated industrial production machines using system technical and maintenance manuals to develop troubleshooting procedures using systems block and schematic diagrams.

Prerequisite: consent of instructor.

## MAT 149. Industrial Mechanical Elements 3 Credits (2+2P)

Introduction to mechanical systems, theory, characteristics and uses for the different types of mechanical power transmission systems used in the industry, and related industrial safety practices. Topics include: safety, drives, shafts, maintenance and lubrication. Restricted to: Community Colleges only.

## MAT 151. Introduction to Metalworking I 3 Credits (2+2P)

Measuring instruments, including steel rules, combination and transfer tools, micrometers, vernier instruments, bevel instruments, and indicators. Shop safety and first aid, introduction to cutting fluids, saws and sawing, and drill presses. Restricted to: Community Colleges only.

# MAT 205. Statistical Controls for Manufacturing Technicians 3 Credits (2+2P)

Use of hardware and software for quality assurance to include the design of experiments, sampling techniques, SPC, control chart application and development, and process reliability. Restricted to: Community Colleges only.

Prerequisite(s): ELT 120 or MATH 120.

#### MAT 221. Cooperative Experience I

#### 1-6 Credits

Supervised cooperative work program. Student is employed in an approved occupation and rated by employer and instructor. Student meets in a weekly class. Graded S/U.

Prerequisite: consent of instructor.

### MAT 234. Industrial Electricity Maintenance

#### 3 Credits (2+2P)

Introduction into electrical systems, theory and uses for the different types of motors used in the industry and related industrial safety practices. DC, AC stepper and servo motors, motor speed and torque, motor performance, and efficiency, motor control fundamentals using variable frequency drives, vector controls, servo and stepper drives. Restricted to: Community Colleges only.

# MAT 235. Programmable Logic Controllers Pneumatics 2 Credits (1+2P)

Introduction to theory and application of pneumatic power transfer and control. Programmable logic controllers (PLC s) introduced as controlling elements for electropneumatic systems. Restricted to: Community Colleges only.

### MAT 240. Electromechanical Devices

### 4 Credits (2+4P)

Theory and application of electromechanical devices and digital control circuits. Includes AD and DA converters, pneumatics, hydraulics, programmable logic controllers, DC, AC, and stepper motors, and servomechanisms. Crosslisted with: AERT 211

**Prerequisite(s):** MAT 160 and (MAT 105 or (MAT 110 & MAT 135)). Restricted to: Community Colleges only.

# MAT 245. Electromechanical Systems 3 Credits (2+2P)

Electromechanical system interfacing. Principles and applications of preventive and corrective maintenance procedures on industrial production machines using system technical and maintenance manuals to develop troubleshooting procedures using systems block and schematic diagrams. Crosslisted with: AERT222.

**Prerequisite(s)/Corequisite(s):** AERT 211 or MAT 240. Prerequisite(s): ELT 135 and ELT 160. Restricted to: Community Colleges only.

#### MAT 265. Special Topics

#### 1-6 Credits

Course subtitled in the Schedule of Classes. May be repeated for a maximum of 12 credits.

Prerequisite: consent of instructor.

Name: Luis Meza, Department Chair

Office Location: DAWD 116A

Phone: (575)-527-7564

Website: https://dacc.nmsu.edu/mat/automation-manufacturing-

technology/

### Automation and Manufacturing Technology - Associate of Applied Science

### (66-67 credits)

#### Core Requirements

Core Requirements		
ENGL 111G	Rhetoric and Composition 1	4
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
MATH 190G	Trigonometry and Precalculus	4
Select one from the	e following:	3
ENGL 203G	Business and Professional Communication <sup>1</sup>	
ENGL 218G	Technical and Scientific Communication	
BOT 209	Business and Technical Communications	
Select one from the	e following:	3
PSY 201G	Introduction to Psychology <sup>1</sup>	
SOC 101G	Introductory Sociology <sup>1</sup>	
BMGT 240	Human Relations	
Select one from the	e following:	4
PHYS 211G & 211GL	General Physics I Laboratory <sup>1</sup>	
PHYS 215G & 215GL	Engineering Physics I and Engineering Physics I Laboratory <sup>1</sup>	
Technical Requiren	nents	
DRFT 114	Introduction to Solid Modeling	3
ELT 110	Electronics I	4
ELT 135	Electronics II	4
ELT 160	Digital Electronics I	4
ELT 205	Semiconductor Devices	4
ELT 225	Computer Applications for Technicians	3
ELT 235	Digital Electronics II	3-4
or MAT 240	Electromechanical Devices	
MAT 102	Print Reading for Industry	3
MAT 105	Introduction to Manufacturing	3
or MAT 107	Computer Integrated Manufacturing PLTW	
MAT 205	Statistical Controls for Manufacturing Technicians	3
MAT 235	Programmable Logic Controllers Pneumatics	2
MAT 245	Electromechanical Systems	3
0ETS 102	Career Readiness Certification Preparation	1
Select a related ele requirement	ctive, PLTW course, additional core	5
Total Credits		66-67

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus. Students planning to continue their studies at NMSU should choose these courses whenever possible.

### Automation and Manufacturing Technology - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (39 credits)

#### **Technical Requirements**

ELT 110	Electronics I	4
MATH 190G	Trigonometry and Precalculus	4
or ELT 120	Mathematics for Electronics	
ELT 135	Electronics II	4
ELT 160	Digital Electronics I	4
MAT 102	Print Reading for Industry	3
MAT 105	Introduction to Manufacturing	3
MAT 106	Applied Manufacturing Practices	3
MAT 108	Metrology, Safety and Quality Control for Manufacturing	3
MAT 110	Machine Operation and Safety	3
MAT 205	Statistical Controls for Manufacturing Technicians	3
MAT 235	Programmable Logic Controllers Pneumatics	2
MAT 245	Electromechanical Systems	3
Total Credits		39

Courses are identical to those offered at New Mexico State University
Las Cruces (main) Campus. Students planning to continue their
studies at NMSU should choose these courses whenever possible.

# Basic Manufacturing and Bridge - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (18 credits)

#### **Technical Requirements**

ELT 105	Basic Electricity and Electronics	3
MAT 102	Print Reading for Industry	3
MAT 105	Introduction to Manufacturing	3
MAT 106	Applied Manufacturing Practices	3
MAT 108	Metrology, Safety and Quality Control for Manufacturing	3
MAT 110	Machine Operation and Safety	3
Total Credits		18

# **Automotive Technology**

**Associate of Applied Science Degree** 

**Certificate of Completion** - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

The automobile has always created a steady demand for automotive technicians. Today, automotive service is one of the fastest-growing industries in the nation, and career opportunities are expanding rapidly.

The Automotive Technology program at Doña Ana Community College is certificated by NATEF/ASE (National Automotive Technicians Education Foundation/Automotive Service Excellence) and is designed to prepare the student for an entry-level position as a line technician, shop foreman, service writer, service manager, or business owner. Completing courses, certificates, and/or degrees from an NATEF certified school will enhance students' ability to gain employment as well as better prepare them to become NATEF certified.

Students are trained using state-of-the-art equipment. In the laboratories, they practice the same service and repair techniques required of any professional service technician working in the real world. Each class includes a number of carefully selected competencies that must be mastered in order to successfully complete the program. Students are trained in:

- · Engine service
- · Suspension and steering
- · Manual drive train and axles
- · Electrical systems
- Brakes
- · Fuel and emissions
- · Heating and air conditioning
- · Engine performance
- · Automatic transmission/transaxle

Classes are offered in the daytime and also at night to accommodate work schedules.

Full-time Automotive Technology students are required to purchase a personal set of automotive technician's tools at an approximate cost of \$1,100, an iPad at the approximate cost of \$400, and to provide their own safety glasses. In addition, they are strongly encouraged to purchase medical/accident insurance. The tool set includes the basic tools that most employers require for an entry-level position. Part-time students are required to purchase only those tools required by the specific course(s) in which they are enrolled.

All Automotive Technology students are encouraged to join SkillsUSA, membership in which provides students an opportunity to develop their leadership skills and to become proficient in public speaking and parliamentary procedure. SkillsUSA also offers students an opportunity to demonstrate their occupational skills through competitions that are held annually on both the state and national level.

Whether taking classes or working on a job site, students enrolled in this program will be required to perform the same job duties and be able to meet the same physical requirements that they will as a graduate in the field. Graduates may be required to lift and carry 50 pounds safely, work

safely using hand and power tools and electrical equipment, and stand, squat, stoop, or kneel for long periods of time.

### **Additional Graduation Requirements**

To receive either an associate degree or a certificate of completion, students are required to obtain a Career Readiness Certificate in the areas of Applied Math, Reading for Information, and Locating Information at the appropriate level for their respective degree option. To facilitate success in obtaining their Career Readiness Certificate students will be required to take 1 credit of OETS 102 Career Readiness Certification Preparation. A program advisor can provide additional information.

Automotive Technology - Associate of Applied Science (p. 74)

Automotive Technology - Certificate of Completion (p. 75)

#### **AUTO 102. Electrical Measuring Instruments**

2 Credits (1+2P)

Selection, operation, and care of electrical measuring instruments.

### AUTO 103. Auto Mechanics Fundamentals

4 Credits (2+4P)

Theory and operation of all areas of auto mechanics. Basic repair and maintenance operations.

### **AUTO 112. Basic Gasoline Engines**

5 Credits (2+6P)

Principles of gasoline engine operation. Identification, design, function of engine components; engine disassembly and reassembly; trouble shooting, and rebuilding heads.

# AUTO 117. Electronic Analysis and Tune-Up of Gasoline Engines 5 Credits (2+6P)

Theory and operation of ignition and emission control systems and fuel system. Use of troubleshooting equipment and diagnostic equipment.

Prerequisite: AUTO 120 or consent of instructor.

#### **AUTO 118. Technical Math for Mechanics**

3 Credits (2+3P)

Mathematical applications for the automotive trade.

#### AUTO 119. Manual Transmission/Clutch

5 Credits (2+6P)

Manual transmission, transfer cases, and clutch operating principles. Students will diagnose problems, remove and replace, disassemble, repair, and assemble units.

#### **AUTO 120. Electrical Systems**

4 Credits (2+4P)

Troubleshooting and repair of starters, alternators, and associated circuits. Reading electrical diagrams, diagnosis and repair of electrical accessories.

Prerequisite: consent of instructor.

#### AUTO 125. Brakes

5 Credits (2+6P)

Theory of operation, diagnosis, repair, and maintenance of disc and drum brakes; safety and use of special tools.

# AUTO 126. Suspension, Steering, and Alignment 5 Credits (2+6P)

Types of steering systems, suspension maintenance and repair, four-wheel alignment procedures.

#### **AUTO 127. Basic Automatic Transmission**

4 Credits (2+4P)

Theory and operation of the automatic transmission; maintenance, troubleshooting, diagnosis, and repair of components.

### AUTO 130. Introduction to Transportation Industry

3 Credits

State and national traffic statutes that relate to the trucking industry. A Commercial Driver's License Learner's Permit will be obtained through successful completion of the course.

**Prerequisites:** Must be 18 years of age, have a current driver's license and consent of instructor.

#### AUTO 131. Class A CDL

3 Credits (1+4P)

Instruction in how to perform proper pre-trip inspection; hands-on training with a tractor-trailer unit on the backing range and street driving to develop skills necessary to pass Class A DCL exam. Restricted to Community Colleges campuses only.

**Prerequisite(s):** Class A CDL restricted license (permit) and either restriction of D.O.T.

# AUTO 132. Automotive Air-Conditioning and Heating Systems 4 Credits (2+4P)

Theory and operation, reading schematic diagrams, troubleshooting, repair, and replacement operations performed.

# AUTO 137. Fuel Systems and Emission Controls 4 Credits (2+4P)

Covers theory and operation of fuel system and emission control. Troubleshooting, vacuum diagrams, overhaul, repair and adjustment of carburetion and fuel injection.

Prerequisites: AUTO 117 or consent of instructor.

#### **AUTO 139. Automotive Computer Controls**

4 Credits (2+4P)

Same as OEPM 139.

#### **AUTO 221. Cooperative Experience I**

1-6 Credits

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U.

Prerequisite: consent of instructor.

# AUTO 255. Special Problems in Automotive Technology 1-5 Credits

Individual studies in areas directly related to automotive technologies. May be repeated for a maximum of 12 credits.

Prerequisite: consent of instructor.

#### **AUTO 295. Special Topics**

1-6 Credits

Topics to be announced in the Schedule of Classes.

Name: Terry Mount, Department Chair

Office Location: DATS 155A

Phone: (575) 527-7584

Website: https://dacc.nmsu.edu/auto/

# Automotive Technology - Associate of Applied Science

### (68 credits)

#### **Core Requirements**

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
Select one from the	following:	3
BMGT 240	Human Relations	
PSY 201G	Introduction to Psychology <sup>1</sup>	
SOC 101G	Introductory Sociology 1	
Related Requireme	nts	
Select one from the	following:	3
BOT 209	Business and Technical Communications	
ENGL 203G	Business and Professional Communication <sup>1</sup>	
ENGL 218G	Technical and Scientific Communication	
Select one from the	e following:	3
C S 110	Computer Literacy <sup>1</sup>	
OECS 105	Introduction to Information Technology	
OECS 227	Computer Applications for Technicians	
DRFT 190	Finding and Maintaining Employment	2
OETS 102	Career Readiness Certification Preparation	1
AUTO 118	Technical Math for Mechanics	3
or OETS 118	Mathematics for Technicians	
Approved BMGT ele	ective	3
Approved elective		3
Technical Requirem	nents	
AUTO 112	Basic Gasoline Engines	5
AUTO 117	Electronic Analysis and Tune-Up of Gasoline Engines	5
AUTO 119	Manual Transmission/Clutch	5
AUTO 120	Electrical Systems	4
AUTO 125	Brakes	5
AUTO 126	Suspension, Steering, and Alignment	5
AUTO 127	Basic Automatic Transmission	4
or AUTO 132	Automotive Air-Conditioning and Heating System	ns
AUTO 137	Fuel Systems and Emission Controls	4
AUTO 221	Cooperative Experience I	3
Total Credits		68

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

# **Automotive Technology - Certificate** of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (17-20 credits)

**Technical Requirements** 

AUTO 120	Electrical Systems	4
OETS 102	Career Readiness Certification Preparation	1
Select 12-15 credits	from the the following:	12-15
AUTO 112	Basic Gasoline Engines	
AUTO 117	Electronic Analysis and Tune-Up of Gasoline Engines	
AUTO 119	Manual Transmission/Clutch	
AUTO 125	Brakes	
AUTO 126	Suspension, Steering, and Alignment	
AUTO 127	Basic Automatic Transmission	
AUTO 132	Automotive Air-Conditioning and Heating Systems	
AUTO 137	Fuel Systems and Emission Controls	
Total Credits		17-20

## **Building Construction Technology**

**Certificate of Completion** - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

The certificate in Building Construction Technology is a one-year program that prepares students for entry-level positions within the growing construction industry. Affording much hands-on participation, the curriculum includes safety, basic math skills, blueprint reading, use of hand and power tools, basic surveying, wood building materials, concrete work, masonry skills, painting, and communication skills. This competency- and performance-based program follows nationally recognized NCCER certification standards.

Students may enroll on a full-time or part-time basis. Many courses are offered in the evening to accommodate students' work schedules.

All Building Construction Technology students are encouraged to join the student chapter of the Las Cruces Home Builders Association (LCHBA). Membership provides students an opportunity to develop their leadership skills, become proficient in public speaking and parliamentary procedures, network with industry professionals, attend trainings provided by LCHBA, and attend other relevant professional development activities. Through their membership, students will have the opportunity to participate in service-learning events that support the local community. Students may be able to demonstrate their technical skills at the National Home Builders Conference.

Whether taking classes or working on a job site, students enrolled in this program will be required to perform the same job duties and be able to meet the same physical requirements that they will as a graduate in the field. Depending where they find employment, graduates may be required to

- · work in inclement weather,
- · lift up to 50 pounds from the ground,
- have good eye-hand coordination,
- work safely around electrical hazards using the appropriate safety equipment,
- · work safely using hand and power tools,
- · ascend and descend stairs and ladders,
- · and stand, squat, or kneel for long periods of time.

### **Additional Graduation Requirements**

To receive either an associate degree or a certificate of completion, students are required to obtain a Career Readiness Certificate in the areas of Applied Math, Reading for Information, and Locating Information at the appropriate level for their respective degree option. A program advisor can provide additional information (575) 527-7592.

Building Construction Technology - Certificate of Completion (p. 77)

#### BCT 100. Building Trades I 8 Credits (2+12P)

Equipment and general safety. Human relations, building construction surveying, footings, foundation form work, framing, sheathing, insulation. Basic electrical wiring and plumbing. Classroom instruction, on-the-job training, and problem solving.

#### **BCT 101. Introduction to Construction I**

#### 2 Credits (2+1P)

Basic safety, including personal protective equipment, how to perform basic construction tasks safely, and what to do if an accident occurs. Includes basic construction methods. May be repeated up to 2 credits. Restricted to Community Colleges campuses only.

Corequisite(s): BCT 102 and BCT 103.

#### BCT 102. Introduction to Construction II

#### 2 Credits (2+1P)

Introduction to power and hand tools, blueprints, and basic rigging hardware and techniques. May be repeated up to 2 credits. Restricted to Community Colleges campuses only.

Corequisite(s): BCT 101 and BCT 103.

## BCT 103. Introduction to Construction Laboratory 3 Credits

Provides students the opportunity to practice skills they have acquired in BCT 101 and BCT 102. It includes task-oriented projects in which students can apply many of the skills and knowledge that have been presented throughout the National Center for Construction and Education Research (NCCER) Carpentry Program. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Corequisite(s): BCT 101 and BCT 102.

#### BCT 104. Woodworking Skills I

#### 3 Credits (1+4P)

Use and care of hand tools and elementary power tools, safety procedures, and supervised project construction.

#### BCT 105. Woodworking Skills II

#### 3 Credits (1+4P)

Advanced woodworking skills to include use of advanced power tools, power tool safety, and supervised construction.

Prerequisite: BCT 104 or consent of instructor.

#### **BCT 106. Woodworking Theory and Practice**

#### 3 Credits (2+2P)

History of wood manufacturing, industrial techniques, wood characteristics, stains and finishes. Design and construction of minor wood projects.

#### BCT 107. Painting I

#### 4 Credits (2+4P)

Types and applications of paints and clear coatings. Use of fasteners, caulks, and sealants. Restricted to: Community Colleges only.

### BCT 109. Plumbing I

#### 3 Credits (2+3P)

Covers orientation to the trade. Students will learn about materials used in the plumbing industry and the different types of plumbing fixtures. It includes task-oriented projects in which the students apply many of the skills and knowledge that are presented through the National Center for Construction and Education Research (NCCER) Plumbing Program. May be repeated up to 3 credits.

**Prerequisite(s)/Corequisite(s):** BCT 101, BCT 102. Restricted to Community Colleges campuses only.

# BCT 110. Blueprint Reading for Building Trades 4 Credits (2+4P)

Same as DRFT 151, OEET 101, OEPB 110.

# BCT 111. Small Equipment Maintenance and Repair 4 Credits (2+4P)

Covers small engine theory, troubleshooting and repair, auto maintenance, hydraulic theory and repair lubricants, batteries and scheduled tool maintenance. Restricted to: Community Colleges only.

#### **BCT 114. Basic Carpentry**

#### 3 Credits (1+4P)

Covers orientation to the trade; wood building materials, fasteners, and adhesives; detailed description and explanations of hand-operated and power tools, including safety; framing basics including laying out and constructing of wood floors, walls and ceilings and includes roughing in of door and window openings. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Corequisite(s): BCT 115 and BCT 116.

#### BCT 115. Carpentry Level I

#### 3 Credits (1+4P)

Describes the various kinds of roofs and provides instructions for lay out of the different roofing systems. Describes the various types of windows, skylights, and exterior doors and provides instruction for installation. May be repeated up to 3 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

Corequisite(s): BCT 114 and BCT 116.

#### **BCT 116. Basic Carpentry Lab**

#### 2 Credits

Provides students the opportunity to practice skills they have acquired in BCT 114 and BCT 115. It includes task-oriented projects in which students can apply many of the skills and knowledge that have been presented throughout the National Center for Construction and Education Research (NCCER) Carpentry Program. May be repeated up to 2 credits. Restricted to Community Colleges campuses only.

Corequisite(s): BCT 114 or BCT 115.

#### BCT 117. Plumbing 1A

#### 3 Credits (2+2P)

This course will introduce students to the plumbing profession. Students will become familiar with the tasks and responsibilities of plumbing professionals in the construction industry and gain a basic knowledge of the plumbing field. Restricted to Community Colleges campuses only.

#### **BCT 118. Math for Building Trades**

#### 3 Credits

Geometry, algebra, arithmetic, and basic trigonometry pertaining to mathematical applications in the building trades field. Same as OEET 118, DRFT 118, OEPB 118.

Prerequisite: CCDM 103 N.

#### BCT 119. Plumbing 1B

#### 3 Credits (2+2P)

This course continues the introduction of students to the plumbing profession. Students will become familiar with the tasks and responsibilities of plumbing professionals in the construction industry and gain a basic knowledge of the plumbing field. Restricted to Community Colleges campuses only.

Prerequisite(s): BCT 117.

# BCT 130. Professional Development and Leadership 1 Credit

As members and/or officers of various student professional organizations, students gain experience in leadership, team building, and community service. Students competing or participating in Skills USA are required to register for the course. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: BCT majors. S/U Grading (S/U, Audit). Restricted to: Community Colleges only.

#### **BCT 150. Forklift Operation**

#### 1 Credit

Classroom instruction and hands-on practice to prepare students to operate a forklift safely in the workplace. Students will have the opportunity to earn a forklift operator's permit. Consent of Instructor required. Restricted to Community Colleges campuses only.

#### BCT 200. Building Trades II

#### 8 Credits (2+12P)

Continuation of BCT 100: roofing; exterior and interior finish; masonry; door, window, and cabinet installation.

#### **BCT 206. Advanced Cabinetmaking**

#### 3 Credits (1+3P)

Advanced cabinetmaking skills, to include expert use of hand and power tools, professional construction and finishing techniques.

Prerequisites: BCT 105, BCT 106, or consent of instructor.

#### BCT 209. Plumbing II 3 Credits (2+3P)

Continuation of BCT 109. Provides students the opportunity to gain more practice in the skills and knowledge learned in Plumbing I. Students will install fixtures and run the various plumbing supply lines from Plumbing Level I. The course included hands on projects in which the students apply many of the competencies that have been presented through the National Center for Construction and Education Research (NCCER) Plumbing Program. May be repeated up to 3 credits.

### Prerequisite(s)/Corequisite(s): BCT 109. BCT 217. Building and the Environment

#### 3 Cradite

Introduction to LEED's, and Green Building Fundamentals, sustainability, sustainable design and green building evaluating cost implication of green building. Describes site development; managing site water runoff, improving a project's water use efficiency. Discusses renewable energy sources, and introduces student to generating power on-site using renewable energy sources, improving a building's indoor environment quality, improving the building industries' environmental performance and environmental aspects of building maintenance, re-use and conservation.Restricted to: Community Colleges only.

#### BCT 218. Plumbing 2

#### 4 Credits (2+4P)

This course builds on the skills and knowledge students have gained in previous BCT introduction to plumbing courses, focusing on installation of plumbing systems. Students will become familiar with the tasks and responsibilities of plumbing professionals in the construction industry and gain a basic knowledge of the plumbing field.

Prerequisite(s): BCT 117 and BCT 119.

#### BCT 219. Weatherization in Construction

#### 3 Credits (2+2P)

Introduction to industry weatherization standards and practices utilized in the construction of buildings for the purpose of energy conservation. Economic and environmental impacts of the use of energy in heating and cooling building will be examined.

Prerequisite(s): BCT 101, BCT 102 and BCT 103.

#### BCT 221. Cooperative Experience I

#### 1-4 Credits

Supervised cooperative work program. Student is employed in an approved occupation and is supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U.

Prerequisite: consent of instructor.

#### **BCT 222. Alternative Building**

#### 3 Credits (2+2P)

Exploration of different types of building techniques and materials other than the traditional wood framed structures. Materials and techniques will include adobe, straw bale, insulated concrete forms, rammed earth and structural insulated panels with an emphasis on "green building" methods. Restricted to: Community Colleges only.

#### **BCT 255. Special Topics**

#### 1-6 Credits (1-6)

Topics to be announced in the Schedule of Classes. May be repeated up to 12 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

#### BCT 290. Special Problems in Building Technology

#### 1-4 Credits

Individual studies in areas directly related to building technologies.

Prerequisite: consent of instructor.

Name: Chipper Moore, Department Chair

Office Location: DADM 200D

Phone: (575) 527-7592

Website: https://dacc.nmsu.edu/bct/

# **Building Construction Technology - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (44-45 credits)

**NOTE:** Students must receive a final grade of *C*- or better in all BCT and OETS courses, and achieve a cumulative grade-point average of at least 2.0.

#### **Related Requirements**

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### **Business Management**

**Associate of Business Occupations Degree** 

- · Finance and Banking Services Emphasis
- · General Management Emphasis
- · Retail Marketing and Sales Emphasis

Certificates of Completion - Important information about the educational debt, earnings, and completion rates of students who attend these certificate programs can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

- General
- · Business Fundamentals
- · Advertising Representative

If you've always wanted to work in the fast-paced world of business, the Business Management program at DACC is your ticket to success. The Business Management program meets the need for supervisors and managers that continues to grow in business organizations, as our students are filling those positions. The experience and education you receive through the Business Management program prepare you to assume the responsibility of supervising and managing business operations.

The Business Management program, through a curriculum of practical training courses, general education courses, and selected elective classes that target a specific industry or business, can help prepare you for an entry-level supervisory or management position. You may take courses as diverse as Introduction to Supervision, Business Law, Economics, Computer Spreadsheet Applications, and Business Finance.

The program also includes fifteen credit hours of electives, allowing you to customize your course of study and concentrate in a particular

instructional area. You may choose courses from three areas of emphasis:

- · General Management
- · Retail Marketing and Sales
- · Finance and Banking

You also may customize an option by seeking advice from a faculty member to plan a series of elective courses that match your interest and career goals.

Graduates of the Business Management program can apply most of their courses toward either of two bachelor's degree programs at NMSU:

- agricultural economics and agricultural business (http:// catalogs.nmsu.edu/nmsu/agricultural-consumer-environmentalsciences/agricultural-economics-business) (offered by the College of Agricultural, Consumer, and Environmental Sciences), or
- · applied studies (offered by the College of Arts and Sciences).

Business Management - Associate of Business Occupations (p. 81)

General Business Management - Certificate of Completion (p. 82)

Business Fundamentals - Certificate of Completion (p. 81)

Advertising Representative - Certificate of Completion (p. 81)

#### **BMGT 110. Introduction to Business**

#### 3 Credits

Terminology and concepts of the business field. Role of accounting, computers, business management, finance, labor, and international business in our society. Restricted to: Community Colleges only.

#### **BMGT 112. Banks and Your Money**

#### 3 Credits

Banking in today's economy: language and documents of banking, check processing, teller functions, deposit function, trust services, bank bookkeeping, loans, and investments. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

#### **BMGT 126. Retail Management**

#### 3 Credits

Phases of retailing, including types of retail outlets and basic problems of organizing and operating a retail store. Restricted to: Community Colleges only.

#### BMGT 132. Principles of Selling

#### 3 Credits

Analysis of customer behavior, persuasive communication, process of the sales interview. Restricted to: Community Colleges only.

#### BMGT 136. Fundamentals of Buying and Merchandising 3 Credits

Covers operational aspects of procuring and selling merchandise for the retail store. Procedures covered are buying, receiving, pricing strategies, sales promotions and operational controls. Restricted to: Community Colleges only.

#### BMGT 138. Advertising

#### 3 Credits

Psychological approach to non-personal consumer persuasion; applied techniques in media selection, layout mechanics, production methods, and campaign structures. Restricted to: Community Colleges only.

#### BMGT 140. Principles of Supervision I

#### 3 Credits

Principles of supervision emphasizing planning, organization, rating of employees and procedures to develop good morale. Introduction to interpretation of case studies. Restricted to: Community Colleges only.

#### **BMGT 150. Income Taxation**

#### 3 Credits

Federal income taxation of individuals, sole proprietorships, partnerships, corporations, trusts, and estates with particular reference to CLU, life insurance and annuities. Restricted to: Community Colleges only.

#### BMGT 155. Special Topics I

#### 1-3 Credits (1-3)

Introductory special topics of lower division level work that provides a variety of timely subjects and content material. May be repeated up to 9 credits. Restricted to Community Colleges campuses only.

#### BMGT 160. Self-Presentation and Etiquette

#### 3 Credits

Introduction to business etiquette based on tradition, social expectations, and professional behavior standards. Restricted to: Community Colleges only.

### BMGT 191. ENACTUS (Students in Free Enterprise)

#### 1 Credit

ENACTUS is an international organization promoting and teaching business entrepreneurship. Students learn teamwork, leadership, and networking skills by participating in regional and national business competitions and community service projects. May be repeated up to 6 credits. Restricted to: BMGT or Pre-Business majors. Restricted to Community Colleges only.

#### **BMGT 201. Work Readiness and Preparation**

#### 3 Credits

Instruction in methods of selection, seeking, acquiring and retaining employment. Addresses work success skills, business etiquette, employer expectation and workplace norms. Restricted to Community Colleges campuses only.

#### **BMGT 205. Customer Service in Business**

#### 3 Credits

Establishes concepts of service quality in relationship to business success and maximization of returns to the organization. Explores techniques for delivering quality and service in a variety of business settings. Restricted to: Community Colleges only.

#### **BMGT 208. Business Ethics**

#### 3 Credits

The course examines the underlying dimensions of ethics in business, investigating ethics in relationship to the organization, the stakeholders, and society. Exploration of ethical issues from a historical context, analyzing actual events through the lens of business decision making, including legal/political, sociocultural, economic, and environmental considerations will be undertaken. Restricted to Community Colleges campuses only.

#### BMGT 210. Marketing

#### 3 Credits

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. May be repeated up to 3 credits. Crosslisted with: MKTG 203. Restricted to Community Colleges campuses only.

Prerequisite(s): BMGT 110 or BUSA 111.

#### BMGT 212. Supervisory and Leadership Trends

#### 3 Credits

Current trends in marketing, merchandising, sales promotion and management; in manufacturing, merchandising and service types of businesses. Extensive use of practical student project. Restricted to Community Colleges only.

Prerequisite(s): BMGT 110 or BUSA 111.

#### **BMGT 213. Consumer Lending**

#### 3 Credits

Principles of credit evaluation, types of credit, marketing, collections, legal aspects, installment lending, leasing management, insurance, and rate structure and yields. Restricted to: Community Colleges only. **Prerequisite(s):** BMGT 112.

#### BMGT 215. Banks and the Money Supply

#### 3 Credits

Practical application of the economics of money and banking. Required of all students electing the banking option. Restricted to: Community Colleges only.

#### BMGT 216. Business Math

#### 3 Credits

Application of basic mathematical procedures to business situations, including percentage formula applications, markup, statement analysis, simple and compound interest, and annuities. Restricted to: Community Colleges only.

Prerequisite(s): CCDM 103 N or satisfactory math score on ACT.

#### BMGT 221. Internship I

#### 1-3 Credits (1-3)

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and instructor. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: BMGT majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

#### **BMGT 225. Introduction to Commercial Lending**

#### 3 Credits

Commercial lending overview, the lending process, portfolio management, and regulation and business development. Restricted to: Community Colleges only.

Prerequisite(s): BMGT 112.

#### BMGT 231. Legal Issues in Business

#### 3 Credits

Survey of the legal environment of business and common legal principles including: the sources of law, dispute resolution and the U.S. court systems, administrative law, tort law, contract law, agency and employment law, business structure and governance, ethics and corporate social responsibility. Explores sources of liability and presents strategies to minimize legal risk. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

#### **BMGT 232. Personal Finance**

#### 3 Credits

Budgeting, saving, credit, installment buying, insurance, buying vs. renting a home, income tax statement preparation, investment, and estate disposal through will and trust. Restricted to: Community Colleges only.

#### **BMGT 235. Credit Administration**

#### 3 Credits

Covers factors influencing and determining loan policy: methods of credit investigation and analysis, credit techniques, credit problems, and types of loans. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): BMGT 112.

#### **BMGT 239. Visual Marketing Techniques**

#### 3 Credits

Provides a basic understanding of visual marketing and merchandising techniques. The importance of effective presentation of a store and its merchandise is covered, as is line, balance and artistic display. Restricted to: Community Colleges only.

#### **BMGT 240. Human Relations**

#### 3 Credits

Human interactions in business and industrial settings. Motivation and learning experiences as related to problems of the worker and supervisor. Practical applications of human behavior. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

### BMGT 248. Introduction to Quality Management

Introductory practices of total quality management practices aimed at all levels of an organization to continually improve performance to include competitiveness in today s business world. Restricted to: Community Colleges only.

#### BMGT 250. Diversity in the Workplace

#### 3 Credits

Concepts of culture, diversity, prejudice, and discrimination within the domestic workforce/society. Restricted to Community Colleges campuses only.

Prerequisite(s): BMGT 110 or BUSA 111.

#### **BMGT 260. Real Estate Practice**

#### 3 Credits

This course is a requirement for licensure in real estate for the state of New Mexico. Topics covered include: real estate finance, settlement, foreclosure, federal taxation, valuation and appraisal, land descriptions and math skills. These topics are requirements of the New Mexico Real Estate Commission. Restricted to: Community Colleges only.

#### BMGT 264. Real Estate Law

#### 3 Credits

This course is a requirement for licensure in real estate for the state of New Mexico. Topics covered include: ownership of real estate, real estate brokerage relationships, contracts, environmental concerns and federal laws that affect real estate. These topics are requirements of the New Mexico Real Estate Commission. Restricted to: Community Colleges only. Crosslisted with: PL S 264

### BMGT 268. Real Estate Broker's Basic Course

#### 3 Credits

State of New Mexico specific criteria that apply to real estate licensure: purchase agreements, listing agreements, New Mexico Rules and Regulations, and landlord tenant legislation. Restricted to: Community Colleges only.

Prerequisite(s): BMGT 260 & BMGT 264.

#### **BMGT 272. E-Commerce Operations**

#### 3 Credits

Includes the many forms of e-commerce and emerging technologies that will impact the business of tomorrow. Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 105 or CS 110 or BCIS 110.

#### BMGT 275. Entrepreneur I

#### 3 Credits

Introduces students to the concept of entrepreneurship and the the process of business startups. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): BMGT 110 or BUSA 111.

#### **BMGT 277. Small Business Management**

#### 3 Credits

This course is designed to acquaint the student with the opportunities encountered in the management and operations of a small business enterprise. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): BMGT 275.

#### **BMGT 280. Introduction to Human Resources**

#### 3 Credits

Personnel functions encompassing job analysis, recruitment, selection, training, appraisals, discipline, and terminations. Restricted to Community Colleges campuses only.

Prerequisite(s): BMGT 110 or BUSA 111 or B A 104.

## BMGT 282. Introduction to International Business Management 3 Credits

Overview of the social, economic and cultural environment of international business transactions. Restricted to Community Colleges only.

Prerequisite(s): BMGT 110 or BUSA 111.

## BMGT 285. Introduction to Manufacturing Operations 3 Credits

Introduction to issues related to manufacturing, including an overview of the production function, product design and development, location, layout, forecasting, planning, purchasing, materials/inventory, and quality management. Restricted to Community Colleges campuses only.

Prerequisite(s): (BMGT 110 or BUSA 111) and (BMGT 140 or MGT 201).

#### **BMGT 286. Introduction to Logistics**

#### 3 Credits

Overview on the planning, organizing, and controlling of transportation, inventory maintenance, order processing, purchasing, warehousing, materials, handling, packaging, customer service standards, and product scheduling. Restricted to: Community Colleges only.

### BMGT 287. Introduction to Export/Import

#### 3 Credits

Procedures and documentation for exporting and importing products. Emphasis on NAFTA regulations and other U.S. border operations crossings. Restricted to Community Colleges only.

Prerequisite(s): BMGT 110 or BUSA 111.

#### **BMGT 290. Applied Business Capstone**

#### 3 Credits

Refines skills and validates courses taken in BMGT program. Business simulations, case studies and projects used to test and improve business practices. Student must be within 25 credits of graduation. May be repeated up to 3 credits. Restricted to: BMGT majors. Restricted to Community Colleges campuses only.

**Prerequisite(s):** (BMGT 110 or BUSA 111), and (BMGT 140 or MGT 201), and (BMGT 240 or SOC 101 or PSY 201), and MKTG 203 and FIN 206.

#### **BMGT 298. Independent Study**

#### 3 Credits

Individual studies directed by consenting faculty with prior approval of department chair. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): Sophomore standing with 3.0 GPA.

Name: Kim Seifert, Department Chair

Office Location: DAEM 100G Phone: (575) 527-7640

Website: http://dacc.nmsu.edu/bmgt

# Advertising Representative -Certificate of Completion

### (15 credits)

**NOTE:** If declared as a major, this certificate program is not eligible for financial aid.

#### **Technical Requirements**

BMGT 132	Principles of Selling	3
BMGT 138	Advertising	3
MKTG 203	Introduction to Marketing <sup>1</sup>	3
or BMGT 210	Marketing	
CMT 140	Print Media I	3
CMT 180	Design Principles	3
Total Credits		15

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

# **Business Fundamentals - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (16-17 credits)

#### **Technical Requirements**

ENGL 111G	Rhetoric and Composition 1, 2	4
BMGT 110	Introduction to Business	3
or BUSA 111	Introduction to Business	
Select 3-4 credits from the following:		3-4
BOT 106	Business Mathematics	

	_	
MATH 120	Intermediate Algebra <sup>1</sup>	
MATH 121G	College Algebra	
MATH 142G	Calculus for the Biological and Management Sciences	
MATH 190G	Trigonometry and Precalculus	
MATH 191G	Calculus and Analytic Geometry I	
MATH 192G	Calculus and Analytic Geometry II	
MATH 210G	Mathematics Appreciation	
MATH 291G	Calculus and Analytic Geometry III	
Select 3 credits fro	m the following:	3
BMGT 240	Human Relations	
PSY 201G	Introduction to Psychology <sup>1</sup>	
SOC 101G	Introductory Sociology <sup>1</sup>	
Select 3 credits fro	m the following:	3
FIN 206	Introduction to Finance	
MGT 201	Introduction to Management	
MKTG 203	Introduction to Marketing	
Total Credits		16-17

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

# **Business Management - Associate of Business Occupations**

### (70 credits)

#### Core/General Education Requirements

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
MATH 120	Intermediate Algebra <sup>1</sup>	3
or BOT 106	Business Mathematics	
C S 110	Computer Literacy <sup>1</sup>	3
or OECS 105	Introduction to Information Technology	
BMGT 208	Business Ethics	3
Select one from the	following:	3
BOT 209	<b>Business and Technical Communications</b>	
ENGL 203G	Business and Professional Communication <sup>1</sup>	
ENGL 218G	Technical and Scientific Communication	

#### Related/Professional Requirements

ACCT 221	Principles of Accounting I (Financial) 1	3
or BOT 120	Accounting Procedures I	
ECON 201G	Introduction to Economics <sup>1</sup>	3
Select 3 credits for	rom the following:	3
OECS 215	Spreadsheet Applications	
OECS 220	Database Application and Design	
BOT 211	Information Processing I	
BOT 215	Spreadsheet Applications	
BOT 217	Powerpoint Presentation	
BUSA 111	Introduction to Business 1	3

This course requires a grade of C or better.

or BMGT 110	Introduction to Business	
MGT 201	Introduction to Management <sup>1</sup>	3
or BMGT 140	Principles of Supervision I	
FIN 206	Introduction to Finance 1	3
MKTG 203	Introduction to Marketing <sup>1</sup>	3
or BMGT 210	Marketing	
Technical/Major R	equirements	
BMGT 201	Work Readiness and Preparation	3
BMGT 221	Internship I	3
BLAW 316	Legal Environment of Business <sup>1</sup>	3
or BMGT 231	Legal Issues in Business	
BMGT 240	Human Relations	3
BMGT 290	Applied Business Capstone	3
Area of Emphasis		
Select 15 credits from the following areas of emphasis (or as approved by advisor): <sup>2</sup>		
Finance and Banking Services		
General Manage	ement	
Retail Marketing and Sales		
Total Credits		70

Courses are identical to those offered at New Mexico State University
Las Cruces (main) Campus.

### **Finance and Banking Services Emphasis**

BMGT 112	Banks and Your Money	3
BMGT 213	Consumer Lending	3
BMGT 215	Banks and the Money Supply	3
BMGT 225	Introduction to Commercial Lending	3
BMGT 232	Personal Finance	3
BMGT 235	Credit Administration	3

### **General Management Emphasis**

BMGT 212	Supervisory and Leadership Trends	3
BMGT 248	Introduction to Quality Management	3
BMGT 250	Diversity in the Workplace	3
BMGT 277	Small Business Management	3
BMGT 280	Introduction to Human Resources	3
BMGT 282	Introduction to International Business Management	3
BMGT 285	Introduction to Manufacturing Operations	3
BMGT 286	Introduction to Logistics	3
BMGT 287	Introduction to Export/Import	3

#### Retail Marketing and Sales Emphasis

netan warketin	g and baics Emphasis	
BMGT 126	Retail Management	3
BMGT 132	Principles of Selling	3
BMGT 136	Fundamentals of Buying and Merchandising	3
BMGT 138	Advertising	3
BMGT 205	Customer Service in Business	3

BMGT 239	Visual Marketing Techniques	3

# General Business Management - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (21-22 credits)

#### **Core Requirements**

•		
ENGL 111G	Rhetoric and Composition <sup>1, 2</sup>	3-4
or BOT 105	Business English I	
MATH 120	Intermediate Algebra <sup>1</sup>	3
or BOT 106	Business Mathematics	
<b>Technical Requiren</b>	nents	
BUSA 111	Introduction to Business <sup>1</sup>	3
or BMGT 110	Introduction to Business	
MGT 201	Introduction to Management <sup>1</sup>	3
or BMGT 140	Principles of Supervision I	
Optional Areas of S	tudy	
Select 9 credits from	m one or more of the following options:	9
Finance and Bar	king Services	
General Manage	ment	
Retail Marketing	and Sales	
Total Credits		21-22

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

### **Finance and Banking Services Emphasis**

BMGT 112	Banks and Your Money	3
BMGT 213	Consumer Lending	3
BMGT 215	Banks and the Money Supply	3
BMGT 225	Introduction to Commercial Lending	3
BMGT 232	Personal Finance	3
BMGT 235	Credit Administration	3

### **General Management Emphasis**

BMGT 212	Supervisory and Leadership Trends	3
BMGT 248	Introduction to Quality Management	3
BMGT 250	Diversity in the Workplace	3
BMGT 277	Small Business Management	3
BMGT 280	Introduction to Human Resources	3
BMGT 282	Introduction to International Business Management	3
BMGT 285	Introduction to Manufacturing Operations	3
BMGT 286	Introduction to Logistics	3
BMGT 287	Introduction to Export/Import	3

### **Retail Marketing and Sales Emphasis**

BMGT 126	Retail Management	3
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It is permissible to combine courses from more than one area.

<sup>&</sup>lt;sup>2</sup> This course requires a grade of C or better.

es of Selling	3
entals of Buying andising	3
ing	3
er Service in Busir	ss 3
larketing Techniqu	s 3
er Service in Busir	

# Computer and Information Technology

#### **Associate of Applied Science Degree**

- · IT Specialist Option
- · Networking Option
- · Programming Option

**Certificate of Completion** - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

Computer and information technology (CIT) is the discipline of using integrated computer-based systems to solve real world problems. Students will utilize technologies in the disciplines of programming, networking, server administration, information security, database design and development, systems analysis and designing, and web development. Students will work with applications and systems used by leading technology companies such as Amazon, Apple, Google, Microsoft and Samsung. Graduates will be prepared to do the following:

- · Investigate and critically analyze real-world problems and concerns;
- · Deploy cyber defense measures to protect data and infrastructure;
- Support multiple operating systems, network topologies, and data systems; and
- Accurately convey technical information, both verbally and in written format.

DACC's Computer and Information Technology Department instructs students using state-of-the-art equipment and real-world, career-based case studies. Additionally, the department participates in numerous academic alliances and partnerships, including the Cisco Networking Academy, the CompTIA Academy Partner Program, Microsoft's Imagine, and the VMware IT Academy. Students in DACC's Computer and Information Technology program have access to free software and are eligible to receive significant discounts when taking industry certification exams.

Students have the opportunity to obtain industry certifications in the following fields of study:

- · Cisco Certified Network Associate
- · Computer Essentials
- · Computer Programming
- · Information Technology Fundamentals
- · Linux Operating Systems
- · Microsoft Operating Systems
- · Network Administration
- Network Security
- · Server Administration

Graduates of the Computer and Information Technology Department are the problem-solvers that employers quickly hire and promote as they upgrade existing systems and deploy new technologies.

Computer and Information Technology - Associate of Applied Science (p. 87)

Computer and Information Technology - Certificate of Completion (p. 89)

# BCIS 110. Introduction to Computerized Information Systems 3 Credits

Computerized information systems, their economic, and social implications. Introduction to microcomputer hardware, personal productivity software, and communications.

#### C S 110. Computer Literacy

#### 3 Credits

This course provides a broad introduction to computing, including computer and information technology concepts; economic and social implications of technology; database management, spreadsheet, word processing, and presentation applications.

# C S 111. Computer Science Principles 4 Credits (3+2P)

This course provides a broad and exciting introduction to the field of computer science and the impact that computation has today on every aspect of life. It focuses on exploring computing as a creative activity and investigates the key foundations of computing: abstraction, data, algorithms, and programming. It looks into how connectivity and the Internet have revolutionized computing and demonstrates the global impact that computing has achieved, and it reveals how a new student in computer science might become part of the computing future.

Prerequisite(s): MATH 120 or higher.

# C S 117. Introduction to Computer Animation 3 Credits

Introductory course for learning to program with computer animation as well as learning basic concepts in computer science. Students create interactive animation projects such as computer games and learn to use software packages for creating animations in small virtual worlds using 3D models. Recommended for students considering a minor/major in computer science or simply interested in beginning computer animation or programming.

#### C S 150. C Programming

#### 3 Credits (2+2P)

Programming in the C language. May be repeated up to 3 credits.

Prerequisite(s): MATH 120 or higher.

### C S 151. C++ Programming

#### 3 Credits (2+2P)

Introduction to object-oriented programming in the C++ language. May be repeated up to 3 credits.

Prerequisite(s): MATH 120 or higher.

#### C S 152. Java Programming

#### 3 Credits (2+2P)

Programming in the Java language. May be repeated up to 3 credits.

Prerequisite(s): MATH 120 or higher.

#### C S 153. Python Programming I

#### 3 Credits

This course is an introduction to programming in the Python language, covering fundamental scripts, data types and variables, functions, and simple object creation and usage. The focus will be on preparing students to use Python in their own areas. No prior programming experience is required.

Prerequisite(s): MATH 120 or higher.

#### C S 154. Python Programming II

#### 3 Credits

This course covers advanced Python programming, including classes, objects, and inheritance, embedded programming in domain applications, database interaction, and advanced data and text processing. The focus will be on preparing students to use Python in their own areas.

 $\label{eq:continuous} \textbf{Prerequisite(s):} \ \texttt{C} \ \texttt{S} \ \texttt{153} \ \text{or} \ \texttt{C} \ \texttt{S} \ \texttt{453}.$ 

#### C S 155. Internet Programming I

#### 3 Credits

This course is an introduction to programming for the Web in PHP and Javascript, covering fundamental web scripting ideas, CSS, data types and variables, functions, simple object creation and usage. Javascript usage will focus on dynamic page content. No prior programming experience is required, though a basic understanding of HTML will be assumed.

Prerequisite(s): MATH 120 and a basic understanding of HTML.

#### C S 156. Internet Programming II

#### 3 Credits

This course covers advanced web scripting, including Javascript with AJAX, PHP integration with databases, object oriented features of PHP and Javascript, advanced CSS usage, and using web application frameworks.

Prerequisite(s): CS 155 or CS 455.

# C S 157. Topics in Software Programming and Applications 3 Credits (2+2P)

Current topics in computer programming and software applications. Topic announced in the Schedule of Classes. May be repeated if subtitle is different.

#### C S 158. R Programming I

#### 3 Credits

This course is an introduction to data processing in the R language, covering fundamental script configuration, data types and data collections, R control structures, and basic creation of graphs and data visualizations. This course will not focus on the statistical capabilities of R, though some basic statistical computations will be used.

Prerequisite(s): MATH 121G.

#### C S 159. R Programming II

#### 3 Credits

This course covers advanced R programming, including advanced data collection processing, advanced data visualizations, object oriented features of R, and file processing. It is recommended that students have one statistics course before taking this course.

Prerequisite(s): CS 158 or CS 458.

# C S 171G. Introduction to Computer Science 4 Credits (3+2P)

Computers are now used widely in all area of modern life. This course provides understanding of the theoretical and practical foundations for how computers work, and provides practical application and programming experience in using computers to solve problems efficiently and effectively. The course covers broad aspects of the hardware, software, and mathematical basis of computers. Weekly labs stress using computers to investigate and report on data-intensive scientific problems. Practical experience in major software applications includes an introduction to programming, word processing, spreadsheets, databases, presentations, and Internet applications.

Prerequisite(s): MATH 210G or MATH 120 or higher.

#### C S 172. Computer Science I

#### 4 Credits (3+2P)

Computational problem solving; problem analysis; implementation of algorithms. Recursive structures and algorithms. Crosslisted with: C S 460.

Prerequisite(s): MATH 121G or higher; C S 111 or successful placement.

C S 209. Special Topics.

#### 1-3 Credits

May be repeated for a maximum of 12 credits.

#### C S 271. Object Oriented Programming

#### 4 Credits (3+2P)

Introduction to problem analysis and problem solving in the objectoriented paradigm. Practical introduction to implementing solutions in the C++ language. Pointers and dynamic memory allocation. Handson experience with useful development tools. May be repeated up to 4 credits.

Prerequisite(s): C- or better in C S 172 or E E 112.

#### C S 272. Introduction to Data Structures

#### 4 Credits (3+2P)

Design, implementation, use of fundamental abstract data types and their algorithms: lists, stacks, queues, deques, trees; imperative and declarative programming. Internal sorting; time and space efficiency of algorithms.

Prerequisite(s): At least a C- in C S 172, or placement.

# C S 273. Machine Programming and Organization 4 Credits (3+2P)

Computer structure, instruction execution, addressing techniques; programming in machine and assembly languages.

Prerequisite(s): At least a C- in C S 172 or E E 161.

# C S 278. Discrete Mathematics for Computer Science 4 Credits (3+2P)

Discrete mathematics required for Computer Science, including the basics of logic, number theory, methods of proof, sequences, mathematical induction, set theory, counting, and functions. Crosslisted with: MATH 278.

Prerequisite(s): At least C- in C S 172.

### **OECS 101. Computer Basics**

#### 1 Credit

Hands-on instruction to introduce computer use and commonly used software. Graded S/U.

## OECS 105. Introduction to Information Technology 3 Credits

Examination of information systems and their impact on commerce, education, and personal activities. Utilization of productivity tools for communication, data analysis, information management and decision-making. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

# OECS 110. Introduction to Power Point 1-3 Credits (1-3)

An introduction to Power Point software to develop business presentations. Includes concepts of basic presentation methods and graphic design principles. Students will create and deliver presentations using text, charts, digitized images, and sound. Restricted to Community Colleges campuses only.

#### **OECS 125. Operating Systems**

#### 1-3 Credits

Installation, configuration and optimization of current operating systems. Restricted to: Community Colleges only.

### OECS 128. Operating Systems Linux/Unix

#### 3 Credits

Installation, configuration, and use of Linux/Unix operating system software and utilities including hardware management, file management, use of command line, and scripting. Restricted to: Community Colleges only.

# OECS 140. Introduction to Game Production Industry 1-3 Credits (1-3)

Students explore the business behind game production, understanding how game companies are organized and funded, positions within the game industry, and what skills game producers need. Restricted to Community Colleges campuses only.

# OECS 141. Introduction to Interactive Game Programming 1-3 Credits (1-3)

This introductory programming class reviews the basics of programming, including the object-oriented approach. Students will de-construct existing games, develop their own code, and gain an appreciation for coding strategies. May be repeated for a maximum of 6 credits. Restricted to Community Colleges campuses only.

# OECS 145. Mobile Application Development 1-3 Credits (1-3)

Introduction to elements of mobile application coding including concepts, design strategies, tools needed to create, test and deploy applications for mobile devices. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

# OECS 150. Visual Basic Programming 3-4 Credits (3-4)

Introduction to algorithmic problem-solving concepts, structured programming design-oriented application programing interface development. Solutions to problems are implemented using the Visual Basic programming language in the Windows environment, with connection to Access databases as applicable.

Prerequisite(s)/Corequisite(s): OECS 220. Restricted to Community Colleges campuses only.

# OECS 155. Special Topics - Introductory Computer Technology 0.5-4 Credits (.5-4)

Topics to be announced in the Schedule of Classes. May be repeated up to 8 credits.

#### OECS 185. PC Maintenance and Repair I

#### 1-3 Credits

Introduction to most common types of PC configurations, installations, and failures. This course will explore troubleshooting skills for maintaining and repairing common hardware and software related problems. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

#### OECS 192. C++ Programming I

#### 3 Credits

Development of skills in programming using the C++ programming language. Restricted to: Community Colleges only.

#### **OECS 195. Java Programming I**

#### 1-3 Credits

Developing of skills in programming using the Java programming language. Restricted to: Community Colleges only.

### OECS 200. Accounting on Microcomputers

#### 3 Credits

Fundamental accounting principles using popular microcomputer soft ware to include G/L, A/R, A/P, purchase order, billing, inventory, and forecasting modules.

Prerequisite: ACCT 221 or BOT 121.

#### **OECS 203. UNIX Operating System**

#### 1-3 Credits

Introduction to the UNIX operating system using Telnet to access a remote UNIX system. Basic UNIX commands and file system concepts.

Prerequisite: C S 110, BCIS 110 or OECS 105.

#### **OECS 204. Linux Operating System**

#### 1-3 Credits

Install and configure the Linux operating system on X86 systems. Covers issues involved in maintaining operating system, networking, creating and managing users, and installing and updating software. General procedures for working with operating system includes maintaining disk space, preserving system security, and other related topics. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

# OECS 205. Advanced Operating Systems: Administration 3 Credits

Examines operating systems designed for PC, minicomputers and mainframes. Covers maintaining operating systems, creating and managing users, and installing and updating software. General procedures for working with operating systems will include maintaining disk space, preserving system security, providing mail services, among other topics. May be repeated for a maximum of 6 credits.

Prerequisite: OECS 128.

#### OECS 207. Windows

#### 0.5-3 Credits

Covers local installation, configuration of core local services, managing users, and the general local management and maintenance of Windows workstations. May be repeated up to 6 credits.

**Prerequisite(s)/Corequisite(s):** OECS 185. Prerequisite(s): . Restricted to Community Colleges campuses only.

### **OECS 208. Internet Applications**

#### 1-3 Credits

Survey of the Internet to include e-mail, file transfer, current search techniques, the World Wide Web and basic Web page development. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

#### **OECS 209. Computer Graphic Arts**

#### 1-3 Credits

Basic graphics composition using computer programs to include editing and manipulating graphic images, clip-art, and printing of pictures. May be repeated for a maximum of 6 credits under different subtitles listed in the Schedule of Classes.

Prerequisite: OECS 105, C S 110, or OECS 101.

#### **OECS 211. Word Processing Applications**

#### 1-3 Credits

Basic word processing to include composing, editing, formatting, and printing of documents. May be repeated under different subtitles listed in the Schedule of Classes for a maximum of 6 credits.

Prerequisites: C S 110, BCIS 110 or OECS 105.

#### **OECS 213. Image Processing**

#### 1 Credit

Introduction to digital imaging acquisition and editing. Use of digital cameras and computer graphic software for business and personal use. Graded S/U.

Prerequisites: C S 110, BCIS 110 or OECS 105.

#### OECS 214. Creating a Web Page

#### 1 Credit

Introduction to creating Web pages for business and personal use. Graded  $\mbox{S/U}.$ 

Prerequisites: C S 110, BCIS 110 or OECS 105.

#### **OECS 215. Spreadsheet Applications**

#### 1-3 Credits

Use of spreadsheets to include graphics and business applications. May be repeated for a maximum of 6 credits.

Prerequisites: C S 110, BCIS 110 or OECS 105.

#### OECS 216. Programming for the Web

#### 3 Credits

Designing web-based applications using appropriate programming language(s) such as, but not limited to HTML, PHP, MySQL, SQL, Java, Perl, C or C++. May be repeated up to 6 credits. Restricted to: Community Colleges only.

Prerequisite(s): One semester of any programming course.

#### OECS 220. Database Application and Design

#### 1-3 Credits

Creating, sorting, and searching of single and multifile databases to include report generation and programming database commands. May be repeated for a maximum of 6 credits under different subtitles listed in the Schedule of Classes. Restricted to: Community Colleges only.

**Prerequisite(s):** C S 110 OR BCIS 110 OR E T 120 OR E T 122 OR OECS 105.

#### OECS 221. Internship I

#### 1-3 Credits

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OECS majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

Prerequisite(s): Consent of instructor.

#### OECS 222. Internship II

#### 1-3 Credits

Continuation of OECS 221. Each credit requires specified number of hours of on-the-job work experience. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OECS majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 221 and consent of instructor.

### OECS 227. Computer Applications for Technicians

#### 3 Credits

Computer applications for service technicians in various disciplines. Hardware and software applications explored. Includes operating systems, high level programming, and networking hardware and software.

#### OECS 230. Data Communications and Networks I

#### 1-3 Credits

Definition of data communication; survey of hardware applications and teleprocessor software; examination and design of networks. May be repeated for a maximum of 6 credits.

Prerequisite: OECS 185.

#### **OECS 231. Data Communications and Networks II**

#### 1-3 Credits

Installation and application of popular microcomputer network software. May be repeated for a maximum of 6 credits.

Prerequisite: OECS 230.

### OECS 232. Implementing and Supporting Networks I

#### 3 Credits

Knowledge and skills relating to post-installation and day-to-day administration tasks in a single-domain or multiple-domain network. **Prerequisite:** OECS 230 or OECS 261.

#### OECS 234. Linux Server

#### 3 Credits

This course addresses the implementation and support needs of IT professionals that are planning to deploy and support Linux Server(s). It provides in-depth, hands-on training for planning, implementation, management and support of Linux networking services. May be repeated up to 6 credits.

Prerequisite(s): OECS 128, OECS 203 or OECS 204.

### OECS 235. Structured Query Language (SQL)

#### 1-3 Credits

Installation, configuration, administration, and troubleshooting of SQL client/server database management system. May be repeated up to 3 credits

Prerequisite(s)/Corequisite(s): OECS 220. Restricted to Community Colleges campuses only.

#### OECS 237. Windows Server

#### 3 Credits

This course addresses the implementation and support needs of IT professionals that are planning to deploy and support Microsoft Windows Server Active Directory Domain Services in medium to large businesses. It provides in-depth, hands-on training for Information Technology (IT) professionals responsible for the planning, implementation, management, and support of Windows Active Directory services. Restricted to: Community Colleges only.

Prerequisite(s): OECS 207.

#### **OECS 245. Game Programming I**

#### 3 Credits

Development of programming skills for games and animation using current programming languages and tools. May be repeated for a maximum of 6 credits.

Prerequisite: consent of instructor.

#### **OECS 246. Game Programming II**

#### 3 Credits

Continuation of OECS 245. May be repeated for a maximum of 6 credits.

Prerequisite: OECS 245.

#### OECS 250. Systems Analysis and Design I

#### 3 Credits

Analysis, configuration, design and testing of organizations' work flow as it relates to hardware, software, data, procedures and personnel. Systems Life Cycle approach matching end users' needs to feasible financial, technical and operational solutions. Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 220.

OECS 255. Special Topics

#### 1-4 Credits

Topics to be announced in the Schedule of Classes.

#### OECS 260. Hypertext Markup Language (HTML)

#### 1-3 Credits

Coverage of HTML as used for web-page development for Internet and Intranet. Text manipulation, graphics, hypertext links, lists, and tables. May be repeated for a maximum or 3 credits.

Prerequisite: C S 110, BCIS 110 or OECS 105.

#### OECS 261. Introduction to Networks

#### 3-4 Credits (3-4)

Introduction to networking principles including the practical and conceptual skills for understanding basic networking, planning and designing networks, implementing IP addressing schemes, examining the OSI and TCP/IP layers, and performing basic configurations for routers and switches. Aligns to the first course of the Cisco Networking Academy CCNA curriculum. Restricted to Community Colleges campuses only.

#### OECS 262. Essentials of Routing and Switching

#### 3-4 Credits (3-4)

Examination of the architecture, components, and operations of routers and switches in a small network. Student will learn how to configure, verify and troubleshoot: routers and switches, static routing, default routing, VLANs, and ACLs. Aligns to the second course of the Cisco Networking Academy CCNA curriculum. May be repeated up to 4 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 261.

#### **OECS 263. Network Fundamentals**

#### 3-4 Credits (3-4)

Fundamentals of networking architecture, components, and operations including practical and conceptual skills using routers and switches. Student will learn how to configure, verify and troubleshoot static routing, default routing, VLANs, and ACLs. This course aligns to the third course of the Cisco Networking Academy CCNA curriculum. May be repeated up to 4 credits. Restricted to Community Colleges campuses only. **Prerequisite(s):** OECS 262.

#### **OECS 264. Network Routing Protocols**

#### 3-4 Credits (3-4)

Fundamentals of routing protocols for troubleshooting advanced network operations. Covers common networking issues such as RIP, OSPF, and EIGRP for IPv4 and IPv6 networks. This course aligns to the fourth course of the Cisco Networking Academy CCNA curriculum. May be repeated up to 4 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 263.

#### **OECS 269. Network Security**

#### 3-4 Credits (3-4)

Fundamentals of design and implementation of network security solutions that will reduce the risk of system vulnerability. May be repeated up to 8 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 204 or OECS 207 or OECS 261 or consent of instructor.

#### OECS 275. PC Maintenance and Repair II

#### 1-3 Credits

Continuation of OECS 185. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 185.

#### OECS 280. Desktop Publishing I

#### 3 Credits

Design and production of publication materials to fill the needs of business communities, using a microcomputer. May be repeated for a maximum of 6 credits. Same as BOT 280.

Prerequisites: either BCIS 110, C S 110, OECS 105.

#### **OECS 290. Computer Technology Capstone**

#### 1-3 Credits

Refines skills learned in the OECS program. Culminates in a review and practice of advanced software applications. May be repeated up to 3 credits. Restricted to: OECS & OECT majors. Restricted to Community Colleges campuses only.

**Prerequisite(s):** (OECS 125, OECS 128, OECS 207, OR OECS 203) AND (OECS 185 OR E T 283).

#### OECS 299. Independent Study

#### 1-3 Credits

Specific subjects to be determined based on need. DAS Occupational Education, Dental Assisting. Restricted to: Community Colleges only.

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Email: jjuarez@dacc.nmsu.edu

Website: https://dacc.nmsu.edu/cit/

### Computer and Information Technology - Associate of Applied Science

### (60-66 credits)

Degree requires a minimum of 60 credits and a cumulative GPA of 2.0.

#### **Core/General Education Requirements**

ENGL 111G	Rhetoric and Composition (grade of C- or better required) <sup>1</sup>	4
ENGL 218G	Technical and Scientific Communication	3
or BOT 209	Business and Technical Communications	
or ENGL 203G	Business and Professional Communication	
or ENGL 211G	Writing in the Humanities and Social Sciences	
	from the following:	3-4
MATH 120	Intermediate Algebra <sup>1</sup>	0 .
MATH 121G	College Algebra <sup>1</sup>	
MATH 190G	Trigonometry and Precalculus <sup>1</sup>	
MATH 191G	Calculus and Analytic Geometry I <sup>1</sup>	
MATH 210G	Mathematics Appreciation <sup>1</sup>	
	technology-related math course	
	from the following:	2-4
OECS 105	Introduction to Information Technology <sup>2</sup>	2-4
BCIS 110	Fundamentals of Information Literacy	
DCI3 110	and Systems <sup>1</sup>	
C S 110	Computer Literacy <sup>1</sup>	
C S 171G	Introduction to Computer Science <sup>1</sup>	
ET120	Computation Software <sup>3</sup>	
	from the following:	3-4
ASTR 105G	The Planets <sup>1</sup>	
ASTR 110G	Introduction to Astronomy <sup>1</sup>	
ANTH 120G	Human Ancestors <sup>1</sup>	
ANTH 125G	Introduction to World Cultures <sup>1</sup>	
ANTH 201G	Introduction to Anthropology <sup>1</sup>	
ANTH 202G	World Archaeology <sup>1</sup>	
ANTH 203G	Introduction to Language and Cultural	
	Anthropology <sup>1</sup>	
BMGT 240	Human Relations	
C J 101G	Introduction to Criminal Justice 1	
C S 171G	Introduction to Computer Science 1	
C EP 110G	Human Growth and Behavior <sup>1</sup>	
GEOG 112G	World Regional Geography	
GEOG 120G	Culture and Environment <sup>1</sup>	
GOVT 100G	American National Government <sup>1</sup>	
GOVT 110G	Introduction to Political Science	
GOVT 150G	American Political Issues 1	
GOVT 160G	International Political Issues	
M SC 111	Introduction to Leadership <sup>3</sup>	
M SC 210	Self/Team Development <sup>3</sup>	
PSY 201G	Introduction to Psychology 1	
S WK 221G	Introduction to Social Welfare 1	
SOC 101G	Introductory Sociology 1	
SOC 201G	Contemporary Social Problems 1	
W S 201G	Introduction to Women s Studies 1	
W S 202G	Representing Women Across Cultures <sup>1</sup>	
Select TWO course	s from the following:	6-7
A ST 251G	Statistics for Business and the Behavioral Sciences <sup>1</sup>	
ACCT 221	Principles of Accounting I (Financial) 1	
ACCT 222	Principles of Accounting II (Managerial) 1	
	, , , , , , , , , , , , , , , , , , , ,	

	BMGT 110	Introduction to Business	
	BMGT 140	Principles of Supervision I	
	BMGT 212	Supervisory and Leadership Trends	
	BMGT 240	Human Relations	
	BMGT 248	Introduction to Quality Management	
	BMGT 286	Introduction to Logistics	
	BOT 120	Accounting Procedures I	
	BUSA 111	Introduction to Business <sup>1</sup>	
	ECON 201G	Introduction to Economics <sup>1</sup>	
	ECON 251G	Principles of Macroeconomics <sup>1</sup>	
	ECON 252G	Principles of Microeconomics <sup>1</sup>	
	FIN 206	Introduction to Finance 1	
	MATH 121G	College Algebra <sup>1</sup>	
	MATH 190G	Trigonometry and Precalculus	
	MATH 192G	Calculus and Analytic Geometry II <sup>1</sup>	
	MATH 210G	Mathematics Appreciation <sup>1</sup>	
	MKTG 203	Introduction to Marketing <sup>1</sup>	
	MGT 201	Introduction to Management <sup>1</sup>	
	PSY 201G	Introduction to Psychology <sup>1</sup>	
	STAT 251G	Statistics for Business and the	
		Behavioral Sciences <sup>1</sup>	
Te	chnical/Major Red		
OE	ECS 204	Linux Operating System <sup>2</sup>	3
	or OECS 128	Operating Systems Linux/Unix	
OE	ECS 185	PC Maintenance and Repair I <sup>2</sup>	3
	or OECS 227	Computer Applications for Technicians	
	or E T 283	Hardware PC Maintenance	
	ECS 207	Windows <sup>2</sup>	3
	ECS 220	Database Application and Design <sup>2</sup>	3
	ECS 221	Internship I <sup>2</sup>	3
OE	ECS 269	Network Security <sup>2</sup>	3
	or OECS 250	Systems Analysis and Design I	
	or OECS 290	Computer Technology Capstone	
OE	ECS 261	Introduction to Networks <sup>2</sup>	3-4
	or E T 153	Introduction to Computer Networks	
	or E T 155	Network Operating Systems I	
	or E T 273	Fundamentals of Networking Communications I	
Se		from the following:	3
	C S 117	Introduction to Computer Animation <sup>1</sup>	
	C S 150	C Programming <sup>1</sup>	
	C S 151	C++ Programming <sup>1</sup> Java Programming <sup>1</sup>	
	C S 152	3	
	C S 157	Topics in Software Programming and Applications <sup>1</sup>	
	C S 171G	Introduction to Computer Science 1	
	OECS 141	Introduction to Interactive Game Programming <sup>2</sup>	
	OECS 145	Mobile Application Development <sup>2</sup>	
	OECS 150	Visual Basic Programming <sup>2</sup>	
	OECS 192	C++ Programming I <sup>2</sup>	
	OECS 195	Java Programming I <sup>2</sup>	
	OECS 216	Programming for the Web <sup>2</sup>	
	OECS 235	Structured Query Language (SQL) <sup>2</sup>	

#### OPTIONS - Select ONE of the following options:

IT Specialist Option (15 credits)

Select 15 credits from approved computer-related electives (except BOT 101).

Networking Option (15 credits)

Select 15 credits from the following:

	- ·· · · · · · · · · · · · · · · · · ·	
E T 253	Networking Operating Systems II <sup>3</sup>	
E T 277	Computer Networking I for IET <sup>3</sup>	
OECS 205	Advanced Operating Systems: Administration <sup>2</sup>	
OECS 216	Programming for the Web <sup>2</sup>	
OECS 230	Data Communications and Networks I <sup>2</sup>	
OECS 231	Data Communications and Networks II $^{\mathrm{2}}$	
OECS 232	Implementing and Supporting Networks I <sup>2</sup>	
OECS 234	Linux Server <sup>2</sup>	
OECS 235	Structured Query Language (SQL) <sup>2</sup>	
OECS 237	Windows Server <sup>2</sup>	
OECS 262	Essentials of Routing and Switching <sup>2</sup>	
OECS 263	Network Fundamentals <sup>2</sup>	
OECS 264	Network Routing Protocols <sup>2</sup>	
OECS 269	Network Security <sup>2</sup>	

Programming Option (15 credits)

Select 9 credits of approved computer-related electives

Select 6 credits of programming electives from the following:

C S 117	Introduction to Computer Animation <sup>1</sup>	
C S 157	Topics in Software Programming and Applications <sup>1</sup>	
C S 171G	Introduction to Computer Science <sup>1</sup>	
OECS 145	Mobile Application Development <sup>2</sup>	
OECS 150	Visual Basic Programming <sup>2</sup>	
OECS 192	C++ Programming I <sup>2</sup>	
OECS 195	Java Programming I <sup>2</sup>	
OECS 216	Programming for the Web $^{2}$	
OECS 235	Structured Query Language (SQL) <sup>2</sup>	
OECS 260	Hypertext Markup Language (HTML) $^{2}$	
Total Credits		60-66

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

Courses not currently taught at DACC.

## Computer and Information Technology - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (16-17 credits)

**NOTE:** Certificate requires a minimum of **16 credit hours** and a cumulative GPA of 2.0.

#### **Related Requirements**

•		
Select 6-7 credits	from the following:	6-7
,	he following prefix: A ST, BCIS, C S, CMT, TH, OECS, or STAT	
Technical/Major F		
•	•	
Select 3 credits fr		3
OECS 128	Operating Systems Linux/Unix <sup>2</sup>	
OECS 204	Linux Operating System <sup>2</sup>	
OECS 207	Windows <sup>2</sup>	
Select 3 credits fr	om the following:	3
OECS 185	PC Maintenance and Repair I <sup>2</sup>	
OECS 227	Computer Applications for Technicians <sup>2</sup>	
E T 283	Hardware PC Maintenance <sup>3</sup>	
Select 3-4 credits	from the following:	3-4
OECS 261	Introduction to Networks <sup>2</sup>	
OECS 234	Linux Server <sup>2</sup>	
OECS 237	Windows Server <sup>2</sup>	
ET 153	Introduction to Computer Networks <sup>3</sup>	
ET 155	Network Operating Systems I <sup>3</sup>	
Total Credits	<u> </u>	15-17

- Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.
- If a student has no basic typing skills, BOT 101 Keyboarding Basics is a prerequisite for all OECS courses.
- Course not currently taught at DACC.

### **Creative Media Technology**

#### **Associate of Applied Science Degrees**

- · Creative Media Technology
- Digital Graphics Technology

Certificates of Completion - Important information about the educational debt, earnings, and completion rates of students who attend these certificate programs (excluding Creative Media) can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

- · Creative Media
- Digital Audio
- · Digital Graphics
- · Digital Video
- · Film Crew Training
- Game Design
- · Graphics and Animation
- · Web Design

Because we live in the age of information, there is an ever-growing need for trained specialists with a visual sophistication to design printed materials and web sites, produce videos and films, create animated

If a student has no basic typing skills, BOT 101 Keyboarding Basics is a prerequisite for all OECS courses.

scenes and characters, and participate in game design. Effective visual communication and interaction is essential in today's world.

The program in Creative Media Technology has been developed in response to all of these needs. It provides a strong but versatile foundation by merging design and digital media into an exciting course of study. The program brings together various dynamic technologies, including print media, web design, multimedia, digital photography, animation, and digital film. Because the field is extremely varied, the CMT program offers a number of pathways:

- The Creative Media degree provides a foundation for students who are looking for professional opportunities in the areas of filmmaking, computer animation, digital video production, game design, and multimedia.
- The Digital Graphics degree emphasizes graphic design, print media, and web design, but also includes fundamentals in animation, multimedia, and digital film.
- The program also offers certificates in specialized areas such as creative media, digital audio, digital graphics, digital video, web design, graphics and animation, game design, and film-crew training.

The future is bright for graduates of the CMT program, whether they choose to enter the job market immediately or pursue a bachelor's degree. Several transfer tracks open the way for graduates of the Creative Media and Digital Graphics associate degree programs to continue their education at New Mexico State University or any institution of higher learning.

Employment will continue to increase for digital media specialists in advertising agencies, animation and film studios, web design companies, and other organizations throughout the business sector. Upon completion of one of the associate degrees, students must have the career-readiness certificate and will have designed and created a self-promotional package and professional, electronic portfolio or demo reel.

High school students who are interested in a career in creative media are encouraged to take courses in art, photography, English, and mathematics. Courses as well as careers in media will require a person to be able to work at computers, communicate verbally and in writing, and participate in an online environment.

Creative Media Technology - Associate of Applied Science (p. 94)

Digital Graphics Technology - Associate of Applied Science (p. 95)

Creative Media - Certificate of Completion (p. 94)

Digital Audio - Certificate of Completion (p. 95)

Digital Graphics - Certificate of Completion (p. 95)

Digital Video - Certificate of Completion (p. 96)

Film Crew Training - Certificate of Completion (p. 96)

Game Design - Certificate of Completion (p. 96)

Graphics and Animation - Certificate of Completion (p. 96)

Web Design - Certificate of Completion (p. 96)

### CMT 100. Introduction to Visual Communications

#### 3 Credits

Overview of the process of crafting a digital product from conception to final. Incorporates basic principles of art and design, typography, layout, color and imagery, logos and advertising basics. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

#### CMT 108. Introduction to Media Technologies

#### 1-3 Credits (1-3)

Introduction to various media technologies. May be repeated up to 12 credits. Restricted to Community Colleges campuses only.

#### CMT 110. Introduction to Web Design

#### 1 Credi

Basics of creating simple web sites for personal use.

# CMT 115. Digital Photography and Imaging I 3 Credits (2+2P)

Principles and techniques of photography using digital equipment with an emphasis on lighting, focus, and composition.

### CMT 120. Introduction to Creative Media

#### 3 Credits (2+2P)

Exploration and discovery of the creative processes through art, music, theater, narrative, and other avenues.

#### CMT 126. Film Crew Training I

#### 9 Credits

This course was designed in collaboration with the NM IATSE Local 480 union and the NM Film Office and focuses on providing hands-on training for students wishing to work on film crews. The course will offer an overview of the primary below-the-line craft areas of film production. Restricted to: Community Colleges only.

# CMT 130. Introduction to Web Design 3 Credits (2+2P)

Introduction to web development techniques, theory, and design. Incorporates HTML and industry-standard web editing software in developing various web sites. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): ART 161 OR CMT 145.

# CMT 135. Introduction to 3D Computer Animation 3 Credits (2+4P)

Learning to work in a 3D environment. Introduction to the basics of modeling, animation, dynamics, and rendering. Working with polygons, NURBS and subdivisions, and editing in multiple interfaces. May be repeated for a maximum of 6 credits.

#### CMT 140. Print Media I

### 3 Credits (2+2P)

Creation and design of publications and presentation materials using page layout software. May be repeated for a maximum of 6 credits.

#### CMT 142. Computer Illustration

#### 3 Credits (2+2P)

Preparation of digital graphics with a vector or draw program for use in print, web, video, animations, and multimedia. May be repeated for a maximum of 6 credits.

#### CMT 145. Image Processing I

#### 3 Credits (2+2P)

Design and creation of digital graphics using a raster or bitmap program for use in print, multimedia, video , animation and web. May be repeated for a maximum of 6 credits.

#### CMT 150. 2D Animation

#### 3 Credits (2+2P)

Concepts and techniques in storyboarding and creating interactive 2D animations for web, multimedia and video.

Prerequisites: CMT 142.

#### CMT 151. Evolution of Electronic Games

#### 3 Credits (2+2P)

Focus on the evolution of video games and how they have shaped mainstream entertainment. May be repeated up to 6 credits.

#### CMT 155. Selected Topics

#### 1-4 Credits (1-4)

Specific titles to be announced in the Schedule of Classes. May be repeated for a maximum of 18 credits. May be repeated up to 18 credits. Restricted to Community Colleges campuses only.

#### CMT 156. Film Crew Training II

#### 9 Credits

The purpose of this course is to provide applied training in a specific film production crew craft area, in which a student has decided to specialize. The various craft areas include but are not limited to, Art Dept., Grip., Electric, Sound, Production Office, Script Supervision, Props, Set Dressing, Locations, Special Effects, Hair/Makeup, Wardrobe, Production Assistant/ Set Operations. Restricted to: Community Colleges only.

Prerequisite(s): CMT 126.

#### CMT 160. Modeling and Animation

#### 3 Credits (2+2P)

Building on student's knowledge of 2D animation, covers modeling, animating objects and scenes in a 3D environment using various camera and lighting effects. May be repeated for a maximum of 6 credits. Restricted to: Community Colleges only.

### CMT 165. Writing and Storyboarding

#### 3 Credits (2+2P)

Learning good writing principles to create storyboards and scripts that communicate the overall picture of the project, timing, scene complexity, emotion, and resource requirements.

Prerequisite: CMT 135 or CMT 160.

#### CMT 170. History of Film: A Global Perspective

#### 3 Credits

Explores the history of cinema from the earliest 19th century developments to the present digital video revolution. Offers students a broader base of understanding of the tools and methodologies used in the craft.

#### CMT 175. 3-D Character Design

#### 3 Credits (2+4P)

Focus on designing a character and then taking that design and building it in 3D using intermediate modeling techniques. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 135 or CMT 160.

#### CMT 180. Design Principles

#### 3 Credits (2+2P)

Techniques and theories of design principles, including layout foundations, logo building, type, color, and story-boarding and their application to print, web, animation and video. Restricted to: Community Colleges only.

Prerequisite(s): CMT 142 or CMT 146.

# CMT 182. Environmental Modeling, Shading and Lighting 3 Credits (2+4P)

Modeling design techniques to create natural and architectural environments to be used for animated films and gaming. Study of various lighting techniques, shading and shadowing.

Prerequisite: CMT 135 or CMT 160.

#### CMT 185. 3D Shading and Lighting Techniques

#### 3 Credits (2+4P)

Study of various global, scene and character lighting techniques, shading and shadowing, and creating atmospheres and reflections that bring computer generated 3D scenes to life. Examines environmental and studio lighting to bring real life experience into the digital production process.

Prerequisite: CMT 135 or CMT 160.

#### CMT 190. Digital Video Production I

#### 3 Credits (2+4P)

A hands-on study of the tools and techniques used to produce the independent video. Through the production of various short projects, the student explores how the ideas of the writer/director are translated into a visual story. May be repeated for a maximum of 6 credits.

#### CMT 195. Digital Video Editing I

#### 3 Credits (2+2P)

A study of the basic tools and techniques of non-linear digital video editing. May be repeated for a maximum of 6 credits.

#### CMT 200. Critical Game Studies

#### 3 Credits (2+2P)

Focus on creating a complete design document utilizing techniques and standards used in the industry today. May be repeated for up to 6 credits. Restricted to: Community Colleges only.

#### CMT 205. Cinematography

#### 3 Credits (2+2P)

Theory and techniques of visual design in cinematography and the aesthetics of lighting. May be repeated for a maximum of 6 credits. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 190.

#### CMT 206. Principles of Sound

#### 3 Credits (2+2P)

Study of soundtrack design theory, and the use of audio editing software that is compatible with media editing software to create soundtracks for different visual media. Pre/ Restricted to: Community Colleges only.

Corequisite(s): CMT 195.

### CMT 210. Digital Video Production II

#### 3 Credits (2+2P)

Advanced techniques of the tools and application of professional film making. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 190.

### CMT 215. Digital Video Editing II

#### 3 Credits (2+2P)

Advanced features of digital video, audio/music, and titling production software. Included are color correction, vector scopes, motion effects, and advanced editing techniques used by filmmakers. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 195.

# CMT 216. Digital Photography and Imaging II 3 Credits (2+2P)

Provide understanding and skills needed for advanced digital capture, editing, optimizing and manipulating photographic images for print, web and multimedia applications. The course will prepare students to make more advanced technical and more refined aesthetic decisions relative to specific photographic applications. Restricted to: Alamogordo campus, Carlsbad campus, Dona Ana campus.

Prerequisite(s): CMT 115.

## CMT 217. Layer Animation & 3D Applications in Photoshop 1 Credit

This is an advanced course in Photoshop 2D techniques and motion graphic applications pertaining to the animation of Photoshop Layers juxtaposed over time and space relationships. Restricted to: CMT majors. Restricted to Community Colleges only.

Prerequisite(s): CMT 145.

## CMT 218. Video for Social Interaction and Informal Commerce 3 Credits

The use of DSLR video has opened the way for photographers to be able to add video as a component of expression. This course shows the ways that this tool can be used for on-line instructional videos, demonstrations and presentations. As more and more commercial entities become involved in YouTube and other social media, this becomes a vocationally viable form of visual communication. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: Community Colleges only.

# CMT 220. Environmental Scene Design 3 Credits (2+4P)

Modeling design techniques used to create environments and scenes for use in animated films and games. Investigation of both natural and architectural environments to be recreated in the virtual world.

Prerequisite: CMT 135 or CMT 160.

### CMT 221. Internship

#### 1-3 Credits

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. May be repeated up to 9 credits. Consent of Instructor required. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

Prerequisite(s): Consent of instructor.

### CMT 222. Pre-production Management

#### 3 Credits (2+2P)

Pre-production planning paperwork breakdowns, budgeting, and scheduling; taking a project from start to finish from a producers standpoint.

Prerequisite: CMT 190.

#### CMT 223. Media Production Services

#### 1-3 Credits

A design studio environment in which students obtain real-world experience while providing service to college and non-profit associations with faculty supervision using a variety of media. Can be used with permission to fulfill cooperative requirement. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 180 or ART 163.

#### CMT 224. Environmental Scene Design II

#### 3 Credits

Second level of modeling design techniques used to create environments and scenes for use in animated films and games. Investigation of both natural and architectural environments to be recreated in the virtual world. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 220.

### CMT 225. Anatomical Character Design

3 Credits (2+4P)

Focus on building anatomy-based 3D characters. Advanced study in NURBS, subdivisions, and polygon modeling techniques used to create fully functional and realist models. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 175.

#### CMT 226. Film Crew Cooperative Experience

#### 3-6 Credits (3-6)

Industry production experience in specific craft areas for film crew technicians who have successfully completed two semesters of FTTP. Restricted to: Dona Ana campus, Carlsbad campus.

Prerequisite(s): CMT 156.

#### CMT 227. Advanced Character Animation

#### 3 Credits (2+2P)

Focus on complex rigging techniques as well as utilizing advanced animation functions to blend multiple animations into complex animations. May be repeated for a maximum of 6 credits. Restricted to: Community Colleges only.

Prerequisite(s): CMT 160.

#### CMT 228. Level Design Concepts

#### 3 Credits (2+2P)

Focus on the design and creation of video game levels. Dealing with the challenges and pitfalls of different video game genres. May be repeated for a maximum of 6 credits. Prerequisite: CMT 200

#### CMT 229. 3D Digital Sculpting

#### 3 Credits

Introduce students to the 3D Sculpting programs which are the industry standard sculpting programs. Students will learn how to create complex high polygon sculpts and normal maps and transfer the models into 3D studio Max and Autodesk Maya. May be repeated up to 6 credits. Restricted to: Community Colleges only.

Prerequisite(s): CMT 160.

### CMT 230. Web Design II 3 Credits (2+2P)

Creating and managing well-designed, organized web sites using HTML and web development software. May be repeated for a maximum of 6 credits. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 130.

#### CMT 235. Web Design for Small Businesses

#### 3 Credits (2+2P)

Technology and techniques for designing and building a web presence for small business. May be repeated for a maximum of 6 credits. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 130.

#### CMT 236. Digital Audio Fundamentals

#### 3 Credits (2+2P)

Advanced digital audio post production and recording techniques using current entertainment industry-standard software and hardware. Restricted to: Community Colleges only.

#### CMT 240. Print Media II

#### 3 Credits (2+2P)

Refining of technical design skills using advanced features of page layout software in preparing a variety of business-related documents. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 140.

#### CMT 242. Advanced Computer Illustration

#### 3 Credits (2+2P)

Advanced techniques in 2D vector drawing and fundamentals of 3D illustration for use in print, web, and multimedia applications. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 142.

#### CMT 245. Image Processing II

#### 3 Credits (2+2P)

Advanced techniques in editing and manipulation of raster images for digital graphics for print, multimedia and web. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 145.

### CMT 247. Production Audio

#### 3 Credits (2+2P)

Essential tools and techniques in: field and studio recording and mixing, environmental assessment, film set protocol, various microphones, audio documentation, wildlines, ambient audio. Restricted to: Community Colleges only.

Prerequisite(s): CMT 190 and CMT 236.

## CMT 248. Music Production and Mastering 3 Credits (2+2P)

Introduction to fundamental tools and techniques in music production and mastering. Including: microphones and microphone techniques, live and studio recording, editing, mixing, and introduction to mastering digital audio. Restricted to: Community Colleges only.

Prerequisite(s): CMT 206 and CMT 236.

# CMT 249. Layer Animation and 3D Applications in Photoshop 3 Credits

This is an advanced course in Photoshop 3D techniques and motion graphic applications pertaining to the animation of Photoshop Layers juxtaposed over time and space relationships. May be repeated up to 6 credits. Restricted to Community Colleges only.

Prerequisite(s): CMT 245.

### CMT 251. Gaming Platform and Standards

#### 3 Credits (2+2P)

Focus on the different gaming platforms and their corresponding gaming demographics and standards. May be repeated up to 6 credits. Restricted to: CMT majors. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 200.

#### CMT 252. Game Tools and Techniques

#### 3 Credits (2+2P)

Focus on the different engines and gaming technologies that power the games of today. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 200.

#### CMT 254. History of Media Design

#### 3 Credits

An introduction to the principles of design history and theory within a chronological framework of historical and emerging media.

#### CMT 255. Special Topics

#### 1-4 Credits

Specific topics to be announced in the Schedule of Classes. May be repeated for a maximum of 18 credits.

#### CMT 256. Typography

#### 3 Credits

Foundation in typography with an emphasis on history of typography and the practical application and impact of font choices for print, web, animation and video. Deals with studies in font or letter construction and font choices focusing on design, application, incorporation, and visual impact. Restricted to: Community Colleges only.

Prerequisite(s): CMT 142.

#### CMT 258. Advanced Camera Techniques

#### 3 Credits (2+2P)

Professional camera techniques and training for electronic news gathering and studio filmmaking. Utilizes high-end handheld shooting techniques, cranes, dollies, and steadicam training. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 190.

#### CMT 260. 3D Special Effects

#### 3 Credits (2+4P)

Creating advanced virtual special effects for both rigid and soft bodies. Using MEL, dynamic principles, mixing nodes, and advanced particle systems. How to drive particles over surfaces, add texture to flow, create surface tensions, and use collision events to drive texture. Study of integrating computer-generated images with real-life video and audio.

Prerequisite: CMT 160 or CMT 225.

#### CMT 265. Personal Character Development

#### 3 Credits (2+4P)

Focus on the development of personal character(s), from sketch to render. Develop complete biographies of character, then build, skin and animate with as many personal attributes as possible.

Prerequisite: CMT 225.

#### CMT 275. Advanced Web Techniques

#### 3 Credits (2+2P)

Creating and managing complex web sites using advanced techniques and tools. May be repeated for a maximum of 6 credits. Restricted to: Community Colleges only.

Prerequisites: CMT 145 and CMT 230.

#### CMT 276. Advanced Photography Workshops

#### 1 Credit

This is a series of 1-credit workshops offering specialized and intense advanced skill training and upgrading applications of photography for commercial purposes and training in photographic skills and styles presented by a variety of professional lecturers. May be repeated up to 7 credits. Restricted to Community Colleges only.

Prerequisite(s): CMT 115.

#### CMT 285. Print Media III

#### 3 Credits (2+2P)

Refinement of skills needed to prepare a variety of documents for print and the service bureau. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 140 or CMT 240.

#### CMT 290. Advanced 3d Animation Workshop A 3 Credits (2+4P)

Program capstone. Students will utilize the skills learned in the program to produce their final animation. Group integrated projects are strongly recommended to emulate a real-work animation studio environment. May be repeated for a maximum of 9 credits.

Prerequisite: consent of instructor.

Corequisite: CMT 291.

#### CMT 291. Advanced 3d Animation Workshop B 3 Credits (2+4P)

Program capstone. Students will utilize the skills learned in the program to produce their final animation. Group integrated projects are strongly recommended to emulate a real-work animation studio environment. May be repeated for a maximum of 9 credits.

Prerequisite: consent of instructor.

Corequisite: CMT 290.

#### CMT 292. Creative Media Studio

#### 3 Credits (2+2P)

A studio environment where students specialize in creating film-festival quality and portfolio-ready projects under the supervision of faculty. May be repeated for a maximum of 6 credits.

Prerequisites: CMT 190 and CMT 195 or CMT 160.

#### CMT 294. Creative Media Studio II

#### 3 Credits

Second level of studio environment where students specialize in creating film-festival quality and portfolio ready projects under the supervision of faculty. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 292.

#### CMT 295. Professional Portfolio Design and Development 1-3 Credits

Personalized design and creation of the student's professional portfolio including hard-copy, demo reel, and online. May be repeated up to 6 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

Prerequisite(s): Consent of instructor.

#### CMT 298. Independent Study

#### 1-3 Credits

Individual studies directed by consenting faculty with prior approval of department head. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): Minimum GPA of 3.0 and sophomore standing.

Name: Matt Byrnes, Department Chair

Office Location: DADM 2001 Phone: (575) 528-7310

Website: https://dacc.nmsu.edu/cmt/

# **Creative Media - Certificate of Completion**

### (15 credits)

#### **Technical Requirements**

OMT 115	Digital Dhatagaanhy and Incoming I	2
CMT 115	Digital Photography and Imaging I	3
Select two from the	following:	6
CMT 140	Print Media I	
CMT 150	2D Animation	

CMT 190	Digital Video Production I	
CMT 142	Computer Illustration	3
CMT 145	Image Processing I	3
Total Credits		15

## **Creative Media Technology -Associate of Applied Science**

### (68-70 credits)

<b>Core Requirements</b>		
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 116G	Perspectives on Film <sup>1</sup>	3
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
MATH 210G	Mathematics Appreciation <sup>1</sup>	3
ART 110G	Visual Concepts <sup>1</sup>	3
or ART 150	Drawing I	
HIST or PHIL genera	al education course <sup>1</sup>	3
Select any four-cred Education Common	lit course from New Mexico General Core Area III	4
Technical/Related F	Requirements	
CMT 130	Introduction to Web Design	3
CMT 142	Computer Illustration	3
CMT 145	Image Processing I	3
CMT 150	2D Animation	3
CMT 160	Modeling and Animation	3
CMT 180	Design Principles	3
CMT 190	Digital Video Production I	3
CMT 195	Digital Video Editing I	3
CMT 206	Principles of Sound	3
CMT 221	Internship	3
or CMT 223	Media Production Services	
CMT 292	Creative Media Studio	3
CMT 295	Professional Portfolio Design and Development	3
ENGL 232	Script Development and Storyboarding <sup>1</sup>	3
or ENGL 235	Narrative: Principles of Story Across the Media	
Electives		
Select 6-8 credits from	om the following:	6-8
ART 150	Drawing I <sup>1</sup>	

Elect	tives		
Selec	ct 6-8 credits fro	om the following:	6-8
Al	RT 150	Drawing I <sup>1</sup>	
CI	MT 140	Print Media I	
CI	MT 151	Evolution of Electronic Games	
CI	MT 175	3-D Character Design	
CI	MT 185	3D Shading and Lighting Techniques	
CI	MT 200	Critical Game Studies	
CI	MT 205	Cinematography	
CI	MT 210	Digital Video Production II	
CI	MT 215	Digital Video Editing II	
CI	MT 221	Internship	
CI	MT 222	Pre-production Management	
CI	MT 223	Media Production Services	
CI	MT 227	Advanced Character Animation	

CMT 228	Level Design Concepts	
CMT 230	Web Design II	
CMT 242	Advanced Computer Illustration	
CMT 252	Game Tools and Techniques	
CMT 256	Typography	
CMT 258	Advanced Camera Techniques	
CMT 260	3D Special Effects	
ENGL 232	Script Development and Storyboarding <sup>1</sup>	
THTR 110	Beginning Acting <sup>1</sup>	
Other approved graphics elective		
Total Credits		68-70

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

### **Digital Audio - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (18 credits)

#### **Technical Requirements**

CMT 195	Digital Video Editing I	3
CMT 206	Principles of Sound	3
CMT 236	Digital Audio Fundamentals	3
Select 9 credits from	m the following:	9
CMT 221	Internship	
CMT 292	Creative Media Studio	
Approved Electiv	res	

**Total Credits** 

# **Digital Graphics - Certificate of** Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (18 credits)

### **Technical Requirements**

CMT 130	Introduction to Web Design	3
CMT 140	Print Media I	3
CMT 142	Computer Illustration	3
CMT 145	Image Processing I	3
CMT 180	Design Principles	3
CMT 240	Print Media II	3
or CMT 242	Advanced Computer Illustration	
Total Credits		18

# **Digital Graphics Technology -Associate of Applied Science** (60 credits)

#### **Core Requirements**

ENGL 111G	Rhetoric and Composition <sup>2</sup>	4
COMM 253G	Public Speaking <sup>2</sup>	3
or COMM 265G	Principles of Human Communication	
MATH 210G	Mathematics Appreciation <sup>2</sup>	3
ART 110G	Visual Concepts <sup>2</sup>	3
Select ONE "G" leve SOC, PSY, etc.	course from Area IV or V in HIST, PHIL,	3
Related Requiremen	nts	
CMT 221	Internship	3

Media Production Services

or CMT 223

**Total Credits** 

Technical Requirer	nents	
CMT 115	Digital Photography and Imaging I	3
CMT 130	Introduction to Web Design	3
CMT 140	Print Media I	3
CMT 142	Computer Illustration	3
CMT 145	Image Processing I	3
CMT 180	Design Principles	3
CMT 230	Web Design II	3
or CMT 235	Web Design for Small Businesses	
CMT 240	Print Media II	3
CMT 242	Advanced Computer Illustration	3
CMT 245	Image Processing II	3
CMT 254	History of Media Design	3
CMT 295	Professional Portfolio Design and Development	3

Electives		
Select 5 credits from	n the following:	5
ART 150	Drawing I <sup>2</sup>	
ART 155	2-D Fundamentals	
ART 280	Introduction to Printmaking	
CMT 150	2D Animation	
CMT 160	Modeling and Animation	
CMT 190	Digital Video Production I	
CMT 195	Digital Video Editing I	
CMT 210	Digital Video Production II	
CMT 215	Digital Video Editing II	
CMT 216	Digital Photography and Imaging II	
CMT 230	Web Design II	
CMT 235	Web Design for Small Businesses	
CMT 256	Typography	
CMT 275	Advanced Web Techniques	
CMT 285	Print Media III	
1-3 credits of app	proved media-related elective(s)	

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

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Not transferable as part of the New Mexico Higher Education Department general education common core.

# **Digital Video - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (21 credits)

#### **Technical Requirements**

CMT 130	Introduction to Web Design	3
CMT 145	Image Processing I	3
CMT 180	Design Principles	3
CMT 190	Digital Video Production I	3
CMT 195	Digital Video Editing I	3
CMT 206	Principles of Sound	3
CMT 210	Digital Video Production II	3
Total Credits		21

# Film Crew Training - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (24 credits)

#### **Technical Requirements**

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6
9
9

# **Game Design - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (30 credits)

### **Technical Requirements**

CMT 142	Computer Illustration	3
CMT 145	Image Processing I	3
CMT 151	Evolution of Electronic Games	3
CMT 160	Modeling and Animation	3
CMT 175	3-D Character Design	3
CMT 200	Critical Game Studies	3
CMT 220	Environmental Scene Design	3
or CMT 260	3D Special Effects	
CMT 228	Level Design Concepts	3

CMT 252	Game Tools and Techniques	3
Select 3 credits fro	om the following:	3
CMT 227	Advanced Character Animation	
CMT 255	Special Topics	
OECS 140	Introduction to Game Production Industry	
OECS 245	Game Programming I	
Approved media-related elective		
Total Credits		30

# **Graphics and Animation - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (24 credits)

#### **Technical Requirements**

CMT 145	Image Processing I	3
CMT 160	Modeling and Animation	3
CMT 195	Digital Video Editing I	3
Tracks		
Creative or Technic	cal Track	15
Total Credits		24

#### **Creative Track**

CMT 260	3D Special Effects	3
CMT 227	Advanced Character Animation	3
CMT 175	3-D Character Design	3
CMT 150	2D Animation	3
CMT 142	Computer Illustration	3

#### **Technical Track**

DRFT 109	Computer Drafting Fundamentals	3
DRFT 114	Introduction to Solid Modeling	3
DRFT 165	Introduction to Building Information Modeling	3
DRFT 176	Solid Modeling, Rendering and Animation	3
Approved related	l elective(s)	3
Total Credits		15

# Web Design - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (21 credits)

#### **Technical Requirements**

CMT 130	Introduction to Web Design	3
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CMT 145	Image Processing I	3
CMT 180	Design Principles	3
CMT 230	Web Design II	3
CMT 235	Web Design for Small Businesses	3
or CMT 275	Advanced Web Techniques	
CMT 245	Image Processing II	3
Select 3 credits fro	m the following:	3
CMT 142	Computer Illustration	
CMT 195	Digital Video Editing I	
CMT 215	Digital Video Editing II	
CMT 240	Print Media II	
CMT 242	Advanced Computer Illustration	
CMT 290	Advanced 3d Animation Workshop A	
OECS 128	Operating Systems Linux/Unix	
OECS 205	Advanced Operating Systems: Administration	
OECS 216	Programming for the Web	
OECS 220	Database Application and Design	
Approved Web-r	elated elective	

Criminal Justice and Law Enforcement

### Associate of Applied Science Degree

· Corrections Option

**Total Credits** 

· Law Enforcement Option

#### **Associate of Criminal Justice Degree**

The Law Enforcement program provides classroom instruction leading to an associate degree in the fields of corrections or law enforcement. This program provides courses to prepare for entry-level careers in agencies at the local, state, and federal levels, as well as private agencies. Some of the career areas available to graduates are law enforcement, private security and related services, adult and juvenile corrections, probation and parole, law, and others.

Those currently working as career officers in law enforcement can also benefit from the program, which can provide them with a better understanding of their roles in the criminal justice system while helping them prepare for higher level positions within their organizations.

# Required Skills and Abilities Physical Abilities

This program requires that the student be able to-

- lift, carry and balance up to 125 pounds (250 pounds with assistance)
- assume a variety of postural positions and be capable of physical maneuvers ranging from crawling, kneeling, squatting, twisting, turning, and bending, to climbing stairs and ladders)
- withstand varied environmental conditions such as extreme heat, cold, and moisture.

### **Technology Competencies**

In an effort to assist students with adequate preparation for their coursework at DACC, technology competencies have been identified and established. These competencies are in effect for all courses taken in the Law Enforcement and Criminal Justice programs. Students must possess the following minimum competencies. Additional competencies may be required for particular courses/programs:

- Access course and program material on the Web using Mozilla Firefox and/or MS Internet Explorer
- Correspond with DACC students and faculty using e-mail and the Web
- · Read/print e-mail and attachments/files from students and faculty
- Complete, send, and receive assignments using e-mail and attachments/files
- Use the DACC Library e-books, e-journals, databases, or credible World Wide Web resources for research and completion of course assignments
- Prepare and conduct presentations in the classroom using presentation equipment as required.
- Use the appropriate software for a given course (DACC uses as standards Microsoft products, including MS Word, MS Project, MS Excel, and MS PowerPoint)
- · Use CD-ROMs when required as part of course assignments
- Use an appropriate anti-virus application to insure the files transmitted and received are virus free
- Use recommended plagiarism review software to insure work is not plagiarized

### Private Security Background Checks for Law Enforcement Majors

Every student focusing on the related career fields of fire, law enforcement, Homeland Security, private security, corrections, parole or probation will at some point be subject to a background and criminal history check.

A background check requires that a student complete a multi-part background questionnaire identifying most of the following:

- · All names and aliases used; marriages and divorces
- Previous home and work addresses, names of employers, teachers, and schools, including dates of work and attendance and or transcripts
- · Medical history including any mental health or drug use
- Credit history

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- Criminal history to include arrests, traffic and infraction tickets (Juvenile arrest histories may not be shielded from background checks even if the juvenile record has been sealed.)
- · Military service record
- Driving record, suspensions, tickets and possession of a current driver's license
- Citizenship and/or immigration status to include birth certificate and valid social security number
- And any other background informational requirements unique to each agency
- Current and past Internet social networking information, profiles, postings, e-mail addresses, and cyber-vetting

**NOTE**: The following categories will eliminate a person from access to internships, training academies, off-site law enforcement related workstudy opportunities, and most criminal justice related jobs:

- Arrest for domestic violence, DUI/DWI, drug use and possession, felony crimes, and misdemeanor crimes (agency dependent)
- Mental impairment based on mental illness and/or drug-alcohol abuse
- · False statements on an application or background check
- Social networking or Internet postings deemed inappropriate or damaging to a candidate's reputation or reputation of potential hiring entities; also, any postings, images, etc., demonstrating a lack of moral turpitude
- · Violations of laws involving moral turpitude
- · Bad credit
- Objectionable visible body art, body modifications or piercings (tattoos on the neck may also disqualify if visible while participating/working)
- Failure to pass any job-related testing process, including, but not limited to, the following: written examination, oral interview board, physical fitness exam, background check, polygraph examination, psychological examination, medical examination

### **Degrees and Options**

# Corrections/Law Enforcement with the Corrections Option

The Corrections option emphasizes the correctional aspect of the criminal justice systems and offers a broad understanding of correctional institutions and alternatives. General studies are offered to students seeking employment in confinement facilities, institutional security, and other similar programs. The student also is prepared to work in adult and juvenile correctional agencies at the local, state, and federal levels.

Workers in the corrections field are responsible for overseeing individuals who have been arrested and are awaiting trial or who have been convicted of a crime and sentenced to serve time in a jail, reformatory, or penitentiary. The majority of officers are employed by local, county, state, and federal institutions.

While the primary mission of corrections is protection of the public, many officers are involved in the treatment, education, and reintegration of offenders. These officers may find employment as wardens, jail administrators, program coordinators and counselors, public information officers, correctional trainers, case managers, probation/parole officers, corrections officers, detention officers or other related careers.

**NOTE:** An articulation agreement exists with the Corrections Department of New Mexico that makes it possible to receive college credit for experience and/or training.

# Corrections/Law Enforcement with the Law Enforcement Option

The Law Enforcement option emphasizes the law enforcement aspect of the criminal justice system. This degree offers the law enforcement student a general understanding of the police officer's multifaceted role in the United States. It also prepares the student with the basic foundations of police work for possible employment opportunities with local, state and federal governments, and private industry.

Most law enforcement officers are employed by the security industry and local, county, and state governments. They have duties that range from providing security to controlling traffic to preventing and investigating crimes. They maintain order, enforce laws and ordinances, issue traffic summonses, investigate accidents, present evidence in court, serve legal documents for the court system, and apprehend, arrest and process prisoners. Career opportunities include positions as private investigators, security officers, loss-prevention officers, police officers, sheriff and deputy officers, criminal investigators, game wardens, private detectives, and bailiffs.

Many law enforcement agencies encourage the applicants to take postsecondary school training in law enforcement-related subjects. Many entry-level applicants for police jobs have completed some formal postsecondary education and a significant number are college graduates. Knowledge of a foreign language is an asset in many federal agencies and urban departments.

Additional information on professional requirements and qualifications may be obtained from the U.S. Department of Labor, Bureau of Labor Statistics, at www.bls.gov (https://www.bls.gov).

**NOTE:** An articulation agreement exists with the Department of Public Safety of New Mexico that makes it possible to receive college credit for experience and/or training.

### The Associate Degree in Criminal Justice

The associate of criminal justice introduces students to three facets of the criminal justice system: police, courts, and corrections. Broadly interdisciplinary—embracing the study of law, the humanities, and the natural, behavioral, and social sciences—the curriculum prepares students to transfer into the NMSU bachelor's degree program in criminal justice, or the bachelor of applied studies, at the junior level.

Law Enforcement/Corrections - Associate of Applied Science (p. 99)

Criminal Justice and Law Enforcement - Associate of Criminal Justice (p. 100)

# C J 101G. Introduction to Criminal Justice 3 Credits

Examination of crime and justice within the broader social and cultural context of U.S. society from interdisciplinary social science perspectives. Includes critical analysis of criminal justice processes and the ethical, legal, and political factors affecting the exercise of discretion by criminal justice professionals.

### C J 199. Special Topics in Criminal Justice I

#### 1-3 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated under different topics for a maximum of 6 credits.

#### C J 205. Criminal Law

#### 3 Credits

Rules, principles, and doctrines of criminal liability in the United States. The historical development, limits, and functions of the substantive criminal law. May be repeated up to 3 credits.

## C J 210. The American Law Enforcement System 3 Credits

Historical and philosophical foundations of law and order. An in-depth examination of the various local, state, and federal law enforcement agencies.

## C J 221. Fundamentals of Criminal Investigation 3 Credits

Investigation procedures from crime scene searches, collection of evidence, and case preparation. Community Colleges only. (Note: students completing C J 221 may not take C J 321.)

#### C J 230. Introduction to Corrections

#### 3 Credits

Development of correctional philosophy, theory, and practice. Instructional and non-institutional alternatives available in the corrections process.

### C J 250. Courts and the Criminal Justice System

#### 3 Credits

Structures and functions of American courts. Roles of attorneys, judges, and other court personnel; operation of petit and grand juries, trial and appellate courts.

# C J 293. Field Experience in Criminal Justice 3-6 Credits

Field experience in a public criminal justice agency or equivalent private sector organization. Supervised internship experience, conferences, and observations. Restricted to majors. Community Colleges only.

**Prerequisites:** C J 101G, prior arrangement and consent of instructor and a GPA of 2.0 or better in major.

# LAWE 201. Introduction to Juvenile Delinquency 3 Credits

An introductory overview of the juvenile justice system of due process, custody, detention and release. Note: course does not meet upper division requirements towards completion of Bachelor of Science in Criminal Justice. Restricted to: Community Colleges Only.

#### LAWE 202. Police Patrol Procedures

#### 3 Credits

A critical review of police procedures and the influences on police behavior; policy development, including the police role; discretion; police community interaction and arrest, search and seizure. Restricted to: Community Colleges only.

### LAWE 203. Introduction to Police Supervision 3 Credits

An introductory overview of police supervision and concerns as it applies to law enforcement. (Note: Course does not meet upper division requirements toward completion of Bachelor of Science in Criminal Justice.) Restricted to: Community Colleges only.

# LAWE 204. Introduction to Homeland Security 3 Credits

A historical perspective of international and domestic terrorist threats and the need to develop cohesive response policies and practices in the interest of National Security. [Course does not meet requirements towards completion of Bachelor of Science in Criminal Justice.]

Restricted to: Community Colleges only.

#### Prerequisite(s): C J 101.

# LAWE 205. Practical Field Investigations 4 Credits (3+3P)

Incorporates the current methods and techniques for the management of the crime scene, includes documentation, collection and preservation of evidence and case presentations. [Course does not meet requirements towards completion of Bachelor of Science in Criminal Justice.]

Restricted to Community Colleges campuses only.

#### Prerequisite(s): C J 101 and C J 221.

## LAWE 206. Traffic Enforcement and Crash Investigations 3 Credits

History and development of traffic laws and regulations, including basic elements of traffic violations, detection, apprehension, impaired drivers and guidelines and procedures for effective crash investigations and reporting. Restricted to: Community Colleges only.

### LAWE 207. Legal Aspects of Law Enforcement

#### 3 Credits

An evaluation of police authority including responsibilities, civil liability, liability implications, legal obligations, legal restraints, laws of arrest, and search and seizure. Retricted to: Community Colleges only.

### LAWE 221. Law Enforcement Internship

#### 3 Credits

Application of knowledge, skills and abilities, in an agency as an intern and integrated member of a law enforcement affiliated agency.

Prerequisite: consent of instructor.

### LAWE 233. Practical Approach to Terrorism

#### 3 Credits

Gives responders an overall safety approach in recognizing and responding to incidents involving terrorism. Presents and overview in types of harm, explosive weapons, chemical weapons, biological weapons and radiological weapons. [Course does not meet requirements towards completion of Bachelor of Science in Criminal Justice.]

Restricted to: Dona Ana campus only. Crosslisted with: FIRE 233

Name: Mark Nunley, Public Services Department Chair

Office Location: DASR 2201

Phone: (575) 527-7746

Website: https://dacc.nmsu.edu/lwcj/

# Law Enforcement/Corrections - Associate of Applied Science

**NOTE:** All courses in this program may be applied toward a Bachelor of Applied Studies or Individualized Studies degree at NMSU.

### (66 credits)

#### Core Requirements

or SPAN 213

CJ101G

**Technical Requirements** 

Core Requirements		
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 203G	Business and Professional Communication <sup>1</sup>	3
or ENGL 218G	Technical and Scientific Communication	
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
GOVT 100G	American National Government <sup>1</sup>	3
PSY 201G	Introduction to Psychology <sup>1</sup>	3
SOC 101G	Introductory Sociology <sup>1</sup>	3
	algebra course selected from Area II of the al Education Common Core	3
Related Requirement	nts	
C S 110	Computer Literacy <sup>1</sup>	3
SPAN 111	Elementary Spanish I <sup>1</sup>	3-4

Spanish for Heritage Learners II

Introduction to Criminal Justice 1

3

C J 205	Criminal Law <sup>1</sup>	3
C J 250	Courts and the Criminal Justice System <sup>1</sup>	3
LAWE 201	Introduction to Juvenile Delinquency	3
LAWE 207	Legal Aspects of Law Enforcement	3
LAWE 233	Practical Approach to Terrorism	3
Electives chosen in	consultation with advisor	1-8
Corrections or Law Enforcement option		12-18
Total Credits		66

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

### **Corrections Option**

C J 230	Introduction to Corrections <sup>2</sup>	3
Select one from th	e following:	3
C J 293	Field Experience in Criminal Justice $^2$	
LAWE 204	Introduction to Homeland Security	
LAWE 205	Practical Field Investigations	4
LAWE 206	Traffic Enforcement and Crash	3
	Investigations	
Total Credits		13

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

### **Law Enforcement Option**

Select one from the following:		3
C J 210	The American Law Enforcement System 3	
LAWE 202	Police Patrol Procedures	
C J 221	Fundamentals of Criminal Investigation <sup>3</sup>	3
or C J 293	Field Experience in Criminal Justice	
LAWE 203	Introduction to Police Supervision	3
LAWE 204	Introduction to Homeland Security	3
LAWE 205	Practical Field Investigations	4
LAWE 206	Traffic Enforcement and Crash Investigations	3
Total Credits		19

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

### Criminal Justice and Law Enforcement - Associate of Criminal Justice

**NOTE:** All courses listed under "Core Requirements" and "Major Requirements" may be applied toward a bachelor's degree in criminal justice at NMSU.

### (66 credits)

#### **Core Requirements**

Select 3 credits from the following:

COLL 101 College/Life Success

UNIV 150	The Freshman Year Experience <sup>1</sup>	
Area I: Communic	ations courses <sup>2</sup>	10
Area II: Mathematics/Algebra courses		3
Area III: Laborator	ry Science courses	8
Area IV: Social/Behavioral Sciences courses <sup>3</sup>		6-9
Area V: Humanities and Fine Arts courses <sup>3</sup>		6-9
Major Requiremen	nts	
C J 101G	Introduction to Criminal Justice <sup>1</sup>	3
C J 205	Criminal Law <sup>1</sup>	3
C J 210	The American Law Enforcement System	3
C J 221	Fundamentals of Criminal Investigation <sup>1</sup>	3
C J 230	Introduction to Corrections <sup>1</sup>	3
C J 250	Courts and the Criminal Justice System <sup>1</sup>	3
Approved elective	s	9
Total Credits		66

- Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.
- One course must be ENGL 111G Rhetoric and Composition
- Student must have an least nine credits in either Area IV or Area V. NOTE: When selecting courses for each of the areas listed above, follow "The New Mexico General Education Common Core (p. 60)" guidelines.

### **Culinary Arts**

#### **Associate of Applied Science Degree**

The Culinary Arts program trains chefs, pastry chefs, cooks, and bakers for positions in restaurants, resorts, institutions, cruise lines, hotels, and any venue where quality food is prepared. Working in state-of-the-art culinary laboratories, students learn, experiment, create, and define the future of gastronomy in our region.

The program leads to an associate of applied science (AAS) degree in an area of study that directly relates to the workforce needs of this region, while establishing the student's credentials to work in the food service industry. It is designed for students entering the culinary arts field, as well as those with previous experience who want to upgrade their professional skills.

A DACC Culinary Arts AAS degree assures employers that graduates possess the knowledge and skills needed in the industry. The program has been designed to meet the requirements of the American Culinary Federation.

Culinary Arts degree students are required to provide their own tools (knives, etc.) and uniforms (specific uniform requirements are available from instructors).

**NOTE:** Because it is comprised primarily of vocational/technical courses, this Career and Technical Education program is not intended for transfer to a four-year institution. Students will be required to provide their own approved uniforms and equipment for laboratory courses. There may be a fee assessed for certain laboratory courses.

### **Special Admissions Criteria**

Culinary Arts is a competitive-entry program. Prior to applying to the program, students will have completed, and passed with a C or better, the courses required to be taken in their initial semester

CHEF 101	Culinary Arts Kitchen Orientation	3
CHEF 165	Math for Kitchen Operations	3
HOST 201	Introduction to Hospitality Industry	3

Students must have received their New Mexico Food Handler's Cardprior to admission to the Culinary Arts program. Students may apply for entry into the cohort at the end of their first semester by preparing an essay detailing their career goals and reasons for seeking admission into the Culinary Arts program, participating in an oral interview with Culinary Arts instructors, and completing the admissions application documents.

Culinary Arts - Associate of Applied Science (p. 103)

### CHEF 101. Culinary Arts Kitchen Orientation 3 Credits

Provides students with basic information and skills necessary for success in the Culinary Arts program. Students learn basic kitchen routines, safety and sanitation, professional conduct and deportment, standard kitchen calculations, knife handling, and are introduced to the laboratories for initial cooking experiences. Restricted to Community Colleges campuses only.

#### CHEF 125. Introductory Cake Decorating

#### 1 Credi

Introduction to the professional cake decorating techniques used by pastry chefs. Basic skills of piping a variety of icings into different patterns are taught. Restricted to Community Colleges campuses only. **Prerequisite(s):** Consent of instructor.

#### **CHEF 126. Intermediate Cake Decorating**

#### 1 Credit

Introduction to more advanced professional cake decorating techniques used by pastry chefs. Fondant work and more complex decorating schemes are taught. Restricted to Community Colleges campuses only. **Prerequisite(s):** CHEF 125.

#### CHEF 127. Chocolate Work

#### 1 Credit

Introduction to working with chocolate utilizing a variety of methods. Tempering, forming, molding, and other professional techniques will be taught. Restricted to Community Colleges campuses only.

Prerequisite(s): Consent of Instructor.

#### CHEF 128. Advanced Chocolate Work

#### 1 Credit

More advanced treatments of chocolate are explored and professional techniques for the chocolatier are developed. Restricted to Community Colleges campuses only.

Prerequisite(s): CHEF 127.

# CHEF 129. Wedding Cake Design and Construction 1 Credit

Basic skills in designing wedding (or other specialty event) cakes. Includes shaping, icing selection, decorating scheme, presentation, transportation, and remote set up. Restricted to Community Colleges campuses only.

Prerequisite(s): CHEF 125 and CHEF 126.

#### CHEF 155. Special Topics

#### 1-3 Credits (1-3)

Specific subjects to be announced in the Schedule of Classes. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

### CHEF 165. Math for Kitchen Operations

#### 3 Credits

Fundamental mathematical concepts and computations, including measurement, recipe scaling and conversions, metric unit conversion, ingredient yield calculations, ratios and cost extensions are covered. Examples of basic mathematical calculations use kitchen and food service functions, as well as situations to demonstrate principles.

# CHEF 211. Food Production Management I 3 Credits (2+2P)

Introduction to kitchen design, workflow, and commercial equipment. Techniques, methods, and application of basic food production principles. Practical experience in cooking processes from a managerial viewpoint. Crosslisted with: HOST 211. Restricted to Community Colleges only.

# CHEF 212. Food Production Management II 3 Credits (2+2P)

Selection and use of ingredients. Demonstration and application of classical and modern cooking and preparation techniques. Management techniques for kitchen personnel. Recipe design and analysis. Crosslisted with: HOST 212. Restricted to Community Colleges only.

Prerequisite(s): CHEF 211 or consent of instructor.

# CHEF 213. Bakery Management I 3 Credits (2+2P)

Fundamentals of baking from a supervisory/management perspective. Exposure to commercial equipment and processes. Introduction to commercial alternatives to scratch-preparation methods. Crosslisted with: HOST 213. Restricted to Community Colleges only.

### CHEF 214. Bakery Management II

#### 3 Credits (2+2P)

Advanced techniques and management of bakery operations are explored. Students learn classical forms and techniques. Modern methods of preparing traditional pastry and baked goods are introduced. Crosslisted with: HOST218. Restricted to Community Colleges only. **Prerequisite(s)**: CHEF 213 or consent of instructor.

# CHEF 233. Culinary Arts Fundamentals I 4 Credits (1+9P)

Introduction to the basics of culinary arts, including ingredients recognition, cooking methods and techniques, knife usage, preparation of basic stocks, mother sauces, starches and vegetables. Students will participate in laboratory work designed to create an understanding of the professional role of the culinarian. Preparation and production of food products integral to service to guests is incorporated in the course. May be repeated up to 4 credits. Consent of Instructor required. Restricted to: CHEF, HOST, HSMG, HOCH majors. Restricted to Community Colleges campuses only.

#### CHEF 234. Culinary Arts Fundamentals II 4 Credits (1+9P)

Continuation of introductory course focusing on meat cookery, daughter sauces, cold food preparation, poultry and seafood. Safe use of equipment is emphasized while experiencing differing methods of preparation and cooking. Preparation and production of food products integral to service of guests is incorporated in this course. May be repeated up to 4 credits. Restricted to: HOST, HSMG, CHEF majors. Restricted to Community Colleges campuses only.

Prerequisite(s): CHEF 233 with a grade of "C-" or better.

#### CHEF 235. Advanced Culinary Arts I 4 Credits (1+9P)

Exploration and experience in preparation techniques beyond the basic level. Nutritional components of food are discussed, as in the application of good nutrition practices in recipe design. Students are encouraged to use creative methods to expand the individual's culinary expressions. Prepares food products for service to guests in both bulk feeding and individual service settings. Plans, prepares, serves and critiques meals provided for students, faculty and staff. May be repeated up to 4 credits. Prerequisite(s)/Corequisite(s): CHEF 234 with a grade of "C" or better if course has been previously taken. Restricted to: CHEF majors. Restricted to Community Colleges campuses only.

#### CHEF 236. Advanced Culinary Arts II 4 Credits (1+9P)

Advanced techniques and experimental use of food combinations to enhance the student's repertoire of skills and abilities. Utilizes knowledge to develop recipes for unique products. Plans, prepares, serves and critiques meals provided for students, faculty and staff. Restricted to: CHEF majors. Restricted to Community Colleges campuses only. Prerequisite(s): CHEF 235 with a grade of "C" or better.

#### CHEF 237. Banquet/Catering Production 3 Credits (1+6P)

Planning and implementation of the culinary aspects of catered functions. Development of time schedules, work assignments and service plans for catered events and banquet functions. Production of food items in appropriate quantities for catered events. Costing and control functions are covered. May be repeated up to 6 credits. Restricted to: CHEF, HOST majors. Restricted to Community Colleges campuses only. Prerequisite(s): Grade of "C" or above in CHEF 233.

### CHEF 240. Baking Fundamentals I

#### 4 Credits (1+9P)

Introduction to baking techniques, measurment and use of ingredients; equipment use and chemical reactions inherent in the baking process. Production of simple desserts and baked goods. Itroduction to working with bread doughs. Restricted to: HOST, CHEF majors. Restricted to Community Colleges campuses only.

Corequisite(s): CHEF 233.

#### CHEF 241. Baking Fundamentals II 4 Credits (1+9P)

More advanced baking and bread making techniques are covered in this course with emphasis on the more advanced elements of quantity production. Students work with a variety of products and ingredients. Restricted to: HOST, CHEF majors. Restricted to Community Colleges campuses only.

Prerequisite(s): grade of "C" or above in CHEF 240.

### CHEF 242. Intermediate Baking I

#### 4 Credits (1+9P)

More advanced baking and pastry techniques are covered in this course with emphasis on the basic elements of patisserie production. Focus is on preparing students to work in a pastry kitchen. Restricted to: HOST, CHEF majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Grade of "C" or above in CHEF 241.

#### CHEF 243. Intermediate Baking II

#### 3 Credits (1+6P)

Continuation of work with basic elements of patisserie products including laminated doughs and filled products. Students prepare creams, custards, fillings and are introduced to cake assembly procedures. Restricted to: HOST, CHEF majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Grade of "C" or above in CHEF 242.

#### CHEF 245. Pastry Art and Techniques

#### 3 Credits (1+6P)

Advanced skills for the pastry chef including pulled sugar work, spun sugar, chocolate art, pastillage, marzipan molding, butter carving and advanced decorating techniques are explored. Students prepare specialty items for display and competition. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: CHEF majors. Restricted to Community Colleges campuses only.

Prerequisite(s): CHEF 240.

#### CHEF 255. Special Topics

#### 3 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated up to 6 credits. Restricted to: CULI, HOST, HSMG majors. Restricted to Community Colleges campuses only.

#### CHEF 256. International Cuisine

#### 3 Credits (1+6P)

Exploration into a variety of international cuisines is undertaken, including the cultural and historical backgrounds of the foods being prepared. Students work on developing themed menus and production plans for meals utilizing a single international cuisine. May be repeated up to 6 credits. Restricted to: CHEF, HOST majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Grade of "C" or above in CHEF 233.

#### CHEF 257. Garde Manger

#### 3 Credits (1+6P)

Traditional garde manger skills are taught, including plated salads, cold foods, entrements, pates, forcemeat, terrines, charcuterie and chaud froid work. The art and craft of food design, preparation and service are emphasized. May be repeated up to 3 credits. Restricted to: CHEF, HOST majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Grade of "C" or above in CHEF 233.

#### CHEF 260. Nutrition for Chefs

#### 3 Credits

Aspects of basic human nutritional requirements are covered as are the applications of the standards to the cooking and baking. Meeting the USDA nutrient guidelines while preparing good tasting food is discussed, calorie, fat and sodium reduction techniques are explored.

Name: Kim Seifert, Department Chair

Office Location: DAEM 100G

Phone: (575) 527-7640

Website: https://dacc.nmsu.edu/chef/

# **Culinary Arts - Associate of Applied Science**

### (61-62 credits)

#### **General Education Requirements**

	•	
ENGL 111G	Rhetoric and Composition <sup>1, 2</sup>	3-4
or BOT 105	Business English I	
CHEF 165	Math for Kitchen Operations <sup>2</sup>	3
BMGT 240	Human Relations	3
BOT 215	Spreadsheet Applications	3
or OECS 215	Spreadsheet Applications	
HOST 201	Introduction to Hospitality Industry <sup>2</sup>	3
Related Requirem	ents	
BMGT 201	Work Readiness and Preparation	3
Technical Require	ments	
HOST 203	Hospitality Operations Cost Control	3
HOST 208	Hospitality Supervision	3
HOST 214	Purchasing and Kitchen Management	3
HOST 219	Safety, Security and Sanitation in Hospitality Operations <sup>2</sup>	3
CHEF 101	Culinary Arts Kitchen Orientation <sup>2</sup>	3
CHEF 233	Culinary Arts Fundamentals I <sup>2</sup>	4
CHEF 234	Culinary Arts Fundamentals II	4
CHEF 235	Advanced Culinary Arts I	4
CHEF 236	Advanced Culinary Arts II	4
CHEF 240	Baking Fundamentals I	4
Elective Requirem	nents	
Select 8 credits fr	om any CHEF courses not listed above.	8
Total Credits		61-62

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

### **Dental Assistant**

**Certificate of Completion** - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/qainfulemployment/.

Dental assisting is both a challenging and a rewarding profession. Dental assistants are people who like helping others, enjoy working closely with patients and other members of the dental team, and like working with their hands. In fact, assistants frequently are relied on as the dentist's "other set of hands."

There is no lack of variety in the types of tasks that dental assistants perform. They

- · prepare equipment, materials, and instruments for patient care;
- · perform sterilization and disinfection procedures;
- · provide patients with instructions for dental procedures;
- · create temporary crowns;
- · provide coronal polishing and placement of sealants;
- · take impressions of teeth;

- · create study casts (molds);
- take and review patient medical histories;
- · expose and develop radiographs; and
- · perform a variety of other duties.

They may also be responsible for administrative tasks, such as billing, patient verification, scheduling of various types of treatment appointments, and material inventory.

Assistants may work in a general-practice office where a dentist provides multiple types of treatment, including restorative/operative work (fillings), prosthetics (crowns, bridges, and dentures), and perhaps some surgery. They may want to specialize for work in periodontics, oral and maxillofacial surgery, pedodontics, or orthodontics.

In the state of New Mexico, dental assistants can become certified to perform the following expanded duties:

- · radiology (taking x-rays),
- · coronal polishing (polishing of teeth and removal of stains),
- fluoride treatments (the act of placing fluoride on a patient's teeth),
   and
- · sealant placement (used to prevent decay).

These certifications are obtained through the State Dental Board and are a portion of the Dental Assisting National Board Certification Exam.

The Dental Assistant program at DACC is nationally accredited by the American Dental Association, Commission on Dental Program Accreditation. It is also recognized by the New Mexico State Board of Dentistry as a continuing-education provider.

# Important Facts About This Certificate Program

For information concerning the total cost, financing, time to completion, and job placement rates associated with this program, visit the following web page: https://dacc.nmsu.edu/vd/GEI/DA-DAS-CT/Gedt.html

#### **Course Fees**

In addition to tuition, a course fee of \$250 is charged for DAS 115 Dental Radiology.

### **Required Skills and Abilities**

Students will need to demonstrate good oral expression (speech clarity) and written comprehension in English, critical thinking skills, near vision, and physical stamina (e.g., the ability to stand for long periods of time), as well as the ability to manipulate dental/medical equipment, move/lift patients and equipment up to 50 pounds without assistance, and perform patient care procedures with manual dexterity.

### **Program Admission Special Requirements**

The Dental Assistant program is a limited-entry, special-application program. When a candidate is considered for acceptance into the program, the following factors are taken into account:

- High school and/or college transcripts and GPA (not less than 3.0)
- · Proof of county residency
- Essay (in accordance with rubric and instructions included in packet)
- Copy of <u>current</u> healthcare provider CPR card and proof of current immunizations

A grade of C- or better is required.

- Completion of English, communication, and biology courses prior to applying to program (completion of other general education, DAS 101, 131, 133 and related requirements also considered)
- Acknowledgment of physical capabilities required of a dental assistant
- · Completion of program application (submitted by deadline)

Website: https://dacc.nmsu.edu/das/

Dental Assistant - Certificate of Completion (p. 105)

Program Director: Martha McCaslin, CDA, MA, Professor

Clinical Coordinator: Rocio Miller, CDA, BS, Instructor

# DAS 101. Introduction to Dental Assisting 2 Credits

An introduction to the duties and responsibilities of a dental assistant. Includes brief lessons on head and neck anatomy, chair side assisting, sterilization techniques, dental office emergencies, and dental office management. Restricted to: Community Colleges only.

# DAS 111. Bio-Dental Science 4 Credits (3+3P)

An introduction to biomedical and dental sciences with emphasis on head and neck anatomy and tooth morphology. Includes microbiology, general anatomy and physiology, histology and embryology of the oral cavity, pathology and pharmacology as they relate to dentistry.

Corequisite(s): DAS 113, DAS 115, and DAS 117.

Prerequisite(s)/Corequisite(s): PSY 201G, PHLS 150G, and HNDS 251. Prerequisite(s): ENGL 111G, BIOL 154, and (COMM 253G or COMM 265G). Restricted to: OEDA majors. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

#### DAS 113. Dental Assisting I

#### 4 Credits (2+6P)

Introduction to chair side assisting procedures, instrumentation, infection control, equipment safety and maintenance, dental office emergencies, and management of pain and anxieties.

Corequisite(s): DAS 111, DAS 115, and DAS 117.

Prerequisite(s)/Corequisite(s): PSY 201G, PHLS 150G, and HNDS 251. Prerequisite(s): ENGL 111G, BIOL 154, and (COMM 253G or COMM 265G). Restricted to: OEDA majors. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

#### DAS 115. Dental Radiology

#### 3 Credits (2+3P)

Radiation physics, hygiene, and safety theories. Emphasis on the fundamentals of oral radiographic techniques and interpretation of radiographs. Includes exposure of intra-oral radiographs, quality assurance, radiographic interpretation, patient selection criteria, and other ancillary radiographic techniques.

Corequisite(s): DAS 111, DAS 113, and DAS 117.

Prerequisite(s)/Corequisite(s): PSY 201G, PHLS 150G, and HNDS 251. Prerequisite(s): ENGL 111G, BIOL 154, and (COMM 253G or COMM 265G). Restricted to: OEDA majors. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

#### DAS 117. Dental Materials

#### 3 Credits (2+3P)

Composition, chemical and physical properties, manipulation and uses of dental materials. Laboratory experiences include the application and manipulation of various materials used in dentistry.

Corequisite(s): DAS 111, DAS 113, and DAS 115.

Prerequisite(s)/Corequisite(s): PSY 201G, PHLS 150G, and HNDS 251. Prerequisite(s): ENGL 111G, BIOL 154, and (COMM 253G or COMM 265G). Restricted to: OEDA majors. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

# DAS 123. Dental Assisting Practicum 6 Credits (1+15P)

This course is the clinical component of the program that combines general practice and experiences in the work place. Seminar topics focus on the practicum experiences and critique of performance. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

Prerequisite(s): DAS 111, DAS 113, DAS 115, and DAS 117.

Corequisite(s): DAS 125, DAS 127, and DAS 129.

#### **DAS 125. Professional Concepts**

#### 3 Credits

Emphasis on the development of professionalism for the dental office. Includes oral communication, psychology, patient relations, problemsolving skills, stress management, and employability in addition to dental jurisprudence and ethics. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

Prerequisite(s): DAS 111, DAS 113, DAS 115, and DAS 117.

Corequisite(s): DAS 123, DAS 127, and DAS 129.

#### DAS 127. Dental Office Management

#### 2 Credits

This capstone course is an introduction to business office procedures, including telephone management, appointment control, accounts payable, completion of third party reimbursement forms, inventory control data entry for charges and payments, management recall, basic dental computer software and operating basic business equipment. Restricted to: OEDA majors. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

Prerequisite(s): DAS 111, DAS 113, DAS 115, and DAS 117.

Corequisite(s): DAS 123, DAS 125, and DAS 129.

### DAS 129. Preventive Dentistry

#### 2 Credits

Prevention of dental diseases, oral hygiene instruction, fluoride, community dental health, and nutrition. Development, implementation and evaluation of a community dental health project. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

Prerequisite(s): DAS 111, DAS 113, DAS 115, and DAS 117.

Corequisite(s): DAS 123, DAS 125, and DAS 127.

#### DAS 130. Dental Assisting II

#### 4 Credits (2+6P)

Continuation of chair side assisting skills and techniques with a major emphasis on four-handed dentistry. This capstone course includes specialties within dentistry and expanded chair side functions. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

**Prerequisite(s):** DAS 111, DAS 113, DAS 115, DAS 117, DAS 123, DAS 125, DAS 127, and DAS 129.

### DAS 131. Dental Office Management I

#### 3 Credits

Introduction to the field of dental office management with emphasis placed on professional verbal and written communication skills utilized within the dental office. Content includes dental terminology, charting, and back office experience as they relate to dental reception and management.

**Prerequisite(s)/Corequisite(s):** DAS 101, AHS 120, and AHS 202. Prerequisite(s): ENGL 111G. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

# DAS 133. Dental Office Management II 3 Credits

Places emphasis on computer programs specifically designed for dental office management (Dentrix, Sof Dent, etc.) Expanded course content on oral communication and telephone skills, appointment scheduling, patient relations, stress management solutions, and comprehensive critical thinking/problem solving skills.

**Prerequisite(s)/Corequisite(s):** AHS 202. Prerequisite(s): ENGL 111G, DAS 101, and AHS 120. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

#### DAS 155. Special Topics

#### 1-6 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

Prerequisite: consent of instructor.

Name: Martha McCaslin, CDA, MA

**Professor** 

**Program Director** 

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Website: https://dacc.nmsu.edu/das/

# **Dental Assistant - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (48 credits)

### **Core Requirements**

ENGL 111G	Rhetoric and Composition 1,2	4
COMM 253G	Public Speaking <sup>1,2</sup>	3
or COMM 265G	Principles of Human Communication	
BIOL 154	Introductory Anatomy and Physiology <sup>1,2</sup>	4
Related Requireme	ents	
Select 6 credits fro	m the following:	6
PSY 201G	Introduction to Psychology <sup>2</sup>	
PHLS 150G	Personal Health and Wellness <sup>2</sup>	
HNDS 251	Human Nutrition <sup>2</sup>	
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#### **Technical Requirements**

DAS 111	Bio-Dental Science

DAS 113	Dental Assisting I	4
DAS 115	Dental Radiology	3
DAS 117	Dental Materials	3
DAS 130	Dental Assisting II	4
DAS 123	Dental Assisting Practicum	6
DAS 125	Professional Concepts	3
DAS 127	Dental Office Management	2
DAS 129	Preventive Dentistry	2
Total Credits		48

- Must be completed before a student can apply to the Dental Assistant program.
- Courses are identical to those offered at New Mexico State University-Las Cruces (main) Campus.

## **Dental Hygiene**

#### **Associate of Applied Science Degree**

A dental hygienist is a vital member of a team of dental professionals dedicated to improving oral health and supporting the general health of individuals and groups. As licensed professionals, dental hygienists provide educational, clinical, and therapeutic services and may be involved in research, administration, client/patient advocacy, marketing or consulting. Dental hygienists may practice in a variety of settings such as private dental offices, public health facilities, schools, nursing homes and hospitals. They may also work in correctional facilities, business and industry and other settings.

Dental hygienists in a clinical setting perform oral and general health assessments and provide oral health instruction, as well as counseling regarding nutrition and healthy lifestyle and their impact on oral and general health. Dental hygienists take and interpret radiographs and provide many types of preventive services such as removing deposits from teeth, applying fluoride, placing sealants and more. Infection control and emergency management are also important functions. In New Mexico and other states, dental hygienists may be certified to provide local anesthesia.

Dental hygienists enjoy working with people, have good manual dexterity and enjoy working with their hands. They possess the maturity and critical thinking skills to provide current, quality, professional care. They have strong interpersonal skills to motivate and educate patients of all ages. Dental hygienists are lifelong learners and are dedicated to continuing education, enhancing the profession and practicing ethical decision-making and behavior.

Dental hygienists are generally well paid and are respected professionals in their communities. Job opportunities in the field are expected to grow much faster than the average for all occupations through 2022. Graduation from this program qualifies students to take national and state examinations to become licensed dental hygienists anywhere in the country, and there are international employment opportunities for dental hygienists educated in the U.S.

Students wishing to pursue a Bachelor's degree should consult with an advisor regarding transferability of courses in the prerequisite list as well as the dental hygiene curriculum.

### **Required Skills and Abilities**

Students will need to demonstrate good oral expression (speech clarity) and written comprehension in English, critical thinking skills, near vision, and physical stamina (e.g., the ability to sit for long periods of time and move about freely), as well as the ability to manipulate dental/medical equipment, move/lift equipment up to 30 pounds without assistance, and perform patient care procedures with manual precision.

### **Program Admission Special Requirements**

This is a limited entry program. Successful candidates generally have a GPA of 3.0 or higher. Faculty student ratio in the clinical setting is 1-to-5. All science courses must be taken within 5 years before admission to the program.

### **Program Prerequisites**

General education and related classes are required prior to applying to the Dental Hygiene Program and are identical to those offered at New Mexico State University Las Cruces (main) Campus (29 credits):

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
MATH 120	Intermediate Algebra (OR higher-level math) <sup>1</sup>	3
BIOL 225	Human Anatomy and Physiology I <sup>1</sup>	4
BIOL 226	Human Anatomy and Physiology II <sup>1</sup>	4
CHEM 110G	Principles and Applications of Chemistry	4
CHEM 210	Chemistry for the Allied Health Sciences	3
BIOL 221 & 221 L	Introductory Microbiology and Introductory Microbiology Laboratory <sup>1</sup>	4
HNDS 251	Human Nutrition <sup>1</sup>	3
Total Credits		29

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

### **Course Fees**

In addition to tuition, a fee of \$400 is charged for each of the following courses:

DHYG 122	Clinical Dental Hygiene I	3
DHYG 132	Clinical Dental Hygiene II	2
DHYG 212	Clinical Dental Hygiene III	4
DHYG 222	Clinical Dental Hygiene IV	4

Dental Hygiene - Associate of Applied Science (p. 108)

### DHYG 110. Preclinical Dental Hygiene

Basic scientific principles and current theory, prevention of disease transmission, ethical and professional treatment of patients, clinical learning preparation, and introduction to comprehensive patient care. Offered concurrently with DHYG 112 to provide dental hygiene students with introductory knowledge, skills and attitudes to function in the clinical setting. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

### DHYG 112. Preclinical Dental Hygiene Lab

3 Credits

Clinical application to basic theories and procedures used in dental hygiene practice. Techniques of instrumentation used in performing diagnostic, preventive and therapeutic services utilized when providing comprehensive patient care. Student will practice these techniques on manikins and student partners in the clinic. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

### DHYG 114. Oral Histology and Embryology 2 Credits

Introduction and description of general histology and embryology with emphasis on the microscopic structures of enamel, dentin, pulp, cementum, periodontal ligament, bone, oral mucosa, epithelial attachment and development of orofacial structures. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 116. Head and Neck Anatomy 3 Credits

Comprehensive study of the anatomy of the head and neck regions, including skeletal, nervous, circulatory, lymphatic, and muscular systems. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### DHYG 117. Dental Anatomy 2 Credits (2+1P)

A detailed study of nomenclature, morphologic characteristics, and physiologic relationships of human primary and permanent teeth as related to the clinical practice of dental hygiene. Laboratory activities develop observation and dexterity skills. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### DHYG 118. Dental Radiology 3 Credits (3+4P)

Study of radiation physics, hygiene and safety theories. Fundamentals of oral radiographic techniques and interpretation of radiographs. Includes exposure of intra-oral radiographs, quality assurance, radiographic interpretation, patient selection criteria, ancillary radiographic techniques and application to dental hygiene treatment. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

# DHYG 120. Dental Hygiene Theory I 3 Credits

Continuation of the theoretical basis for dental hygiene clinical practice. Emphasis on emergency care, planning dental hygiene care, health promotion and disease prevention, oral rehabilitation and care of appliances, modifications of dental hygiene care through the life-span, and an introduction to medically comprised patients. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### DHYG 122. Clinical Dental Hygiene I 3 Credits

Application of dental hygiene procedures on a variety of clinical patients under direct supervision of faculty. Emphasis on patient assessment and diagnosis, treatment procedures, appointment planning and prevention techniques. Theory is simultaneously related to practical experience. Offered concurrently with DHYG 120. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### DHYG 124. General and Oral Pathology

#### 3 Credits

Introduction to general pathology with focused study of diseases and disorders of the oral cavity and their interrelationship with body systems; developmental anomalies of the teeth and jaws; manifestations of disease in the oral cavity, head and neck. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### **DHYG 126. Periodontology**

#### 3 Credits

Study of normal and diseased periodontium to include the structural, functional and environmental factors. Emphasis on etiology, pathology, evaluation of disease, treatment modalities, and therapeutic and preventative periodontics relative to the hygienist's role as a co-therapist in a contemporary practice setting. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

### DHYG 132. Clinical Dental Hygiene II

#### 2 Credits

Continuation of clinical skills, patient assessment and diagnosis, treatment and appointment planning, preventive techniques and application of dental hygiene procedures at an intermediate level under the direct supervision of faculty. Clinical-based instruction helps students synthesize new knowledge, apply previous knowledge, and gain experience managing the workflow. Theory is simultaneously related to practical experience. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

Prerequisite(s): "C" or above in DHYG 120, DHYG 122, DHYG 124, DHYG 126, DHYG 134.

### Corequisite(s): DHYG 218.

# DHYG 134. Dental Materials 3 Credits (2+2P)

Study of the composition, chemical and physical properties, manipulations, and uses of dental materials. Emphasis on materials and procedures for which the dental hygienist is directly responsible. Laboratory experiences include application and manipulation of various materials used in dentistry. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

### DHYG 210. Dental Hygiene Theory III 2 Credits

# 2 Credits Advanced theory of dental hygiene and information on periodontal

therapies relative to the hygienist's role as a co-therapist in clinical practice. Continuation of the study of dental hygiene care for medically comprised patients and an introduction to special needs patients. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

# DHYG 212. Clinical Dental Hygiene III 4 Credits

Continuation of clinical skills, patient assessment and diagnosis, treatment and appointment planning, preventive techniques and applications of dental hygiene procedures at the intermediate to competent level under supervision of faculty. Emphasis on dental hygiene treatment for the medically compromised and periodontally involved patients. Theory is simultaneously related to practical experience. Offered concurrently with DHYG 210. May be repeated up to 4 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### **DHYG 214. Dental Pharmacology**

#### 3 Credits

Study of the pharmacologic aspects of drugs and drug groups with which the dentist and dental hygienist are directly and indirectly concerned. Emphasis is placed on nomenclature, origin, physical and chemical properties, preparation, modes of administration and effects of drugs upon the body systems. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 215. Medical and Dental Emergencies 2 Credits

This course provides an overview of medical and dental emergencies encountered most frequently in the dental setting. It also provides the student with knowledge and techniques on how to address those emergencies should they occur. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

### DHYG 217. Research Methodology

#### 2 Credits

This course provides an introduction to the principles and application of research methods in social, behavioral and medical research. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

# DHYG 218. Pain and Anxiety Management 2 Credits

Study of the application of various physical, chemical, and psychological modalities to the prevention and treatment of preoperative and postoperative patient anxiety and pain. Emphasis on administration of local anesthesia and nitrous oxide. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### DHYG 219. Pain and Anxiety Management Clinical 1 Credit

Clinical application of concepts learned in DHYG 218. Emphasis on the administration and techniques of local anesthesia and monitoring nitrous oxide. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### Prerequisite(s): DHYG 218.

# DHYG 220. Dental Hygiene Theory IV 3 Credits

Theoretical preparation for advanced clinical practice. In-depth study of dental hygiene care for patients with special needs. Case Study presentations and a Board Review are utilized to demonstrate the synthesis of comprehensive dental hygiene knowledge, skills and attitudes. The most current dental and dental hygiene technology will be reviewed as it related to clinical practice. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

# DHYG 222. Clinical Dental Hygiene IV 4 Credits

Clinical sessions combine basic and advanced dental hygiene skills with time management techniques essential for private practice. Comprehensive patient care to include assessment, dental hygiene diagnosis, treatment planning, implementation and evaluation of dental care, nonsurgical periodontal therapy, adjunct clinical procedures, ultrasonic instrumentation, patient management, sealants, and comprehensive programs for control of oral diseases will be emphasized. Theory is simultaneously related to practical experience. Students are encouraged to develop independent decision-making with minimal faculty supervision. May be repeated up to 4 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 224. Principles of Practice 2 Credits

Examination of the dental hygienist's role in both traditional and non-traditional employment settings. Career planning, resume preparation and interviewing are practices. An understanding of the law, professional ethics of dental hygiene and the need for lifelong learning are emphasized. Future roles of the dental hygienist and emerging issues in dental hygiene will be explored. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 225. Dental Public Health Education 3 Credits

Study of principles and concepts of community public health and dental health education. Emphasis on dental epidemiology and statistical methods, community assessment, educational planning, implementation, and evaluation, scientific review of literature, and classroom presentation. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 255. Special Topics in Dental Hygiene 1-6 Credits (1-6)

Study of special topics related to the advanced practice of dental hygiene. May include educational methodology as well as applications in clinical practice, research, or community service. Consent of instructor required. Restricted to: Community Colleges only. Restricted to DHYG majors.

Name: Elmer Gonzalez, Program Director

Office Location: DASH 98C Phone: (575) 528-7216

Website: https://dacc.nmsu.edu/dhyg/

# Dental Hygiene - Associate of Applied Science

## (70 credits)

**NOTE:** Students must receive a final grade of C (75%) or higher to remain in the program. Clinical courses have additional requirements that must be met in addition to the grade of C (75%).

### **Core Requirements**

COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
PSY 201G	Introduction to Psychology <sup>1</sup>	3
SOC 101G	Introductory Sociology 1	3
<b>Technical Requirem</b>	ents <sup>2</sup>	
DHYG 110	Preclinical Dental Hygiene	3
DHYG 112	Preclinical Dental Hygiene Lab	3
DHYG 114	Oral Histology and Embryology	2
DHYG 116	Head and Neck Anatomy	3
DHYG 117	Dental Anatomy	2
DHYG 118	Dental Radiology	3
DHYG 120	Dental Hygiene Theory I	3
DHYG 122	Clinical Dental Hygiene I	3
DHYG 124	General and Oral Pathology	3
DHYG 126	Periodontology	3

DHYG 132	Clinical Dental Hygiene II	2
DHYG 134	Dental Materials	3
DHYG 210	Dental Hygiene Theory III	2
DHYG 212	Clinical Dental Hygiene III	4
DHYG 214	Dental Pharmacology	3
DHYG 215	Medical and Dental Emergencies	2
DHYG 217	Research Methodology	2
DHYG 218	Pain and Anxiety Management	2
DHYG 219	Pain and Anxiety Management Clinical	1
DHYG 220	Dental Hygiene Theory IV	3
DHYG 222	Clinical Dental Hygiene IV	4
DHYG 224	Principles of Practice	2
DHYG 225	Dental Public Health Education	3
Total Credits		70

- Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.
- <sup>2</sup> All DHYG classes are restricted to students who have been accepted into the Dental Hygiene program.

## **Diagnostic Medical Sonography**

**Associate of Applied Science Degree** 

**Certificate of Completion** - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

Sonography is an allied health specialty that uses high-frequency sound waves (ultrasound) to image many structures in the body. Sonographers function as members of the healthcare team by providing and evaluating high quality images that aid physicians in the diagnosis and treatment of their patients. Sonographers are highly motivated, independent, critical thinkers who enjoy one-on-one patient interaction.

Employment opportunities are available in a variety of settings, such as hospitals, physicians' offices, and veterinarian practices. There are also opportunities in sales, education, management, research, marketing, and product development. Because job prospects in the Las Cruces—El Paso area occasionally are limited, it may be necessary to conduct a wider job search.

Training involves a combination of academic courses and a clinical internship in the ultrasound department of area hospitals and clinics where students will gain hands-on training under the supervision of registered diagnostic medical sonographers and will work alongside physicians and other health-care professionals. Coursework covers abdominal and OB-Gyn ultrasound, pediatric sonography, acoustic physics and instrumentation, and introductory vascular technology. Students will participate in lab activities and learn to write case reports and journal article reviews. The clinical sites include facilities in Las Cruces, Alamogordo, Ruidoso, and Silver City, New Mexico, as well as El Paso, Texas.

The Diagnostic Medical Sonography program offers a certificate track for students who already possess an associate degree in a medically related, allied healthcare program or a bachelor's degree in a related field. The associate degree track is designed for those who do not meet the entrance requirements for the certificate-track program. Once accepted

into the Diagnostic Medical Sonography program the curriculum for certificate and associate degree pathways is identical .

Students in the Diagnostic Medical Sonography program are required to complete and pass a variety of background/screening measures that include a security background check, FBI fingerprinting and/or drug screening, in order to participate in the clinical education portion of the program. Past criminal violations may prevent a student from completing the program and gaining employment in the field.

The DACC Diagnostic Medical Sonography program has been awarded continuing accreditation status by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Students who satisfy program requirements are qualified to apply for national certification examinations in the specialty areas of Abdominal and OB/GYN Sonography. These examinations are administered by the American Registry of Diagnostic Medical Sonography (ARDMS) and/or the American Registry of Radiologic Technologists (ARRT). Licensing requirements vary by state; New Mexico requires sonographers to obtain a state license. Continuing education beyond graduation is required to maintain credentials earned by the ARDMS and ARRT; and for maintaining state licensure in New Mexico.

Information on requirements, forms, and deadlines for applications are available on our website at https://dacc.nmsu.edu/dms/. You can also find information at the Health Sciences Division Office (room DAHL 190), or by calling (575) 527-7730.

## **Required Physical and Cognitive Skills**

Sonography students must be able to do the following:

- 1. Read, write and communicate effectively in English.
- Possess emotional and physical health sufficient to meet the demands of the profession.
- 3. Position, move, and lift patients in wheelchairs and stretchers.
- 4. Maintain prolonged arm positions necessary for scanning.
- 5. Position and move ultrasound equipment on wheels (up to 500 lbs.)
- 6. Effectively operate sonographic equipment.
- 7. Evaluate sonograms, acquiring appropriate diagnostic information.
- Integrate diagnostic sonograms, laboratory results, patient histories and medical records, and adapt sonographic examinations as necessary.
- Use independent judgment to acquire the optimal diagnostic sonographic information in each examination performed.
- 10. Evaluate, synthesize, and communicate diagnostic information to be used by the attending physician.
- Communicate effectively with the patient and healthcare team, recognizing the special nature of sonographic exams and patients' needs.
- Establish and maintain effective working relationships with the public and healthcare team.
- 13. Follow established departmental procedures.
- 14. Work efficiently and cope with emergency situations.

# **Special Admissions Criteria for Certificate Track**

This is a limited-entry program accepting students only in the fall semester. Criteria and factors used in evaluating applicants include the following:

- · Completion of either
  - (a) an associate degree in an allied health program which is medically related and involves human-patient care (proof of current certification in ones' allied health area is required), OR
  - (b) a bachelor's degree in a related field that includes at least one semester of anatomy & physiology.
- · Overall GPA of 3.0 or higher
- College-level course in algebra (MATH 121G College Algebra or equivalent)
- College-level course in general physics or radiographic physics or introductory physics for the health sciences or equivalent.

### **Course Fees**

In addition to tuition, a fee of \$175 is charged for each of the following courses: DMS 170, DMS 180, DMS 270, DMS 280.

DMS 170	Clinical Practicum I	2
DMS 180	Clinical Practicum II	5
DMS 270	Clinical Practicum III	5
DMS 280	Clinical Practicum IV	5

Diagnostic Medical Sonography - Associate of Applied Science (p. 111)

Diagnostic Medical Sonography - Certificate of Completion (p. 113)

## DMS 100. Introduction to Clinical Practicum 1 Credit

Introduction to working in the medical environment. Includes preparation for clinical internship and observation hours in the ultrasound department. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

# DMS 101. Introduction Sonography/Patient Care 2 Credits

Introduction to the careers in sonography, terminology, medical ethics, scanning planes, applications of ultrasound, professional standards and patient care. May be repeated up to 2 credits. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

## DMS 116. Introduction to Vascular Technology 2 Credits

Review of basic ultrasound physics and principles, peripheral vascular anatomy, hemodynamics, Doppler evaluation, peripheral vascular scanning techniques, physiologic testing and the carotid arteries and the peripheral vascular system. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 116 L. Vascular Technology I Lab 1 Credit

Includes protocol development, scanning techniques, recognition of anatomical relationships and the normal ultrasound appearance of the carotid arteries and peripheral vasculature utilizing real-time sonographic equipment including Doppler. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 130. Pelvic Sonography

### 1 Credit

Includes the anatomy, sectional anatomy and normal physiology of the pelvic structures; including the uterus, ovaries, prostate, pelvic muscles, lower GI, appendix and vessels as well as scanning techniques, sonographic appearance and Doppler evaluation of the pelvis. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 130 L. Pelvic Sonography Lab

#### 1 Credit

Includes protocol development, scanning techniques, recognition of anatomical relationships and the normal ultrasound appearance of the pelvic structures including the uterus, ovaries, prostate, lower gastrointestinal system, appendix and pelvic muscles utilizing real-time sonographic equipment including Doppler. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 140. Abdominal Sonography

#### 3 Credits

Includes the anatomy, sectional anatomy and normal physiology of prevertebral vessels, liver, biliary system, pancreas, upper gastrointestinal system, kidneys, adrenals, and spleen as well as scanning techniques, sonographic appearance and Doppler evaluation of the deep abdominal organs. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 140 L. Abdominal Sonography Lab

#### 1 Credit

Includes protocol development, scanning techniques, recognition of anatomical relationships and the normal ultrasound appearance of prevertebral vessels, liver, biliary system, pancreas, upper gastrointestinal system, kidneys and spleen utilizing real-time sonographic equipment including Doppler. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 150. Sonographic Principles and Instrumentation I 1 Credit

Includes the fundamental properties and mathematical relationships between variables of wave parameters, acoustic variables, attenuation, pulsed wave operation, transducers, system operation, Doppler, and artifacts utilizing real-time sonographic equipment. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 160. 1st Trimester Obstetric Sonography 1 Credit

Includes the embryology, anatomy, sectional anatomy, normal physiology, biometrics, assessment, and sonographic appearance of the 1st trimester fetus, placenta, uterus and adnexa as well as scanning techniques according to recognized protocols. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

## DMS 165. 2nd/3rd Trimester Obstetric Sonography

Includes the anatomy, sectional anatomy, normal physiology, biometrics, assessment, and sonographic appearance of the 2nd and 3rd trimester fetus, placenta, uterus, and adnexa as well as scanning techniques according to recognized protocols. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 170. Clinical Practicum I

### 2 Credits (8-10P)

Development of technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at the developmental level. Ongoing reinforcement and broadening of knowledge base related to hospital procedures and policies. Continued observation, assistance and performance of patient care and sonographic duties under direct supervision. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 180. Clinical Practicum II

#### 5 Credits

Development of technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at the beginner level. Ongoing reinforcement and broadening of knowledge base related to hospital procedures and policies. Continue observation, assistance and performance of patient care and sonographic duties under direct supervision. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 201, Sonographic Procedures Lab 1 Credit

Advances scanning skills, system optimization, anatomic recognition of abdominal and pelvic structures utilizing real-time sonographic equipment including Doppler. Includes sonographic evaluation of the first trimester pregnancy and normal fetus. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

## DMS 216. Vascular Technology II

Includes the pathology and pathophysiology of the vascular system, scanning techniques, clinical presentation, ultrasound appearance and Doppler evaluation seen with pathological conditions of the carotid arteries, deep and peripheral vascular systems. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

## DMS 216 L. Vascular Technology II Lab

### 1 Credit

Includes progressive development of skills following recognized protocols, scanning techniques, recognition of anatomical relationships with differentiation of normal and abnormal ultrasound appearance of the carotid arteries, deep and peripheral vascular systems utilizing real-time sonographic equipment including Doppler. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 226. Sonographic Case Studies I 1 Credit

Includes integration of didactic knowledge, clinical presentation, laboratory values, sonographic appearance and related medical imaging of a variety of pathological conditions through a variety of case analysis and presentations. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 227. Sonographic Case Studies II 1 Credit

Continuation of DMS 226, integration of didactic knowledge, clinical presentation, laboratory values, sonographic appearance and related medical imaging of a variety of pathological conditions through a variety of case analysis and presentations. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

New Mexico State University - Doña Ana

### DMS 230. Gynecologic Pathology

### 2 Credits

Includes the pathology and pathophysiology of the female reproductive system, scanning techniques, clinical presentation, ultrasound appearance and Doppler evaluation seen with pathological conditions of the uterus, ovaries, and adnexa. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 240. Abdominal Pathology I

### 2 Credits

Includes the pathology and pathophysiology of abdominal structures of the prevertebral vessels, liver, biliary system, pancreas, spleen and gastrointestinal system; scanning techniques, ultrasound appearance, clinical presentation and Doppler evaluation seen with pathological conditions. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

## DMS 245. Abdominal Pathology II 2 Credits

Includes the pathology and pathophysiology of abdominal structures of the genitourinary system, spleen, retroperitoneum, adrenal glands, abdominal wall and prostate; scanning techniques, ultrasound appearance, clinical presentation and Doppler evaluation seen with pathological conditions. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 248. Pediatric Sonography

### 2 Credits

Includes the anatomy of the brain, skull, spine, hips, and normal developmental changes as well as pathology and pathophysiology of specific conditions that affect the premature infant, newborn and pediatric population across a variety of body systems. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

# DMS 250. Sonographic Principles and Instrumentation II 3 Credits

Includes properties of sound and its use in diagnostic imaging, artifacts, system operation, Doppler, basic hemodynamics, image optimization, bio effects, quality assurance, and new technologies in ultrasound imaging. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### **DMS 255. Vascular Physics**

### 2 Credits

Includes a review of sound properties and its use in diagnostic imaging, artifacts, system operation, Doppler, image optimization, bio effects, quality assurance, and in-depth application of fluid properties and hemodynamics in vascular ultrasound imaging. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

# DMS 260. High Risk Obstetric Sonography 3 Credits

Includes congenital malformations of the developing fetus, high risk pregnancies, multiple gestation, maternal conditions and invasive procedures. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 270. Clinical Practicum III

### **5 Credits**

Continued development of technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at an intermediate level. Ongoing reinforcement and broadening of knowledge base related to hospital procedures and policies. Continued observation, assistance and performance of patient care and sonographic duties under limited supervision. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 280. Clinical Practicum IV

### 5 Credits

Application of technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at a proficient level. Ongoing reinforcement and broadening of knowledge base related to hospital procedures and policies. Continued observation, assistance and performance of patient care and sonographic duties under limited supervision. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

## DMS 290. Small Parts & Superficial Structures 2 Credits

Includes anatomy, pathology and pathophysiology, protocol development, scanning techniques, recognition of anatomical structures and the normal and pathological ultrasound appearance of the breast, thyroid, neck, scrotum, non-cardiac chest and musculoskeletal ultrasound. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 291. Registry Preparation: OB/GYN

### 1 Credit

Registry preparation mock examinations over materials covered in Obstetric and Gynecological ultrasound. Students must pass this course with a 74% or better OR pass national certification in OB/GYN Sonography. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 292. Registry Preparation: Abdomen

### 1 Credit

Registry preparation mock examinations over materials covered in abdominal ultrasound including small parts and superficial structures. Students must pass this course with a 74% or better OR pass ARDMS national certification exam in Abdominal Sonography. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

# DMS 293. Registry Preparation: Vascular 1 Credit

Registry preparation mock examinations over materials covered in vascular ultrasound. Students must pass this course with a 74% or better OR pass national certification in Vascular Technology. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

Name: Darla Matthew, Program Director

Office Location: DAHL 190

Phone: (575) 528-7047

Website: https://dacc.nmsu.edu/dms/

# Diagnostic Medical Sonography -Associate of Applied Science Associate Degree Track

This is a limited-entry program accepting students only in the fall semester. Criteria and factors used in evaluating applicants include the following:

- · High school diploma or GED
- · Completion of all \*pre-requisites with an overall GPA of 3.0 or higher
- · County of residence

The following courses will receive application points as follows: A = 10 pts, B = 5 pts, C = 2 pts

#### Note:

- \*Students should receive a B or better in CHEM and BIOL prerequisites to be a viable candidate for the DMS program.
- There are restrictions on repeating courses with a grade of C or lower.
   See program director for details.

## (Associate Degree 74 credits)

NOTE: Application Deadline is April 1

### Core Requirements/Pre-Requisites

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
MATH 121G	College Algebra <sup>1</sup>	3
or MATH 120	Intermediate Algebra	
PHYS 211G	General Physics I 1	3
or RADT 105	Radiographic Physics and Equipment	
or PHYS 210	Introductory Physics for the Health Sciences	
CHEM 110G	Principles and Applications of Chemistry 1, 2	4
or CHEM 111G	General Chemistry I	
BIOL 225	Human Anatomy and Physiology I <sup>1, 2</sup>	4
The following cours	es are required for the associate degree	

The following courses are required for the associate degree but are not pre-requisites. Courses that are completed or are in progress at the time of application to the DMS program will receive bonus points toward the application as follows: A = 5 pts, B = 3 pts.

### **Related Requirements**

ENGL 218G	Technical and Scientific Communication	3
or COMM 253G	Public Speaking	
or COMM 265G	Principles of Human Communication	
PSY 201G	Introduction to Psychology <sup>1</sup>	3
or SOC 201G	Contemporary Social Problems	

The following courses are not required for the Associates degree; however, the courses will strengthen study skills or increase knowledge that will be beneficial as a sonography student. Courses completed or are in progress at the time of application will receive bonus points toward the application as follows:

BONUS POINTS: A =	= 10 pts, B = 5 pts, C = 2 pts
BIOL 226	Human Anatomy and Physiology II <sup>1</sup>
BIOL 227	Pathophysiology <sup>1</sup>
BONUS POINTS: A =	= 5 pts, B = 3 pts
STAT 251G	Statistics for Business and the Behavioral Sciences <sup>1</sup>
AHS 120	Medical Terminology
or HIT 150	Introduction to Medical Terminology
C S 110	Computer Literacy <sup>1</sup>
or BCIS 110	Fundamentals of Information Literacy and Systems

### **Technical Requirements**

DMS 100	Introduction to Clinical Practicum	1
DMS 101	Introduction Sonography/Patient Care	2
DMS 130	Pelvic Sonography	1

DMS 130 L	Pelvic Sonography Lab	1
DMS 140	Abdominal Sonography	3
DMS 140 L	Abdominal Sonography Lab	1
DMS 150	Sonographic Principles and Instrumentation I	1
DMS 160	1st Trimester Obstetric Sonography	1
DMS 165	2nd/3rd Trimester Obstetric Sonography	1
DMS 170	Clinical Practicum I	2
DMS 180	Clinical Practicum II	5
DMS 201	Sonographic Procedures Lab	1
DMS 226	Sonographic Case Studies I	1
DMS 227	Sonographic Case Studies II	1
DMS 230	Gynecologic Pathology	2
DMS 240	Abdominal Pathology I	2
DMS 245	Abdominal Pathology II	2
DMS 248	Pediatric Sonography	2
DMS 250	Sonographic Principles and Instrumentation II	3
DMS 260	High Risk Obstetric Sonography	3
DMS 290	Small Parts & Superficial Structures	2
DMS 270	Clinical Practicum III	5
DMS 280	Clinical Practicum IV	5
DMS 291	Registry Preparation: OB/GYN	1
DMS 292	Registry Preparation: Abdomen	1
Total Credits		74

- Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.
- Students should receive a B or better in CHEM and BIOL prerequisites to be a viable candidate for the DMS program.

### **Selection Criteria**

Completion of pre-requisite courses DOES NOT guarantee acceptance into the Diagnostic Medical Sonography Program. Selection for the program utilizes a point system as well as a comprehensive evaluation of the student's overall strengths related to the essential qualifications, competencies, and functions of the professional diagnostic medical sonographer.

Selection for acceptance incorporates two phases.

### Phase I

Phase I points are awarded in pre-requisite and related courses as indicated above as well as scoring on the ATI TEAS exam.

Relevant field experience and/or professional credentials may qualify for additional bonus points. See program website for details https://dacc.nmsu.edu/dms/diagnostic-sonography-program-admission-process/

### **ATI TEAS Exam**

Scores are valid for 5 years. Candidates must achieve an individual total score of at least a 60% to remain a candidate of the DMS program and are restricted to no more than one attempt per year. The program considers the applicants' ranking adjusted to the AH CATEGORY R when awarding TEAS points for overall performance as well as performance in subcategories of reading, math, science, and language.

### Phase II

Phase II is for applicants who have scored very well in Phase I and on the ATI TEAS exam. Phase II is by invitation only and is conducted in an interview format to identify personal strengths and/or weaknesses related to essential qualifications, competencies, and functions for professional diagnostic medical sonographers.

Application packets are available at the program orientation meetings. See website for orientation schedule https://dacc.nmsu.edu/dms/program-orientation/

### **Course Fees**

In addition to tuition, a fee of \$175 is charged for each of the following courses: DMS 170, DMS 180, DMS 270 and DMS 280.

DMS 170	Clinical Practicum I	2
DMS 180	Clinical Practicum II	5
DMS 270	Clinical Practicum III	5
DMS 280	Clinical Practicum IV	5

# Diagnostic Medical Sonography - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/qainfulemployment/.

# **Special Admissions Criteria for Certificate Track**

This is a limited-entry program accepting students only in the fall semester. Criteria and factors used in evaluating applicants include the following:

- · Completion of either
  - (a) an associate degree in an allied health program which is medically related and involves human-patient care (proof of current certification in ones' allied health area is required), OR
  - (b) a bachelor's degree in a related field that includes at least one semester of anatomy & physiology.
- · Overall GPA of 3.0 or higher
- College-level course in algebra (MATH 121G College Algebra or equivalent)
- College-level course in general physics or radiographic physics or introductory physics for the health sciences or equivalent.

## (Certificate 56 credits)

**NOTE:** All of the courses in this program relate to each other and to the clinical internship and cannot be taken individually.

### **Core Requirements**

MATH 121G	College Algebra <sup>1</sup>	3
or MATH 120	Intermediate Algebra	
PHYS 211G	General Physics I <sup>1</sup>	3
or RADT 105	Radiographic Physics and Equipment	
or PHYS 210	Introductory Physics for the Health Sciences	

<b>Technical</b>	Requiren	nents
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DMS 100	Introduction to Clinical Practicum	1
DMS 101	Introduction Sonography/Patient Care	2
DMS 130	Pelvic Sonography	1
DMS 130 L	Pelvic Sonography Lab	1
DMS 140	Abdominal Sonography	3
DMS 140 L	Abdominal Sonography Lab	1
DMS 150	Sonographic Principles and Instrumentation I	1
DMS 160	1st Trimester Obstetric Sonography	1
DMS 165	2nd/3rd Trimester Obstetric Sonography	1
DMS 170	Clinical Practicum I	2
DMS 180	Clinical Practicum II	5
DMS 201	Sonographic Procedures Lab	1
DMS 226	Sonographic Case Studies I	1
DMS 227	Sonographic Case Studies II	1
DMS 230	Gynecologic Pathology	2
DMS 240	Abdominal Pathology I	2
DMS 245	Abdominal Pathology II	2
DMS 248	Pediatric Sonography	2
DMS 250	Sonographic Principles and Instrumentation II	3
DMS 260	High Risk Obstetric Sonography	3
DMS 290	Small Parts & Superficial Structures	2
DMS 270	Clinical Practicum III	5
DMS 280	Clinical Practicum IV	5
DMS 291	Registry Preparation: OB/GYN	1
DMS 292	Registry Preparation: Abdomen	1
Total Credits		56

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

### **Course Fees**

In addition to tuition, a fee of \$175 is charged for each of the following courses: DMS 170, DMS 180, DMS 270, DMS 280.

DMS 170	Clinical Practicum I	2
DMS 180	Clinical Practicum II	5
DMS 270	Clinical Practicum III	5
DMS 280	Clinical Practicum IV	5

## **Drafting and Design Technologies**

### **Associate of Applied Science Degrees**

- Architectural Technology
- · Civil/Survey Technology
- · Mechanical Drafting and Solid Modeling
- · Pre-Architecture

Certificates of Completion - Important information about the educational debt, earnings, and completion rates of students who attend these certificate programs can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

· Architectural Technology

- · Civil/Survey Technology
- · General Drafting and Graphics
- · Geographical Information Systems
- · Mechanical Drafting and Solid Modeling

The Drafting and Design Technologies Program provides students with a strong foundation in Computer-Aided Drafting (CAD), Architecture/Design, and relevant theory and concepts necessary to become successful in various related fields. These fields include

- · Architecture,
- · Architectural Technology,
- · Civil/Survey Technology and,
- · Mechanical Drafting/Solid Modeling.

Excellent job and salary opportunities are available nationwide for Drafters/CAD specialists, technicians, architects, and engineers. With its rapid growth, southern New Mexico also has strong employment possibilities for graduates of the Drafting and Design Technologies Program. Students with previous related training and/or formal education may quickly qualify for more advanced positions, such as construction inspector or supervisor, contractor, or senior drafter.

Within the Drafting and Design Technologies Program are four courses of study leading to associate of applied science degrees. These allow students to tailor their studies to their own interests and career aspirations.

- Architectural Technology: Architectural 2D and 3D drafting, residential design, construction estimating, construction technology, architectural rendering and animation, green building (LEED), and Building Information Modeling (BIM)
- Civil/Survey Technology: Civil engineering drafting, surveying fundamentals, roadway construction drafting, land development drafting, and GIS training
- Mechanical Drafting and Solid Modeling: Mechanical drafting, machine/ manufacturing fundamentals, basic mechanical design, parametric solid modeling, and animation
- Pre-Architecture: Architectural theory and drawing; design studio/ culture; architectural history; computer applications; introduction to construction principles and construction documents; presentation techniques

In addition to the associate degrees, the program also offers certificates of completion specializing in five areas:

- Architectural Technology,
- · Civil/Survey Technology,
- · Drafting and Graphics,
- · Mechanical Drafting/Solid Modeling, and
- · Geographical Information Systems.

While pursuing this program, whether taking classes or working in a co-op position, students will be required to perform the same job duties and be able to meet the same physical requirements that they will as a graduate in the field including working at a computer for an extended period of time and the ability to lift 25 to 50 pounds. Courses, as well as careers, in Drafting and Design Technologies will require a person to be able to work at computers, communicate verbally and in writing, and participate in an online environment.

Future students who are still in high school are encouraged to take courses in mathematics, science, English, and drafting. Furthermore, Dual credit opportunities are available for high school students who wish to earn college credit while still in high school. These credits may apply to their high school credit requirements as well as the DACC Drafting and Design Technologies requirements. (For more information, refer to the section titled, "Dual Credit Program (p. 16)," within this catalog.)

## **Pre-Architecture Program Overview**

Students planning to pursue a professional career in architecture may find it more convenient and economically advantageous to begin their studies closer to home. The DACC Pre-Architecture program, which culminates in an associate of applied science degree, consists roughly of the first two years of a standard, bachelor's degree curriculum in architecture. Currently, the most popular transfer universities for DACC Pre-Architecture students are the University of New Mexico and Texas Tech University. Both offer in-state tuition rates and have signed articulation agreements with DACC providing for the smooth and efficient transfer of credits.

Acceptance into a transfer university's architecture program is not automatic nor is it guaranteed. Students must follow the regular application procedures of the chosen university.

Nor can DACC guarantee placement into a transfer university's architecture program at any particular level, for such matters are totally dependent on how the university may evaluate transcripts, portfolios and other required materials against its own acceptance criteria. For example, in order to be accepted at UNM, a final grade of *B*- or better is required in ARCT 101 Introduction to Architecture and ARCT 104 Introduction to Architectural Drawing, and a final grade of *C*- or better is required in all other courses in the DACC Pre-Architecture curriculum.

Potential architecture students should contact a Pre-Architecture advisor at DACC for assistance with course scheduling and transfer procedures (575) 527-7592.

## Credit Transfer to Bachelor's Degrees in Engineering Technology at NMSU

The Architectural Technology, Civil/Survey Technology, and Mechanical Drafting and Solid Modeling associate degree programs include elective courses that allow students to earn credits that may be transferable into one of the engineering technology programs offered by NMSU. These elective courses allow students to maximize the number of credits applicable to an NMSU Engineering Technology program, while also making it possible to earn an associate degree for immediate employment in a drafting related field. Students should contact a Drafting and Design Technologies program advisor for the most current information and requirements related to these credit transfer opportunities (575) 527-7592.

## **Additional Program Information**

Students receive training from highly qualified faculty in modern classrooms and drafting and design laboratories equipped with the latest in computers, peripheral equipment, and professional software. The Drafting and Design Technologies program is housed at the DACC East Mesa Campus of (see map (https://dacc.nmsu.edu/marketing/wpcontent/uploads/sites/11/2015/09/Map-to-East-Mesa.pdf)).

Classes are scheduled during the day and evening hours, as well as during the summer, to serve both full- and part-time students, including

high school students who are participating in a dual credit enrollment program. Courses are available at the various DACC locations, as well as selected high schools in the area.

Students gain professional development and leadership skills through the Drafting and Graphics Association (DAGA) or the American Institute of Architecture Students (AIAS). These student organizations are affiliated with at least one of the following:

- · American Design Drafting Association (ADDA),
- · SkillsUSA,
- · National Association of Home Builders (NAHB),
- · Home Builders Institute (HBI), and
- · American Institute of Architecture Students (AIAS).

Students actively participate in numerous events and activities. Members also take part in activities sponsored by other professional associations, recruiting at high schools, and participating in community service projects. Students can compete in statewide and nationwide drafting contests sponsored by SkillsUSA and other organizations.

## **Additional Graduation Requirements**

A final grade of *C*- or better is required in all DRFT courses. A final grade of *B*- or better is required in ARCT 101 Introduction to Architecture and ARCT 104 Introduction to Architectural Drawing; in all other ARCT courses, a minimum final grade of *C*- is required. To receive either an associate degree or a certificate of completion, students are required to obtain a Career Readiness Certificate in the areas of Applied Math, Reading for Information, and Locating Information at the appropriate level for their respective degree option. A program advisor can provide additional information (575) 527-7592.

NOTES: DRFT 108 Drafting Concepts/Descriptive Geometry and DRFT 109 Computer Drafting Fundamentals can be completed through articulated high school courses. Enrolling in NMSU courses will result in additional tuition and fees for DACC students.

Architectural Technology - Associate of Applied Science (p. 118)

Civil/Survey Technology - Associate of Applied Science (p. 118)

Pre-Architecture - Associate of Applied Science (p. 120)

Mechanical Drafting and Solid Modeling - Associate of Applied Science (p. 119)

Architectural Technology - Certificate of Completion (p. 118)

Civil/Survey Technology - Certificate of Completion (p. 119)

General Drafting and Graphics - Certificate of Completion (p. 119)

Geographical Information Systems - Certificate of Completion (p. 119)

Mechanical Drafting and Solid Modeling - Certificate of Completion (p. 120)

## DRFT 101. Introduction to Drafting and Design Technologies 1 Credit

Professional and student organizations associated with the Drafting and Design Technologies program, degree requirements, employment skills and work habits, and university and college policies and procedures will be explored. Students will be introduced to the current learning management system and career-readiness certification. Restricted to Community Colleges only.

## DRFT 105. Technical Drawing for Industry 3 Credits (2+2P)

Technical sketching, basic CAD, and interpretation of drawings with visualization, speed and accuracy highly emphasized. Areas of focus include various trades such as machine parts, welding, heating and cooling, and general building sketches/plan interpretation.

# DRFT 108. Drafting Concepts/Descriptive Geometry 2 Credits (1+2P)

Basic manual drafting skills, sketching, terminology and visualization. Graphical solutions utilizing applied concepts of space, planar, linear and point analyses. Metric and S.I. units introduced.

# DRFT 109. Computer Drafting Fundamentals 3 Credits (2+2P)

Introduction to principles and fundamentals of drafting using both manual drawing techniques and computer-aided drafting (CAD) applications. May be repeated up to 3 credits. Crosslisted with: E T 109 and C E 109. Restricted to Community Colleges campuses only.

# DRFT 112. Drafting Concepts/Computer Drafting Fundamentals I 4 Credits (2+4P)

Basic drafting skills, terminology, and visualization. Introduction to principles and fundamentals of computer-aided drafting. Same as ET 106

Prerequisites: OECS 207, OECS 125 or consent of instructor.

## DRFT 113. Drafting Concepts/Computer Drafting Fundamentals II 4 Credits (2+4P)

Drafting for mechanical/industrial applications; machine part detailing, assemblies in orthographic, isometric, auxiliary, oblique, and sectional views. Two-dimensional AutoCAD with introduction to 3-D AutoCAD. Same as E T 216. Restricted to: Community Colleges only.

Prerequisite: DRFT 112.

# DRFT 114. Introduction to Solid Modeling 3 Credits (2+2P)

2D mechanical drafting and 3D mechanical solid modeling utilizing the latest version of AutoCAD software. Industry dimensioning and annotation standards will be emphasized. 2D multi-view working drawings, 3D solid models, and basic 3D model assemblies will be introduced. Restricted to Community Colleges campuses only. **Prerequisite(s):** DRFT 109.

## DRFT 115. General Construction Safety 3 Credits

Overview of general construction safety related to building, highway and road construction, and surveying field work for entry-level individuals. Students will also have the opportunity to earn a 10-hour construction industry OSHA card. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

### DRFT 120. Survey Equipment Fundamentals

### 2 Credits

Introduces the application and the setup to the following surveying equipment: Automatic Level, Total station, and Global Positioning Systems. Field safety knowledge is required. Restricted to Community Colleges only.

### **DRFT 130. General Building Codes**

### 3 Credits (2+2P)

Interpretation of the Building Code, local zoning codes, A.D.A. Standards and the Model Energy Code to study construction and design requirements and perform basic plan checking. Restricted to: Community Colleges only.

### DRFT 135. Electronics Drafting I

### 3 Credits (2+2P)

Drafting as it relates to device symbols; wiring, cabling, harness diagrams and assembly drawings; integrated circuits and printed circuit boards; schematic, flow and logic diagrams; industrial controls and electric power fields. Drawings produced using various CAD software packages.

Prerequisites: DRFT 108 and DRFT 109.

### DRFT 143. Civil Drafting Fundamentals

### 3 Credits (2+2P)

Introduction to drafting in the field of Civil Engineering. Drawings, projects, and terminologies related to topographic, contour drawings, plan and profiles, and street/highway layout. Crosslisted with: E T 143. Restricted to Community Colleges only.

Prerequisite(s): DRFT 109.

# DRFT 151. Construction Principles and Print Reading 3 Credits (2+2P)

Introduction to construction materials, methods, and basic cost estimating and print reading applicable in today's residential, commercial, and public works industry. Instruction by print reading and interpretation, field trips, and actual job-site visits and progress evaluation.

## DRFT 153. Survey Drafting Applications 3 Credits (2+2P)

Introduction to drafting in the field of survey engineering. Drawings, projects and terminologies related to Point Data, topography, land/boundary surveys, legal descriptions and plat surveys. Using the current Autodesk software. Crosslisted with: SUR 143. Restricted to: Community Colleges only.

Prerequisite(s): DRFT 109.

# DRFT 160. Construction Take-Offs and Estimating 3 Credits (2+2P)

Computing and compiling materials and labor estimates from working drawings using various techniques common in general building construction and in accordance with standard specifications and estimating formats. Use of spreadsheets and estimating software introduced.

Prerequisite: DRFT 151.

## DRFT 161. Introduction to Construction Management 3 Credits

Introduction to the construction industry and construction management; construction documents and contracts; project planning, scheduling and administration; construction site management; and the role of Building Information Modeling (BIM) in construction management. Pre/ Restricted to: Community Colleges only.

Corequisite(s): DRFT 151 or consent of instructor.

## DRFT 164. Intermediate Mechanical Drafting/Solid Modeling 3 Credits (2+2P)

Intermediate 3D mechanical parametric solid modeling and assembly creation utilizing the latest version of Autodesk Inventor software. The creation of 2D working drawings from 3D solid models will be emphasized. Geometric Dimensioning and Tolerancing (GD&T), basic material properties, and industry standard fastening and manufacturing methods will be introduced.

Prerequisite(s)/Corequisite(s): DRFT 114. Restricted to Community Colleges campuses only.

# DRFT 165. Introduction to Building Information Modeling 3 Credits (2+2P)

Introduction to Building Information Modeling (BIM) in the development of virtual 3D building models, construction documents, renderings and basic animations related to architectural, structural, and mechanical/electrical/plumbing building components. Utilizes the latest BIM technologies in the integration one, parametric BIM. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

## DRFT 176. Solid Modeling, Rendering and Animation 3 Credits (2+2P)

Introduction to three dimensional drafting and solid modeling, rendering and animation for architecture and engineering fields. Material application, mapping, and scene lighting will be introduced. Restricted to: Community Colleges only.

Prerequisite(s): DRFT 109.

# DRFT 180. Residential Drafting 3 Credits (2+2P)

Basic residential drafting including, floor plans, foundation plans, sections, roof plans, exterior and interior elevations, and site plans. Applicable residential building and zoning codes, construction methods and materials, adaptable residential design, and drawing and sheet layout for architectural drafting will be introduced. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): DRFT 109.

### DRFT 181. Commercial Drafting

### 3 Credits (2+2P)

Drafting principles, plan coordination, and code analysis applicable in the development of working drawings for commercial, public, and industrial building projects. Students will utilize National Cad Standards, ADA Standards, and will be introduced to modern office practice. Pre/Restricted to: Community Colleges only.

Prerequisite(s): DRFT 109. Corequisite(s): DRFT 180.

## DRFT 190. Finding and Maintaining Employment

Techniques in self-evaluations, resume writing, application completion, job interviewing, and job retention. Exposure to work ethics, employee attitudes, and employer expectations.

## DRFT 204. Geographic Information Systems Technology 3 Credits (2+2P)

The use of digital information for which various digitized data creation methods are captured. Users will capture, store, analyze and manage spatially referenced data in a modeled mapping procedure. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

## DRFT 214. Advanced Solid Modeling 3 Credits (2+2P)

Advanced 3D mechanical parametric solid modeling and assembly creation utilizing the latest version of Solidworks software. The creation of 2D working drawings from 3D solid models and the creation of 3D models for machining/manufacturing will be emphasized. Geometric Dimensioning and Tolerancing (GD&T), material properties, and industry standard fastening and manufacturing methods will be further explored. **Prerequisite(s)/Corequisite(s):** DRFT 114. Restricted to Community Colleges campuses only.

## DRFT 215. Construction Site Safety Management 3 Credits

Construction safety, compliance, documentation, and reporting requirements for individuals with construction site safety management responsibilities. Students will have the opportunity to earn a 30-hour construction industry OSHA card. Consent of Instructor required. Restricted to Community Colleges campuses only.

## DRFT 222. Surveying Fundamentals 3 Credits (2+2P)

Elementary surveying and civil drafting theory and techniques for non engineering majors. Includes traverse plotting, site plans, mapping, cross sections, and development of plan and profile drawings. Actual basic field measurement/surveying as well as extensive manual and CAD projects will be assigned. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): DRFT 109 and MATH 190G.

# DRFT 230. Building Systems Drafting 3 Credits (2+2P)

Development of working drawings for electrical, plumbing, and HVAC systems, for residential and commercial building through the applications of both 2D Drafting and 3D Building Information Modeling (BIM) techniques. Basics of project setup, National CAD Standards, ADA Standards, modern office practice, code analysis, as well as Sustainability and LEED for new construction. Restricted to: Community Colleges only. **Prerequisite(s):** DRFT 180 or DRFT 181.

## DRFT 240. Structural Systems Drafting 3 Credits (2+2P)

Study of foundations, wall systems, floor systems and roof systems in residential, commercial and industrial design/construction. Produce structural drawings including foundation plans, wall and building sections, floor and roof framing plans, shop drawings and details; schedules, materials lists and specifications. Use of various software. Restricted to: Community Colleges only.

Prerequisite(s): DRFT 180 or DRFT 181.

## DRFT 242. Roadway Development Drafting 3 Credits (2+2P)

Advanced civil/survey technology and drafting related to roadway development. Emphasis is on relevant terminology, codes/standards, and the production of complex working drawings such as topographical/grading, drainage, master utilities, roadway P P/details/etc., according to agency standards. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): DRFT 143.

### DRFT 243. Land Development Drafting

### 3 Credits (2+2P)

Advanced civil/survey technology and drafting related to land development. Emphasis is on relevant terminology codes/standards, and the production of complex working drawings such as subdivision plats, local utility and drainage plans, construction details roadway P P, etc., according to local development/ agency standards.

Prerequisite: DRFT 143 and DRFT 153.

# DRFT 250. Principles of Detailing and Design 3 Credits (2+2P)

Advanced practice in construction documentation in the development and coordination of working drawings & specifications. In particular, will utilize Architectural Graphic Standards, National CAD Standards, and ADA standards to develop detail drawings related to Architectural, Civil, Structural and Building Mechanical systems. Will also be introduced to basic principles, factors, and process of building design such as space planning, site analysis, and basic architectural programming. Restricted to: Community Colleges only.

Prerequisite(s): DRFT 180 or DRFT 181.

# DRFT 254. Spatial Data Processing 3 Credits (2+2P)

Utilizes the tools and technologies of GIS, processing volumes of geodata identifying a numerical, coded or listed map. Involves the analysis of spatial data from various diverse applications and place in a descriptive mapping process. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): DRFT 204.

### DRFT 255. Independent Study

### 1-3 Credits (1-3)

Instructor-approved projects in drafting or related topics specific to the student's individual areas of interest and relevant to the drafting and graphics technology curriculum. Consent of instructor required. May be repeated for a maximum of 6 credits.

# DRFT 265. Advanced Building Information Modeling Applications 3 Credits (2+2P)

Advanced applications of Building Information Modeling (BIM) including the creation of, and practice in collaborative work sets, data and design analyses, energy modeling and analysis, preliminary LEED analysis, construction take-offs & estimation, and construction animation, through use of various BIM and related software. Restricted to: Community Colleges only.

Prerequisite(s): DRFT 165.

# DRFT 274. GIS Theory and Analysis 3 Credits (2+2P)

Analyzes the hypothesis in which location and spatial data sufficiently quantifies the appropriate statistical methodology. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): DRFT 254.

# DRFT 276. Computer Rendering and Animation I 3 Credits (2+2P)

Introduction to technical applications of computer generated renderings and animations for the architecture and engineering fields. 3D models, photo-realistic renderings, and basic animation movie files will be produced utilizing industry standard modeling and animation software.

### DRFT 278. Advanced CAD Applications

### 3 Credits (2+2P)

Introduction to advanced CAD commands, applications, usage techniques, and user customization. the latest version of the National CAD Standards will also be explored. Restricted to: Community Colleges only.

Prerequisite(s): DRFT 109.

### DRFT 288. Portfolio Development

### 3 Credits (2+2P)

Production of a portfolio consisting of previously produced student work related to the student's individualized degree option. Process shall include the compilation and organization of working and presentation drawings, construction documents, BIM Models, and renderings/animations. Students will learn the basics of design layout and online portfolio documentation. Job search and resume preparation activities will also be required. Production of new material and content may also be required. This course is designed as a last semester course in the Drafting & Design curricula. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): Consent of Instructor.

### **DRFT 290. Special Topics**

#### 1-4 Credits (1-4)

Topics subtitled in the Schedule of Classes. May be repeated for a maximum of 12 credits.

### **DRFT 291. Cooperative Experience**

### 1-6 Credits (1-6)

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. Student meets with advisor weekly. Graded S/U.

Prerequisite: consent of instructor.

## DRFT 295. Professional Development and Leadership DAGA 1 Credit

Students gain experience in leadership, team building, performing community service, and membership and/or leadership in a student organization. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Name: Chipper Moore, Department Chair

Office Location: DADM 200D

Phone: (575) 527-7592

Website: https://dacc.nmsu.edu/drft/

# Architectural Technology - Associate of Applied Science (60 credits)

### **General Education Requirements**

	-	
ENGL 111G	Rhetoric and Composition <sup>1, 2</sup>	4
ENGL 218G	Technical and Scientific Communication	3
COMM 265G	Principles of Human Communication <sup>1</sup>	3
MATH 121G	College Algebra <sup>1</sup>	3
Advisor Approved	General Education Elective	3
Technical Require	ements	
DRFT 109	Computer Drafting Fundamentals	3

DRFT 240	Structural Systems Drafting	3
DRFT 250	Principles of Detailing and Design	3
DRFT 265	Advanced Building Information Modeling Applications	3
DRFT 288	Portfolio Development	3
Electives		11
Advisor approved	d electives (ARCT, DRFT, BCT, E T, ICT)	
3	petter is required in all courses except h requires a grade of C or better.	
Total Credits		60

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

# **Architectural Technology - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (18 credits)

### **Technical Requirements**

•		
DRFT 109	Computer Drafting Fundamentals <sup>1</sup>	3
DRFT 130	General Building Codes	3
DRFT 151	Construction Principles and Print Reading	3
DRFT 165	Introduction to Building Information Modeling	3
DRFT 180	Residential Drafting	3
DRFT 181	Commercial Drafting	3
A final grade of	C- or better is required in all courses.	
Total Credits		18

Course may be completed through articulated high school course.

# Civil/Survey Technology - Associate of Applied Science

### (60 credits)

### **General Education Requirements**

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 218G	Technical and Scientific Communication	2
LINGL 2100	1	3
COMM 265G	Principles of Human Communication <sup>1</sup>	3

<sup>&</sup>lt;sup>2</sup> Grade of C or better is required.

MATH 121G	College Algebra <sup>I</sup>	3
MATH 190G	Trigonometry and Precalculus	4
Technical Requir	rements	
DRFT 109	Computer Drafting Fundamentals	3
DRFT 143	Civil Drafting Fundamentals	3
DRFT 151	Construction Principles and Print Reading	3
DRFT 153	Survey Drafting Applications	3
DRFT 204	Geographic Information Systems Technology	3
DRFT 222	Surveying Fundamentals	3
DRFT 242	Roadway Development Drafting	3
DRFT 243	Land Development Drafting	3
DRFT 254	Spatial Data Processing	3
DRFT 288	Portfolio Development	3
Advisor approved	d electives (CET, CMT, DRFT, GEOG)	13
•	petter is required in all courses except th requires a grade of C or better.	
Total Credits		60

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

# **Civil/Survey Technology - Certificate** of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (18 credits)

### **Technical Requirements**

DRFT 109	Computer Drafting Fundamentals <sup>1</sup>	3
DRFT 143	Civil Drafting Fundamentals	3
DRFT 151	Construction Principles and Print Reading	3
DRFT 153	Survey Drafting Applications	3
DRFT 204	Geographic Information Systems Technology	3
DRFT 254	Spatial Data Processing	3
A final grade of C	or better is required in all DRFT courses.	
Total Credits		18

This course can be completed through an articulated high school course.

# General Drafting and Graphics - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (18 credits)

**Technical Requirements** 

DRFT 109	Computer Drafting Fundamentals <sup>1</sup>	3
DRFT 151	Construction Principles and Print Reading	3
or MAT 102	Print Reading for Industry	
Advisor-approved	electives (ARCT or DRFT)	12
A final grade of C	or better is required in all DRFT courses.	
Total Credits		18
1		

This course can be completed through an articulated high school course.

# **Geographical Information Systems - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (19 credits)

### **Technical Requirements**

DRFT 109	Computer Drafting Fundamentals <sup>1</sup>	3
DRFT 153	Survey Drafting Applications	3
DRFT 204	Geographic Information Systems Technology	3
DRFT 254	Spatial Data Processing	3
DRFT 274	GIS Theory and Analysis	3
GEOG 111G	Geography of the Natural Environment <sup>2</sup>	4
or Advisor Ap	proved Elective (DRFT, GEOG, or SUR)	
A final grade of (	C- or better is required in all DRFT courses.	
Total Credits		19

This course can be completed through an articulated high school

## Mechanical Drafting and Solid Modeling - Associate of Applied Science

### (60 credits)

### **General Education Requirements**

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 218G	Technical and Scientific Communication	3
COMM 265G	Principles of Human Communication <sup>1</sup>	3
MATH 121G	College Algebra <sup>1</sup>	3
MATH 190G	Trigonometry and Precalculus <sup>1</sup>	4
PHYS 211G	General Physics I <sup>1</sup>	3
PHYS 211GL	General Physics I Laboratory <sup>1</sup>	1
Technical Require	ements	
DRFT 109	Computer Drafting Fundamentals	3
DRFT 114	Introduction to Solid Modeling	3

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

DRFT 164	Intermediate Mechanical Drafting/Solid Modeling	3
DRFT 214	Advanced Solid Modeling	3
DRFT 288	Portfolio Development	3
MAT 102	Print Reading for Industry	3
MAT 105	Introduction to Manufacturing	3
Advisor approve MAT, M E, or WE	d electives (AERT, ARCT, DRFT, ENGR, E T, LD)	18
A grade of C- or better is required in all courses except ENGL 111G which requires a grade of C or better.		
Total Credits		60

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## Mechanical Drafting and Solid Modeling - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (18 credits)

### **Technical Requirements**

DRFT 109	Computer Drafting Fundamentals <sup>1</sup>	3
DRFT 114	Introduction to Solid Modeling	3
DRFT 164	Intermediate Mechanical Drafting/Solid Modeling	3
DRFT 214	Advanced Solid Modeling	3
MAT 102	Print Reading for Industry	3
or Advisor A	pproved Elective (AERT, DRFT, E T, or MAT)	
MAT 105	Introduction to Manufacturing	3
or Advisor A	pproved Elective (AERT, DRFT, E T, or MAT)	
A final grade of	C- or better is requred in all DRFT courses.	
Total Credits		18

This course can be completed through an articulated high school

# Pre-Architecture - Associate of Applied Science (72 credits)

### **General Education Requirements**

	•	
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 211G	Writing in the Humanities and Social Sciences <sup>1</sup>	3
COMM 265G	Principles of Human Communication <sup>1</sup>	3
MATH 190G	Trigonometry and Precalculus	4
MATH 142G	Calculus for the Biological and Management Sciences <sup>1</sup>	3
PHYS 211G & 211GL	General Physics I and General Physics I Laboratory <sup>1</sup>	4
<b>Technical Requirem</b>	ents	

ARCT 101	Introduction to Architecture <sup>3</sup>	3
ARCT 104	Introduction to Architectural Drawing <sup>3</sup>	4
ARCT 111	Architecture World History I	3
ARCT 154	Introduction to Architectural Design	3
ARCT 170	Computers in Architecture	3
ARCT 204	Architectural Design Studio I	5
ARCT 210	Architectural Delineation I	3
ARCT 211	Architectural World History II	3
ARCT 250	Construction Documents	3
ARCT 254	Architectural Design Studio II	5
ARCT 260	Architectural Delineation	3
DRFT 151	Construction Principles and Print Reading	3

#### **Electives**

Select 10 credits fr	om the following:	10
ARCT 295	Professional Development and Leadership-AIAS	
Any other adviso	or-approved ARCT course	
ART 150	Drawing I <sup>1</sup>	
ART 155	2-D Fundamentals <sup>1</sup>	
ART 156	3-D Fundamentals <sup>1</sup>	
GOVT 100G	American National Government <sup>2</sup>	
HIST 101G	Roots of Modern Europe <sup>1</sup>	
HIST 201G	Introduction to Early American History <sup>1,2</sup>	
HIST 202G	Introduction to Recent American History	

Advisor-approved natural science elective <sup>2</sup>

A grade of C- or better is required in all courses except ENGL 111G which requires a grade of C or better and ARCT 101 & ARCT 104 which requires a B- or better.

Total Credits 72

- Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.
- Recommended electives for students planning on transferring to the B.S. Architecture program at Texas Tech University.
- Requires a grade of B- or better.

## **Early Childhood Education**

**Associate Degree: Early Childhood Education** 

The Early Childhood Education associate degree program is designed to prepare students to become highly qualified teachers, assistant teachers, or family day care providers in professional child care for children ages birth through eight years. Students will gain a broad understanding of the specific needs of young children and develop strategies for meeting those needs. They may choose to continue their education at any four-year institution in New Mexico.

The DACC program includes the lower-division courses required for entry into the Teacher Education Program (TEP), a baccalaureate program at New Mexico State University. Alternatively, students may opt to transfer to a similar program at another four-year institution. Completion of this program does NOT guarantee admission into a Teacher Education Program at a four-year institution. Early in their second year of study at

DACC, students should contact the four-year institution they have chosen to obtain application information.

### **Requirements and Limitations**

- Students in the Early Childhood Education Program are required to complete and pass a security background check in order to take practicum courses and complete field experiences. Past criminal violations may prevent a student from completing the degree and from being hired by school systems or other child care facilities upon graduation.
- 2. Students must complete all technical requirement courses as well as the following courses with a grade of C- or better:

C EP 110G	Human Growth and Behavior	3
ENGL 111G	Rhetoric and Composition	4
ENGL 211G	Writing in the Humanities and Social Sciences	3
MATH 120	Intermediate Algebra	3
MATH 111	Fundamentals of Elementary Mathematics I	3
MATH 112G	Fundamentals of Elementary Math II	3

- Students must have a 2.0 GPA to graduate from this program.
   However, because a 2.5 GPA is required for acceptance into the
   Teacher Education Program at NMSU, it is highly recommended that
   DACC students complete the Early Childhood Education program with
   a 2.5 cumulative GPA.
- 4. Any education course more than seven years old taken at NMSU, NMSU community colleges or other institutions will not be counted toward the student's baccalaureate program. It is highly recommended that students request a review of their cumulative coursework by the appropriate department at NMSU. Any course not approved must be repeated by the student.
- Completion of all requirements does not guarantee acceptance in the NMSU Teacher Education Program. Please see the NMSU College of Education Advising Center for more information.

Early Childhood Education - Associate Degree (p. 122)

# ECED 115. Child Growth, Development, and Learning 3 Credits

This basic course in the growth, development, and learning of young children, prenatal through age eight, provides students with the theoretical foundation for becoming competent early childhood professionals.

## ECED 125. Health, Safety, and Nutrition 2 Credits

This course provides information related to standards and practices that promote children's physical and mental well being sound nutritional practices, and maintenance of safe learning environments.

# ECED 135. Family and Community Collaboration 3 Credits

This beginning course examines the involvement of families and communities from diverse cultural and linguistic backgrounds in early childhood programs. Ways to establishes collaborative relationships with families in early childhood settings is discussed.

Prerequisite(s): ECED 115 and ENGL 111G.

## ECED 215. Curriculum Development Through Play 3 Credits

The beginning curriculum course places play at the center of curriculum in developmentally appropriate early childhood programs. It addresses content that is relevant for children birth through age four and developmentally and culturally sensitive ways of integrating content into teaching and learning experiences. Information on adapting content areas to meet the needs of children with diverse abilities and the development of IFSP's and IEP's is included. Consent of instructor required.

**Prerequisite(s):** ECED 115 and ENGL 111G. **Corequisite(s):** ECED 220.

# ECED 220. Early Childhood Education Practicum I 2 Credits

The beginning practicum course will provide experiences that address curriculum content that is relevant for children birth through age four in developmentally and culturally sensitive ways. Consent of instructor required

**Prerequisite(s):** ECED 115 and ENGL 111G. **Corequisite(s):** ECED 215.

# ECED 225. Curriculum Development and Implementation II 3 Credits

The second curriculum course focuses on developmentally appropriate curriculum content in early childhood programs, age 3 through third grade. Development and implementation of curriculum in all content areas, including literacy, numeracy, the arts, health and emotional wellness, science, motor and social skills, is emphasized. Information on adapting content areas to meet the needs of children with diverse abilities and the development of IEP's is included. Consent of instructor required.

Prerequisite(s): ECED 115, ENGL 111G.

Corequisite(s): ECED 230.

## ECED 230. Early Childhood Education Practicum II 2 Credits

The second field-based curriculum course focuses on practicing developmentally appropriate curriculum content in early childhood programs, age 3 through third grade. Consent of instructor required.

Prerequisite(s): ECED 115, ENGL 111G,.

Corequisite(s): ECED 225.

# ECED 235. Introduction to Language, Literacy and Reading 3 Credits

This course is designed to prepare early childhood professionals for promoting children's emergent literacy and reading development. Through a developmental approach, the course addresses ways in which early childhood professionals can foster young children's oral language development, phonemic awareness, and literacy problem solving skills, fluency, vocabulary, and comprehension.

Prerequisite(s): ECED 115 and ENGL 111G.

### ECED 245. Professionalism

### 2 Credits

This course provides a broad-based orientation to the field of early care and education. Early childhood history, philosophy, ethics and advocacy are introduced. Basic principles of early childhood systems are explored. Multiple perspectives on early care and education are introduced. Professional responsibilities such as cultural responsiveness and reflective practice are examined.

### ECED 255. Assessment of Children and Evaluation of Programs 3 Credits

This basic course familiarizes students with a variety of culturally appropriate assessment methods and instruments, including systematic observation of typically and non-typically developing children. Crosslisted with: SPED 255

Prerequisite(s): ECED 115 and ENGL 111G.

### ECED 265. Guiding Young Children

#### 3 Credits

This course explores various theories of child guidance and the practical applications of each. It provides developmentally appropriate methods for guiding children and effective strategies and suggestions for facilitating positive social interactions. Strategies for preventing challenging behaviors through the use of environment, routines and schedule will be presented.

### ECED 270. Program Management

#### 3 Credits

Technical knowledge necessary to develop and maintain a quality early care and education program. The course will focus on sound financial management and vision, laws and legal issues that affect programs and state and national standards including accreditation requirements. Prerequisite: consent of instructor.

### ECED 275. Curriculum for Diverse Learners and Their Families 3 Credits

Implementation of family-centered programming that includes developmentally appropriate and culturally responsive curriculum. The course will also cover the establishment and maintenance of healthy and safe learning environments. Consent of instructor required.

### ECED 276. Effective Program Development for Diverse Learners and Their **Families**

### 2 Credits

Practical experience in observing and carrying out the role of the director/ administrator in the implementation of family-centered programming that includes individually appropriate and culturally responsive curriculum in a healthy and safe learning environment. Consent of instructor required. Restricted to ECED majors.

Corequisite(s): ECED 275.

### **ECED 280. Professional Relationships**

### 3 Credits

Development of staff relationships that will foster strong professional relationships with and among families, communities and advisory boards. Issues of staff recruitment, retention, support and supervision will lay a foundation for positive personnel management. Working effectively with board, advisory groups and community members and agencies will be addressed. Consent of instructor required.

Corequisite(s): ECED 281.

### ECED 281. Professional Relationships Practicum 2 Credits

Practical experience in the development of staff relationship that will foster professional relationships with families, communities and boards. Issues of staff recruitment, retention, support and supervision will lay a foundation for positive personnel management. Consent of instructor required. Restricted to ECED majors.

Corequisite(s): ECED 280.

Name: Shannon Bradley, Department Chair

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# **Early Childhood Education -Associate Degree**

## (68 credits)

Students completing all of the Early Childhood coursework within the associate degree are eligible to apply for the One Year Vocational Certificate issued by the New Mexico Office of Child Development. For more information, contact the Office of Child Development at (505) 827-7946.

NOTE: All courses listed, except EDUC 150 Math for Paraprofessionals and EDUC 151 Math for Paraprofessionals II, may be applied toward a degree at NMSU.

<b>Core Requirements</b>		
Area I: Communication		
ENGL 111G	Rhetoric and Composition 1,2	4
ENGL 211G	Writing in the Humanities and Social Sciences <sup>1,2</sup>	3
COMM 265G	Principles of Human Communication <sup>2</sup>	3
or COMM 253G	Public Speaking	
Area II: Mathematics		
Select one from the	following:	6
MATH 111 & MATH 112G	Fundamentals of Elementary Mathematics I and Fundamentals of Elementary Math II 2,3	
EDUC 150 & EDUC 151	Math for Paraprofessionals and Math for Paraprofessionals II <sup>4</sup>	
Area III: Laboratory S		
Select two from diff	erent groups: <sup>5</sup>	8
Group A:		
ASTR 105G	The Planets <sup>2</sup>	
or ASTR 110G	Introduction to Astronomy	
Group B:		
BIOL 101G & 101GL	Human Biology and Human Biology Laboratory <sup>2</sup>	
BIOL 110G	Contemporary Problems in Biology <sup>2</sup>	
BIOL 111G & 111GL	Natural History of Life and Natural History of Life Laboratory <sup>2</sup>	
BIOL 211G & 211GL	Cellular and Organismal Biology and Cellular and Organismal Biology Laboratory <sup>2</sup>	
Group C:		
CHEM 110G	Principles and Applications of Chemistry 2	
or CHEM 1110	General Chemistry I	
Group D:		
GEOL 111G	Introductory Geology <sup>2</sup>	

or GEOG 111G Geography of the Natural Environment

General Physics I

The Great Ideas of Physics 2

and General Physics I Laboratory 2

Group E:

**PHYS 110G** 

**PHYS 211G** 

& 211GL

A 0/0 1/51	. 10.	
Area IV: Social/Beh		_
C EP 110G	Human Growth and Behavior <sup>2</sup>	3
Select one from th	<u> </u>	3
ANTH 201G	Introduction to Anthropology <sup>2</sup>	
ECON 201G	Introduction to Economics <sup>2</sup>	
ECON 251G	Principles of Macroeconomics <sup>2</sup>	
ECON 252G	Principles of Microeconomics <sup>2</sup>	
GEOG 112G	World Regional Geography 2	
GEOG 120G	Culture and Environment <sup>2</sup>	
GOVT 100G	American National Government <sup>2</sup>	
GOVT 110G	Introduction to Political Science <sup>2</sup>	
SOC 101G	Introductory Sociology <sup>2</sup>	
Area V: Humanities		
HIST 111G	Global History to 1500 <sup>2</sup>	3
or HIST 112G	Global History Since 1500	
HIST 201G	Introduction to Early American History <sup>2</sup>	3
or HIST 202G	Introduction to Recent American History	
Select one from th	e following:	3
ART 101G	Orientation in Art <sup>2</sup>	
MUS 101G	An Introduction to Music <sup>2</sup>	
MUS 201G	History of Jazz in Popular Music: A Blending of Cultures <sup>2</sup>	
THTR 101G	The World of Theatre <sup>2</sup>	
Technical Require	ments	
ECED 115	Child Growth, Development, and Learning	3
ECED 125	Health, Safety, and Nutrition <sup>1</sup>	2
ECED 135	Family and Community Collaboration <sup>1</sup>	3
ECED 215	Curriculum Development Through Play <sup>1</sup>	3
ECED 220	Early Childhood Education Practicum I 1	2
ECED 225	Curriculum Development and Implementation II	3
ECED 230	Early Childhood Education Practicum II	2
ECED 235	Introduction to Language, Literacy and Reading <sup>1</sup>	3
ECED 245	Professionalism	2
ECED 255	Assessment of Children and Evaluation of Programs <sup>1</sup>	3
ECED 265	Guiding Young Children <sup>1</sup>	3
Total Credits	<u> </u>	68
Total Cieuts		00

- Courses are required to apply for the Teacher Education Program (TFP)
- Courses are part of the New Mexico Common Core.
- Recommended for students transferring to the bachelor of early childhood education program. Inquire about prerequisite(s) before enrolling in MATH 111 Fundamentals of Elementary Mathematics I/MATH 112G Fundamentals of Elementary Math II.
- EDUC 150 Math for Paraprofessionals and EDUC 151 Math for Paraprofessionals II are not transferrable to other institutions.
- It is recommended that students use the science requirements for their planned bachelor's degrees for guidance in making selections from these groups. The requirements differ for physical education and some secondary education majors.

### **Education**

### **Associate Degree: Education**

The Education associate degree program at Doña Ana Community College is designed to prepare students for transfer into the Teacher Education Program (TEP), a baccalaureate program at New Mexico State University. Alternatively, students may opt to transfer to a similar program at another four-year institution. The DACC program includes the lower division courses required for entry into the TEP. Completion of this program does NOT guarantee admission into a Teacher Education Program at a four-year institution. Early in their second year of study at DACC, students should contact the four-year institution they have chosen to obtain application information.

**NOTE**: It is recommended that students check the requirements for their planned bachelor's degree. Requirements may differ for some bachelor's degrees. See education advisor for course selection information.

## **Requirements and Limitations**

- Students in the Education Program are required to complete and pass a security background check in order to take field-experience courses. Past criminal violations may prevent a student from completing the degree and from being hired by school systems or other child care facilities upon graduation.
- The College of Education requires a minimum grade of "C-" in all education, TEP pre-requisite, endorsement and teaching field courses. Students must also complete General Education Requirements with a "C-" or better.

### **General Education Requirements**

- 1. Nine to ten credits in General Education Area I (language arts); twelve to thirteen for elementary education
- 2. Nine credits in General Education Area II (mathematics)
- 3. Eight credits in General Education Area III (laboratory science)
- 4. Nine credits in General Education Area IV (social/behavioral sciences)
- 5. Nine credits in General Education Area V (humanities and fine arts)
- Students must have a 2.0 GPA to graduate from this program.
   However, a 2.5 GPA is required for acceptance into the Teacher
   Education Program at NMSU. For this reason, it is highly
   recommended that DACC students complete the Education Program
   with a 2.5 cumulative GPA.
- 4. Any education course more than seven years old taken at NMSU, NMSU community colleges, or other institutions will not be counted toward the student's baccalaureate program. It is highly recommended that students request a review of their cumulative coursework by the appropriate department at NMSU. Any course not approved must be repeated by the student.

Note: It is recommended that students see an education advisor to determine the courses in their teaching field/major.

Education - Associate Degree (p. 125)

### C EP 110G. Human Growth and Behavior

### 3 Credits

Introduction to the principles of human growth and development throughout the life span.

### C EP 199. Academic Excellence

#### 1 Credit

Academic curriculum of excellence that includes the development of collaborative learning and student success environment, learning diverse learning styles and multiple intelligences, and developing multicontextual academic communication styles. Students must enroll in course for both Fall and Spring semesters. Course does not count toward CEP minor. May be repeated up to 2 credits.

### C EP 210. Educational Psychology

### 3 Credits

Psychological foundations as they apply to the learner in the class room setting.

### C EP 215. The Preschool Child

#### 3 Credits

Survey of psychological development from conception to age five.

### C EP 240. Adolescence in School Settings

#### 3 Credits

Survey of psychological development during the adolescent years.

## C EP 298. Exploration of Counseling & Community Psychology 3 Credits

An exploration of careers, activities, & techniques in counseling, school, and community psychology. Course does not count towards CEP minor. May be repeated up to 6 credits.

### C EP 298 H. Exploration of CCP

### 3 Credits

An exploration of careers, activities, & techniques in counseling, school, and community psychology. Taught with 298 with differentiated instruction and/or independent project to be determined. Restricted to Las Cruces campus only.

### C EP 299. Academic Excellence Classes

### 1-6 Credits (1-6)

Academic curriculum of excellence that includes an in-depth understanding of the elements that promote student academic success. Students will develop leadership and presentation skills needed to forge effective student mentor relationships and conduct outreach to campus and local community leaders to cultivate a collaborative learning environment. May be repeated up to 6 credits.

## EDLT 268. Integrating Technology with Teaching 3 Credits

Considers impact of technology on communication and knowledge development; engages students in the design of technology-integrated lessons with a constructivist approach.

### **EDUC 101. Freshman Orientation**

### 1 Credit

Introduction to the university and to the College of Education. Discussion of planning for individualized education program and field experience. Restricted to Las Cruces campus only.

### EDUC 102. Internship I

### 3 Credits

Supervised experience in elementary education settings.

## EDUC 103. Introduction with Internship in Bilingual Education/ESL 3 Credits

An overview of the American Education system with emphasis on organization, governance, law, demographics, and professional practice. Will include supervised experience in bilingual education/ESL elementary settings for prospective bilingual education/ESL teachers.

### EDUC 150. Math for Paraprofessionals

### 3 Credits

Applied math skills for paraprofessionals working with children.

Prerequisite: CCDM 103.

### EDUC 151. Math for Paraprofessionals II

#### 3 Credite

Applied math skills for paraprofessionals working under the direction of a teacher.

Prerequisite: EDUC 150.

EDUC 181. Field Experience I

### 1 Credit

Introduction to public school teaching, school visits, classroom observations and discussion seminar.

### **EDUC 195. Individual Topics in Education**

### 1-3 Credits

Supervised study in a specific area of interest. Each course shall be designated by a qualifying subtitle. May be repeated for a maximum of 9 credits.

### EDUC 202. Internship II

#### 3 Credits

Supervised experience in junior high settings.

Prerequisite: must be a co-op student.

### EDUC 204. Foundations of Bilingual/ESL Education

### 3 Credits

Explore and review the historical, legal, philosophical, theoretical and pedagogical paradigms of bilingual/ESL education.

### EDUC 219. Pre-Teacher Preparation

### 3 Credits

Assists students in developing the necessary competencies needed for acceptance to the Teacher Education Program. Course content includes basic skill development, test taking skills, and completion of teacher preparation packet. Maybe repeated for a maximum of 6 credits. Graded S/U. Community Colleges only.

### **EDUC 250. Introduction to Education**

### 2 Credits

An overview of the American education system with emphasis on organization, governance, law, demographics, and professional practice. Restricted to Las Cruces campus only.

## EDUC 281. Introduction to Secondary Education and Youth 3 Credits

Introductory course for students considering a career in secondary education. Includes historical, philosophical, and sociological foundations, program organization, critical dispositions, and understanding the context of schools and youth. Practicum required. Restricted to: Secondary Ed majors. Traditional Grading with RR.

## ELA 215. Multicultural Leadership in Education 3 Credits

Introduction to the social and cultural constructions of gender, class, and race. Students will critically apply theoretical constructs to everyday life and discuss the intersection of gender and race with class inequality in national and global contexts. Using a social justice framework, readings, and assignments integrate a variety of racial/ethnic groups while considering the effects of historically uneven resource distribution, unearned privilege, forms of domination and subordination, immigration status, and cultural representation and ideologies. Participants will learn how to apply the change theories and concepts introduced in the course to practice through course readings, online discussions with the instructor and colleagues, group work, active examination of daily practice in schools, and personal reflection.

## ELA 255. Leadership and Change in Education 3 Credits

This course will introduce students to the challenges and key strategies in initiating, implementing, and sustaining educational change and reform. In the first part of the course, participants will learn about the challenges of educational change in the United States and the role that they as school leaders play in facilitating change and reform. The course continues with an examination of how culture, micro-politics, and power structures support or impede national and global change initiatives. The last part of the course offers suggestions for change agents including community organizing, culture building, and embracing sustainable leadership practices. Participants will learn how to apply the change theories and concepts introduced in the course to practice through course readings, online discussions with the instructor and colleagues, group work, active examination of daily practice in schools, and personal reflection.

## ELA 298. Special Topics in Education 1-3 Credits (1-3)

Special topics course in education for undergraduate students. Course will be identified by a subtitle. May be repeated up to 12 credits. Restricted to Las Cruces campus only.

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## **Education - Associate Degree**

# Specific degree requirements for each of the individual Areas of Study can be found below.

# <u>Area of Study: Elementary Education</u> (60 credits)

NOTE: All courses listed may be applied toward a degree at NMSU.

AREA I: English & Communications (10 credits)		
ENGL 111G	Rhetoric and Composition <sup>1, 2, 5</sup>	4
ENGL 211G	Writing in the Humanities and Social Sciences <sup>1, 2, 5</sup>	3

COMM 265G	Principles of Human Communication <sup>1, 2</sup>	3
or COMM 253G	Public Speaking	
AREA II: Mathematics		
MATH 120	Intermediate Algebra <sup>2, 5</sup>	3
MATH 111	Fundamentals of Elementary Mathematics I <sup>2, 5</sup>	3
MATH 112G	Fundamentals of Elementary Math II 1, 2, 5	3
AREA III: Laboratory	Sciences (8 credits)	
Select two different	Area III "G" courses with labs	8
ASTR 105G	The Planets <sup>1, 2</sup>	
	Introduction to Astronomy	
BIOL 101G & 101GL	Human Biology and Human Biology Laboratory <sup>1, 2</sup>	
or BIOL 110G	Contemporary Problems in Biology	
or BIOL 111G	Natural History of Life	
& 111GL	and Natural History of Life Laboratory	
or BIOL 211G	Cellular and Organismal Biology	
& 211GL	and Cellular and Organismal Biology Laboratory	
CHEM 110G	Principles and Applications of Chemistry 1, 2	
or CHEM 111G	General Chemistry I	
or CHEM 112G	General Chemistry II	
GEOG 111G	Geography of the Natural Environment <sup>1,</sup>	
GEOL 111G	Introductory Geology <sup>1, 2</sup>	
or GEOL 212G	The Dynamic Earth	
PHYS 110G	The Great Ideas of Physics 1,2	
	Introduction to Acoustics	
or PHYS 211G & 211GL	General Physics I and General Physics I Laboratory	
or PHYS 212G & 212GL	General Physics II and General Physics II Laboratory	
AREA IV: Social/Beha	avioral Sciences (6 credits)	
LING 200G	Introduction to Language 1, 2, 4, 5	3
Select ONE course f		3
GEOG 112G	World Regional Geography <sup>1, 2</sup>	
or GEOG 120G	Culture and Environment	
or GOVT 100G	American National Government	
or GOVT 110G	Introduction to Political Science	
AREA V: Humanities	and Fine Arts (9 credits)	
HIST 111G	Global History to 1500 <sup>1, 2</sup>	3
or HIST 112G	Global History Since 1500	
HIST 201G	Introduction to Early American History <sup>1, 2</sup>	3
or HIST 202G	Introduction to Recent American History	
Select ONE course f		3
ART 101G	Orientation in Art <sup>1, 2</sup>	
DANC 101G	Dance Appreciation <sup>1, 2</sup> An Introduction to Music <sup>1, 2</sup>	
MUS 101G	History of Jazz in Popular Music: A	
MUS 201G	Blending of Cultures 1, 2	
THTR 101G	The World of Theatre 1,2	
Professional Requir		
C EP 110G	Human Growth and Behavior <sup>1, 2, 5</sup>	3

EDUC 103	Introduction with Internship in Bilingual Education/ESL <sup>2, 3, 5</sup>	3
EDUC 204	Foundations of Bilingual/ESL Education 2, 5	3
C EP 210	Educational Psychology <sup>2, 5</sup>	3
EDLT 268	Integrating Technology with Teaching <sup>2, 5</sup>	3
1 Elective from Tead	ching Field <sup>5</sup>	3
Total Credits		60

- Courses are part of the New Mexico Common Core.
- Courses are identical to those offered at New Mexico State University (main) Campus. Students planning to continue their studies at NMSU should choose these courses.
- Students majoring in bilingual education need to take EDUC 103 Introduction with Internship in Bilingual Education/ESL. See an education advisor before enrolling.
- <sup>4</sup> Bilingual/TESOL endorsement, Language Arts Teaching Field
- <sup>5</sup> This course must be completed with a grade of C- or better.
- \* TEP Pre-Requisites taken at NMSU, Las Cruces EDUC 315, EDLT 368 (if EDLT 268 has not been taken), SPED 350.

# <u>Area of Study: Elementary Education - Special Education</u> (60 credits)

NOTE: All courses listed may be applied toward a degree at NMSU.

AREA I: English & Co	mmunications (10 credits)	
ENGL 111G	Rhetoric and Composition <sup>1, 2, 5</sup>	4
ENGL 211G	Writing in the Humanities and Social Sciences <sup>1, 2, 5</sup>	3
COMM 265G	Principles of Human Communication 1, 2	3
or COMM 253G	Public Speaking	
AREA II: Mathematic	cs/Algebra (9 credits)	
MATH 120	Intermediate Algebra <sup>2, 5</sup>	3
MATH 111	Fundamentals of Elementary Mathematics I <sup>2, 5</sup>	3
MATH 112G	Fundamentals of Elementary Math II <sup>1, 2, 5</sup>	3
AREA III: Laboratory	Sciences (8 credits)	
	t subject areas with labs or any course II in the undergraduate catalog.	8
ACTD 10FC	The Diamete 1, 2	

lis	ted under AREA II	in the undergraduate catalog.
	ASTR 105G	The Planets <sup>1, 2</sup>
	or ASTR 110G	Introduction to Astronomy
	BIOL 101G & 101GL	Human Biology and Human Biology Laboratory <sup>1, 2</sup>
	or BIOL 110G	Contemporary Problems in Biology
	or BIOL 111G & 111GL	Natural History of Life and Natural History of Life Laboratory
	or BIOL 211G & 211GL	Cellular and Organismal Biology and Cellular and Organismal Biology Laboratory
	CHEM 110G	Principles and Applications of Chemistry 1, 2
	or CHEM 111G	General Chemistry I
	or CHFM 112G	General Chemistry II

ES110G	Introductory Environmental Science 1,2	
GEOG 111G	Geography of the Natural Environment <sup>1,</sup>	
GEOL 111G	Introductory Geology <sup>1, 2</sup>	
or GEOL 212G	The Dynamic Earth	
PHYS 110G	The Great Ideas of Physics 1,2	
or PHYS 120G	Introduction to Acoustics	
or PHYS 211G & 211GL	General Physics I and General Physics I Laboratory	
or PHYS 212G & 212GL	General Physics II and General Physics II Laboratory	
AREA IV: Social/Beha	avioral Sciences (6 credits)	
LING 200G	Introduction to Language 1, 2, 4, 5	3
Select ONE course f	_	3
GEOG 112G	World Regional Geography <sup>1, 2</sup>	
GEOG 120G	Culture and Environment 1, 2	
GOVT 100G	American National Government 1, 2	
GOVT 110G	Introduction to Political Science 1, 2	
AREA V: Humanities	and Fine Arts (9 credits)	
HIST 111G	Global History to 1500 <sup>1, 2</sup>	3
or HIST 112G	Global History Since 1500	
HIST 201G	Introduction to Early American History <sup>1, 2</sup>	3
or HIST 202G	Introduction to Recent American History	
Select ONE course f	rom the following:	3
ART 101G	Orientation in Art <sup>1, 2</sup>	
DANC 101G	Dance Appreciation <sup>1, 2</sup>	
MUS 101G	An Introduction to Music 1, 2	
MUS 201G	History of Jazz in Popular Music: A Blending of Cultures <sup>1, 2</sup>	
THTR 101G	The World of Theatre <sup>1, 2</sup>	
<b>Professional Require</b>	,	
C EP 110G	Human Growth and Behavior <sup>1, 2, 5</sup>	3
EDUC 103	Introduction with Internship in Bilingual Education/ESL <sup>2, 3, 5</sup>	3
EDUC 204	Foundations of Bilingual/ESL Education 2,5	3
EDLT 268	Integrating Technology with Teaching <sup>2, 5</sup>	3
2 Electives from Tea	ching Field <sup>5</sup>	6
Total Credits		60

- Courses are part of the New Mexico Common Core.
- Courses are identical to those offered at New Mexico State University (main) Campus. Students planning to continue their studies at NMSU should choose these courses.
- Students majoring in bilingual education need to take EDUC 103 Introduction with Internship in Bilingual Education/ESL. See an education advisor before enrolling.
- Bilingual/TESOL endorsement, Language Arts Teaching Field
- This course must be completed with a grade of C- or better.
- TEP Pre-Requisites taken at NMSU, Las Cruces EDUC 315, EDLT 368 (if EDLT 268 has not been taken), SPED 350.

# **Area of Study: Secondary Language Arts** (60-61 credits)

NOTE: All courses listed may be applied toward a degree at NMSU.

### **Core Requirements**

AREA I: English & Cor	nmunications (10 credits)	
ENGL 111G	Rhetoric and Composition <sup>1, 2, 5</sup>	4
ENGL 251	Survey of American Literature I 2,5	3
or ENGL 252	Survey of American Literature II	
or ENGL 271	Survey of English Literature I	
or ENGL 272	Survey of English Literature II	
COMM 265G	Principles of Human Communication <sup>1, 2</sup>	3
or COMM 253G	Public Speaking	
AREA II: Mathematics	s/Algebra (9-10 credits)	
MATH 120	Intermediate Algebra <sup>2, 5</sup>	3
Select ONE course f		3-4
MATH 121G	College Algebra <sup>1, 2, 5</sup>	
MATH 190G	Trigonometry and Precalculus 1, 2, 5	
Select ONE course f	3	3
MATH 210G	Mathematics Appreciation <sup>1, 2, 5</sup>	
MATH 142G	Calculus for the Biological and	
AD5A # 1 1	Management Sciences 1, 2, 5	
AREA III: Laboratory	Area III "G" courses with labs	0
	The Planets <sup>1, 2</sup>	8
ASTR 105G	Introduction to Astronomy	
BIOL 101G	,	
& 101GL	Human Biology and Human Biology Laboratory <sup>1, 2</sup>	
or BIOL 111G		
& 111GL	and Natural History of Life Laboratory	
or BIOL 211G	Cellular and Organismal Biology	
& 211GL	and Cellular and Organismal Biology Laboratory	
CHEM 110G	Principles and Applications of Chemistry 1, 2	
or CHEM 111G	General Chemistry I	
or CHEM 112G	General Chemistry II	
GEOG 111G	Geography of the Natural Environment <sup>1,</sup>	
GEOL 111G	Introductory Geology 1, 2	
	vioral Sciences (6 credits)	
JOUR 105G	Media and Society	3
	rom the following (for more options see	3
AREA IV in the unde		
ANTH 120G	Human Ancestors <sup>1, 2</sup>	
ANTH 125G	Introduction to World Cultures 1,2	
ANTH 201G	Introduction to Anthropology 1, 2	
ANTH 202G	World Archaeology <sup>1, 2</sup>	
ANTH 203G	Introduction to Language and Cultural Anthropology <sup>1, 2</sup>	
GEOG 112G	World Regional Geography <sup>1, 2</sup>	
GEOG 120G	Culture and Environment 1, 2	
GOVT 100G	American National Government 1,2	
GOVT 110G	Introduction to Political Science 1,2	

GOVT 150G	American Political Issues 1, 2	
GOVT 160G	International Political Issues <sup>1, 2</sup>	
SOC 101G	Introductory Sociology 1, 2	
SOC 201G	Contemporary Social Problems <sup>1, 2</sup>	
AREA V: Humanities	and Fine Arts (9 credits)	
HIST 101G	Roots of Modern Europe 1,2	3
or HIST 102G	Modern Europe	
HIST 201G	Introduction to Early American History 1, 2	3
or HIST 202G	Introduction to Recent American History	
THTR 101G	The World of Theatre <sup>1, 2</sup>	3
<b>Professional Requir</b>	rements (18 credits)	
C EP 110G	Human Growth and Behavior <sup>1, 2, 5</sup>	3
EDUC 281	Introduction to Secondary Education and Youth <sup>2, 5</sup>	3
EDLT 268	Integrating Technology with Teaching <sup>2, 5</sup>	3
3 Electives from Tea	aching Field <sup>5</sup>	9
Total Credits		60-61

- Courses are part of the New Mexico Common Core.
- Courses are identical to those offered at New Mexico State University (main) Campus. Students planning to continue their studies at NMSU should choose these courses.
- Students majoring in bilingual education need to take EDUC 103 Introduction with Internship in Bilingual Education/ESL. See an education advisor before enrolling.
- Bilingual/TESOL endorsement, Language Arts Teaching Field
- This course must be completed with a grade of C- or better.
- \* TEP Pre-Requisites taken at NMSU, Las Cruces EDUC 315, EDLT 368 (if EDLT 268 has not been taken), SPED 350.
- \*\* Language Arts Teaching Field: COMM 263G/265G, ENGL 251/252, ENGL 271/272.

# <u>Area of Study: Secondary Math</u> (61 credits)

NOTE: All courses listed may be applied toward a degree at NMSU.

AREA I: English & Co	mmunications (10 credits)	
ENGL 111G	Rhetoric and Composition 1, 2, 5	4
ENGL 211G	Writing in the Humanities and Social Sciences <sup>1, 2, 5</sup>	3
COMM 265G	Principles of Human Communication <sup>1, 2</sup>	3
or COMM 253G	Public Speaking	
AREA II: Mathematic	s/Algebra (10 credits)	
MATH 120	Intermediate Algebra <sup>2, 5</sup>	3
MATH 121G	College Algebra <sup>1, 2, 5</sup>	3
MATH 191G	Calculus and Analytic Geometry I 1, 2, 5	4
AREA III: Laboratory	Sciences (8 credits)	
PHYS 211G & 211GL or PHYS 215G	General Physics I and General Physics I Laboratory <sup>1, 2</sup> Engineering Physics I	4
& 215GL	and Engineering Physics I Laboratory	
PHYS 212G & 212GL	General Physics II and General Physics II Laboratory <sup>1, 2</sup>	4

or PHYS 216G & 216GL	Engineering Physics II and Engineering Physics II Laboratory	
	avioral Sciences (6 credits)	
ECON 201G	Introduction to Economics 1,2	3
or ECON 251G	Principles of Macroeconomics	
or ECON 252G	Principles of Microeconomics	
Select ONE course	from the following:	3
ANTH 120G	Human Ancestors 1,2	
ANTH 125G	Introduction to World Cultures 1, 2	
ANTH 201G	Introduction to Anthropology 1, 2	
ANTH 202G	World Archaeology <sup>1, 2</sup>	
ANTH 203G	Introduction to Language and Cultural Anthropology <sup>1, 2</sup>	
GEOG 112G	World Regional Geography <sup>1, 2</sup>	
GEOG 120G	Culture and Environment 1, 2	
GOVT 100G	American National Government 1,2	
GOVT 110G	Introduction to Political Science 1,2	
SOC 101G	Introductory Sociology 1, 2	
SOC 201G	Contemporary Social Problems <sup>1, 2</sup>	
AREA V: Humanities	and Fine Arts (9 credits)	
HIST 101G	Roots of Modern Europe 1, 2	3
or HIST 102G	Modern Europe	
HIST 201G	Introduction to Early American History 1,2	3
or HIST 202G	Introduction to Recent American History	
Select ONE course to	•	3
ART 101G	Orientation in Art <sup>1, 2</sup>	
MUS 101G	An Introduction to Music 1, 2	
MUS 201G	History of Jazz in Popular Music: A Blending of Cultures <sup>1, 2</sup>	
THTR 101G	The World of Theatre 1,2	
<b>Professional Requir</b>	rements (18 credits)	
C EP 110G	Human Growth and Behavior <sup>1, 2, 5</sup>	3
EDUC 281	Introduction to Secondary Education and Youth $^{2,5}$	3
EDLT 268	Integrating Technology with Teaching <sup>2, 5</sup>	3
3 Electives from Tea	aching Field <sup>5</sup>	9
Total Credits		61

- Courses are part of the New Mexico Common Core.
- Courses are identical to those offered at New Mexico State University (main) Campus. Students planning to continue their studies at NMSU should choose these courses.
- Students majoring in bilingual education need to take EDUC 103 Introduction with Internship in Bilingual Education/ESL. See an education advisor before enrolling.
- Bilingual/TESOL endorsement, Language Arts Teaching Field
- This course must be completed with a grade of C- or better.
- \* TEP Pre-Requisites taken at NMSU, Las Cruces EDUC 315, EDLT 368 (if EDLT 268 has not been taken), SPED 350.
- \*\* Mathematics Teaching Field: MATH 191G, 192G, 291G, 280, C S 110.

# **Area of Study: Secondary Science** (60-62 credits)

NOTE: All courses listed may be applied toward a degree at NMSU.

### **Core Requirements**

Core Requirements		
AREA I: English & Co	mmunications (10 credits)	
ENGL 111G	Rhetoric and Composition 1, 2, 5	4
ENGL 211G	Writing in the Humanities and Social Sciences <sup>1, 2, 5</sup>	3
COMM 265G	Principles of Human Communication <sup>1, 2</sup>	3
or COMM 253G	Public Speaking	
AREA II: Mathematic	s/Algebra (9-11 credits)	
MATH 120	Intermediate Algebra <sup>2, 5</sup>	3
Choose ONE course		3-4
MATH 121G	College Algebra <sup>1, 2, 5</sup>	
MATH 190G	Trigonometry and Precalculus <sup>1, 2, 5</sup>	
Choose ONE course	from the following:	3-4
MATH 142G	Calculus for the Biological and Management Sciences 1, 2, 5	
MATH 191G	Calculus and Analytic Geometry I 1, 2, 5	
AREA III: Laboratory		
Select two different	Area III "G" courses with labs	8
BIOL 111G & 111GL	Natural History of Life and Natural History of Life Laboratory <sup>1, 2</sup>	
or BIOL 211G & 211GL	Cellular and Organismal Biology and Cellular and Organismal Biology Laboratory	
CHEM 111G	General Chemistry I 1, 2, 5	
or CHEM 1120	General Chemistry II	
PHYS 211G	General Physics I	
& 211GL	and General Physics I Laboratory <sup>1, 2</sup>	
or PHYS 212G & 212GL	General Physics II Laboratory	
or PHYS 215G & 215GL	Engineering Physics I and Engineering Physics I Laboratory	
or PHYS 216G & 216GL	Engineering Physics II and Engineering Physics II Laboratory	
or PHYS 221G & 221GL	General Physics for Life Sciences I and Laboratory to General Physics for Life Science	ce I
or PHYS 222G & 222GL	General Physics for Life Sciences II and Laboratory to General Physics for Life Scient II	ces
AREA IV: Social/Beha	avioral Sciences (6 credits)	
GEOG 112G	World Regional Geography 1,2	3
or GEOG 120G	Culture and Environment	
Choose ONE course AREA IV in the unde	from the following (for more options see rgraduate catalog):	3
ANTH 120G	Human Ancestors 1, 2	
ANTH 125G	Introduction to World Cultures 1,2	
ANTH 201G	Introduction to Anthropology 1, 2	
SOC 101G	Introductory Sociology 1, 2	
SOC 201G	Contemporary Social Problems 1,2	
AREA V: Humanities	and Fine Arts (9 credits)	

Roots of Modern Europe 1,2

Modern Europe

HIST 101G

or HIST 102G

	or HIST 112G	Global History Since 1500	
	or HIST 201G	Introduction to Early American History	
	or HIST 202G	Introduction to Recent American History	
	options see AREA V	es in different departments (for more ' in the undergraduate catalog. ART/ MUS/PHIL/THTR ("G" courses)	6
I	Professional Requirements (18 credits)		
	C EP 110G	Human Growth and Behavior <sup>1, 2, 5</sup>	3
1	EDUC 281	Introduction to Secondary Education and Youth <sup>2</sup>	3
1	EDLT 268	Integrating Technology with Teaching <sup>2, 5</sup>	3

Global History to 1500

Courses are part of the New Mexico Common Core.

3 Electives from Teaching Field <sup>5</sup>

**Total Credits** 

Courses are identical to those offered at New Mexico State University (main) Campus. Students planning to continue their studies at NMSU should choose these courses.

60-62

- Students majoring in bilingual education need to take EDUC 103 Introduction with Internship in Bilingual Education/ESL. See an education advisor before enrolling.
- Bilingual/TESOL endorsement, Language Arts Teaching Field
- <sup>5</sup> This course must be completed with a grade of C- or better.
- \* TEP Pre-Requisites taken at NMSU, Las Cruces EDUC 315, EDLT 368 (if EDLT 268 has not been taken), SPED 350.
- \*\* General Science Teaching Field: BIOL 111G/GL, BIOL 211G/GL, CHEM 111G, CHEM 112G, CHEM 115, PHYS 212G/GL, PHYS 216G/GL.

# **Area of Study: Secondary Social Studies** (60-61 credits)

NOTE: All courses listed may be applied toward a degree at NMSU.

### **Core Requirements**

or HIST 111G

AREA I: English & Communications (10 credits)		
ENGL 111G	Rhetoric and Composition 1, 2, 5	4
ENGL 211G	Writing in the Humanities and Social Sciences <sup>1, 2, 5</sup>	3
COMM 265G	Principles of Human Communication 1, 2	3
or COMM 253G	Public Speaking	
AREA II: Mathematic	cs/Algebra (9 credits)	
MATH 120	Intermediate Algebra <sup>2, 5</sup>	3
Choose ONE course	e from the following:	3-4
MATH 121G	College Algebra <sup>1, 2, 5</sup>	
MATH 190G	Trigonometry and Precalculus <sup>1, 2, 5</sup>	
Choose ONE course	e from the following:	3
MATH 210G	Mathematics Appreciation <sup>1, 2, 5</sup>	
MATH 142G	Calculus for the Biological and Management Sciences <sup>1, 2, 5</sup>	
AREA III: Laboratory	Sciences (8 credits)	
Select two different	t Area III "G" courses with labs	8
ASTR 105G	The Planets <sup>1, 2</sup>	
or ASTR 110G	Introduction to Astronomy	

BIOL 101G	Human Biology	
& 101GL	and Human Biology Laboratory <sup>1, 2</sup>	
or BIOL 110G	Contemporary Problems in Biology	
or BIOL 111G	Natural History of Life	
& 111GL	and Natural History of Life Laboratory	
or BIOL 211G & 211GL	Cellular and Organismal Biology and Cellular and Organismal Biology Laborat	tory
CHEM 110G	Principles and Applications of Chemistry 1, 2	
or CHEM 111G	General Chemistry I	
or CHEM 112G	General Chemistry II	
GEOG 111G	Geography of the Natural Environment <sup>1,</sup>	
GEOL 111G	Introductory Geology	
AREA IV: Social/Beha	avioral Sciences (6 credits)	
GEOG 120G	Culture and Environment 1, 2	3
GOVT 100G	American National Government 1, 2, 5	3
or GOVT 110G	Introduction to Political Science	
AREA V: Humanities	and Fine Arts (9 credits)	
HIST 101G	Roots of Modern Europe 1, 2, 5	3
or HIST 102G	Modern Europe	
HIST 111G	Global History to 1500 <sup>1, 2, 5</sup>	3
or HIST 112G	Global History Since 1500	
HIST 201G	Introduction to Early American History <sup>1,</sup> 2,5	3
or HIST 202G	Introduction to Recent American History	
<b>Professional Requir</b>	ements (18 credits)	
C EP 110G	Human Growth and Behavior <sup>1, 2, 5</sup>	3
EDUC 281	Introduction to Secondary Education and Youth <sup>2</sup>	3
EDLT 268	Integrating Technology with Teaching <sup>2, 5</sup>	3
3 Electives from Tea		9
Total Credits		60-61

- Courses are part of the New Mexico Common Core.
- Courses are identical to those offered at New Mexico State University (main) Campus. Students planning to continue their studies at NMSU should choose these courses.
- Students majoring in bilingual education need to take EDUC 103 Introduction with Internship in Bilingual Education/ESL. See an education advisor before enrolling.
- Bilingual/TESOL endorsement, Language Arts Teaching Field
- This course must be completed with a grade of C- or better.
- \* TEP Pre-Requisites taken at NMSU, Las Cruces EDUC 315, EDLT 368 (if EDLT 268 has not been taken), SPED 350.
- \*\* Social Studies Teaching Field: ECON 251G, ECON 252G, HIST 101G or HIST 102G, HIST 201G, HIST 202G, GEOG 281.

## **Electrical Programs**

### **Associate of Applied Science Degree**

· Electrical Apprenticeship

**Certificates of Completion** - Important information about the educational debt, earnings, and completion rates of students who attend these

certificate programs can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

- · Electrical Apprenticeship
- · Electrical Lineworker Certificate

## **Electrical Apprenticeship**

\*\*NOTICE\*\*: On March 6, 2018, the NMSU Board of Regents approved the proposal to close the DACC Electrical Apprenticeship program. Students who currently have a declared major in Electrical Apprenticeship (working toward either a certificate or an AAS degree) will be offered a reasonable opportunity (approximately 36 months) to complete their program of study. No new students will be admitted into the Electrical Apprenticeship program.

DACC's electrician program teaches students various installation and maintenance techniques for residential, commercial and industrial electrical systems based on the national electrical code (NEC). Faculty members of the program bring to the classroom many years of real-world experience working with and installing various electrical devices used in job sites.

DACC's general electrician program includes training courses structured around NCCER curriculum and National Electrical Code (NEC) standards. The courses teach students the knowledge and skills needed to install, repair, alter and maintain residential, commercial and industrial electrical systems. Additionally, the Electrician program can provide you with the necessary technical, scientific, communication, and interpersonal skills for successful employment.

Concepts discussed in lecture are applied through hands-on lab projects that utilize DACC's lab facilities. Students work on both team-based and individual projects that simulate real-world jobsites. Lab projects provide students with core hands-on training to build skills needed for the electrician trade.

Many of DACC's students work with licensed journeyman electricians and contractors to obtain on-the-job training that will apply towards their eligibility to sit for their journeyman electrician license.

Whether taking classes or working on a job site, students enrolled in this program will be required to perform the same job duties and be able to meet the same physical requirements that they will as a graduate in the field. Depending where they find employment, graduates may be required to work in inclement weather, lift up to 50 pounds from the ground, have good eye-hand coordination, work safely around electrical hazards using the appropriate safety equipment, work safely using hand and power tools, ascend and descend stairs and ladders to reach installations, and stand, squat, or kneel for long periods of time.

## **Electrical Lineworker Certificate Program**

PLEASE NOTE: The statement regarding the closure of the Electrical Apprenticeship program <u>does not</u> apply to the Electrical Lineworker Certificate Program; this program is active, and is accepting new students.

New Mexico electric cooperatives and private firms that perform electrical line work often find it difficult to fill vacancies. DACC's Electrical Lineworker Program is a one-year pre-apprenticeship certificate program designed to provide students with the technical background and the manual skills necessary for careers in the installation and maintenance of electrical power cables. This training will apply to other

industries such as cable television companies, telephone companies and line construction contractors. Opportunities for advancement into supervisory and management positions within these companies is a possibility, but will require a consistently high job performance along with solid leadership skills by individuals.

Students will be exposed to such curriculum topics as AC/DC electrical theory, field training, occupational safety, line construction theory, rigging, and transformers. Campus instruction facilities include a large outdoor training field for pole climbing, line construction, bucket-truck operation and erecting power lines using power-line construction trucks with safety, pole climbing and teamwork highly emphasized. Along with extensive hands-on experience building power lines, students also practice both overhead and underground techniques. As part of the required curriculum, students will be required to work as a cooperative education student with a New Mexico electric cooperative or a private firm that performs electrical line work.

Upon successful completion of the Electrical Lineworker program, the graduate is expected to:

- Practice the electrical skills of the profession in a conscientious, responsible, and accountable manner while recognizing the need to continue to expand their technical knowledge and skills.
- 2. Safely climb poles and operate line bucket trucks and pole setting equipment when performing overhead line construction.
- Safety, teamwork and critical thinking use the acquired analytical skills to solve problems encountered in a field situation.

Graduates are prepared to join the electrical power industry workforce as safe and knowledgeable apprentices.

## **Additional Graduation Requirements**

To receive either an associate degree or a certificate of completion, students are required to obtain a Career Readiness Certificate in the areas of Applied Math, Reading for Information, and Locating Information at the appropriate level for their respective degree option. To facilitate success in obtaining their Career Readiness Certificate students will be required to take 1 credit of OETS 102 Career Readiness Certification Preparation. A program advisor can provide additional information.

## **Program Admissions Criteria**

The following items are required for successful admission into the Electrical Lineworker program:

- · Admission to DACC
- Background check through the designated affiliate (adverse findings may disqualify a student from acceptance into the program)
- Drug screening
- · Human Performance Evaluation; Very Heavy Test

Electrical Apprenticeship - Associate of Applied Science (p. 132)

Electrical Apprenticeship - Certificate of Completion (p. 132)

Electrical Lineworker - Certificate (p. 132)

# OEET 110. Basic Electricity and Electronics 4 Credits (3+3P)

An introduction to electricity theory and practice, including electron theory, Ohm s law, construction of electrical circuits, direct and alternating currents, magnetism, transformers, and practical applications. Same as HVAC 102, ELT 105, OEPB 102.

### OEET 130. Introduction to Electrical Power Systems 2 Credits

An overview of electrical power systems, equipment, safety practices, first aid and CPR. Restricted to majors.

Prerequisite: acceptance into the electrical lineworker program.

Corequisite: OEET 110 and OEET 131.

### OEET 131. Electrical Lineworker Lab I

#### 6 Credits

Climbing and work on utility poles using ropes and rigging, pole setting and an introduction to transmission and distribution line construction. Maintenance and troubleshooting to include the use of hot sticks. Restricted to maiors.

Prerequisite: acceptance into the electrical lineworker program.

Corequisite: OEET 110 and OEET 130.

### **OEET 140. Electrical Power Systems II**

### 3 Credits (2+2P)

Theory of power generation and distribution with emphasis on three phase systems to include transformers, voltage regulators, surge arrestors. Includes troubleshooting. Restricted to majors.

Prerequisites: acceptance into the electrical lineworker program and

OEET 130.

Corequisite: OEET 141.

### **OEET 141. Electrical Lineworker II**

### 6 Credits

Practice in the installation of electrical power lines including transformers, voltage regulators, and surge arrestors. Also advanced hot sticking procedures, troubleshooting, underground systems procedures, and pole-top rescue. Restricted to: Community Colleges only.

Prerequisites: Acceptance into the lineworker program and OEET 131.

Corequisite: OEET 140.

### OEET 151. Electrical Apprenticeship I

### 6 Credits

Apprenticeship responsibilities and benefits as well as first aid and CPR will be covered. Hand tools, electrical theory, and the regulations imposed by national codes and OSHA. Students will apply theory taught in their iobs.

Prerequisite: consent of instructor.

### **OEET 152. Electrical Apprenticeship II**

### 6 Credits

OHM s law circuit sizing and service panel sizing will be covered in detail. Other topics include low voltage systems, heating and air conditioning circuits, alarm systems and smoke detectors.

Prerequisites: OEET 151 and consent of instructor.

### **OEET 153. Electrical Apprenticeship III**

### 6 Credits

Various electrical measuring devices will be covered in detail. Inductance, transformers, capacitance, and simple motors will be studied.

Prerequisites: OEET 152 and consent of instructor.

### **OEET 154. Electrical Apprenticeship IV**

### 6 Credits

Theory and application of three-phase transformers and autotransformers. Electrical distribution using switchboards, panelboards, and circuit breakers.

Prerequisites: OEET 153 and consent of instructor.

### **OEET 221. Cooperative Experience I**

### 1-4 Credits

Supervised cooperative work program. Student is employed in an approved occupation and is supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U.

Prerequisite: consent of instructor.

### **OEET 251. Electrical Apprenticeship V**

#### 6 Credits

Commercial/industrial applications for electricians. Blueprint interpretation, commercial construction types and processes, wiring methods, wiring materials, and motor controls.

Prerequisites: OEET 154 and consent of instructor.

### **OEET 252. Electrical Apprenticeship VI**

### 6 Credits

In-depth commercial applications to include commercial/industrial service calculations, mobile home parks, multi-family dwellings, and commercial fire/security systems.

Prerequisites: OEET 251 and consent of instructor.

### **OEET 253. Electrical Apprenticeship VII**

### 6 Credits

Control devices in commercial/industrial applications; emphasis on logic in-line diagrams, time delay starters, reversing starters, and manual/magnetic solenoids.

Prerequisites: OEET 252 and consent of instructor.

### **OEET 254. Electrical Apprenticeship VIII**

### 6 Credits

Miscellaneous topics for the journeyperson electrician to include power distribution/transmission, solid state controls and relays, photoelectric and proximity controls and programmable controllers.

Prerequisites: OEET 253 and consent of instructor.

### **OEET 295. Special Topics**

### 1-6 Credits

Topics to be announced in the Schedule of Classes.

Name: Terry Mount, Department Chair

Office Location: DATS 155A

Phone: (575) 527-7590

Website: https://dacc.nmsu.edu/elp/

# **Electrical Apprenticeship - Associate** of Applied Science

\*\*NOTICE\*\*: On March 6, 2018, the NMSU Board of Regents approved the proposal to close the DACC Electrical Apprenticeship program. Students who currently have a declared major in Electrical Apprenticeship (working toward either a certificate or an AAS degree) will be offered a reasonable opportunity (approximately 36 months) to complete their program of study. No new students will be admitted into the Electrical Apprenticeship program.

## (67 credits)

**NOTE:** Students must achieve a cumulative grade-point average of 2.0 with a final grade of *C* or better in all required OEET courses.

### **Core Requirements**

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
Select one from the	following:	3
BOT 209	Business and Technical Communications	
ENGL 203G	Business and Professional Communication <sup>1</sup>	
ENGL 218G	Technical and Scientific Communication	
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
Select one from the	following:	3
BMGT 240	Human Relations	
PSY 201G	Introduction to Psychology <sup>1</sup>	
SOC 101G	Introductory Sociology <sup>1</sup>	
Related Requireme	nts	
Select one from the	following:	3
C S 110	Computer Literacy <sup>1</sup>	
OECS 105	Introduction to Information Technology	
OECS 227	Computer Applications for Technicians	
OETS 102	Career Readiness Certification Preparation	1
Select an approved	elective	2
Technical Requirem	nents	
OEET 151	Electrical Apprenticeship I	6
OEET 152	Electrical Apprenticeship II	6
OEET 153	Electrical Apprenticeship III	6
OEET 154	Electrical Apprenticeship IV	6
OEET 251	Electrical Apprenticeship V	6
OEET 252	Electrical Apprenticeship VI	6
OEET 253	Electrical Apprenticeship VII	6
OEET 254	Electrical Apprenticeship VIII	6
Total Credits		67

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

# **Electrical Apprenticeship - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

\*\*NOTICE\*\*: On March 6, 2018, the NMSU Board of Regents approved the proposal to close the DACC Electrical Apprenticeship program. Students who currently have a declared major in Electrical Apprenticeship (working toward either a certificate or an AAS degree) will be offered a reasonable opportunity (approximately 36 months) to complete their program of study. No new students will be admitted into the Electrical Apprenticeship program.

## (49 credits)

To earn the electrical apprenticeship certificate, OETS 102 Career Readiness Certification Preparation must also be taken. Students must achieve a cumulative grade-point average of 2.0 with a final grade of *C* or better in all required OEET courses.

### **Related Requirements**

OETS 102	Career Readiness Certification Preparation	1
Technical Requ	irements	
OEET 151	Electrical Apprenticeship I	6
OEET 152	Electrical Apprenticeship II	6
OEET 153	Electrical Apprenticeship III	6
OEET 154	Electrical Apprenticeship IV	6
OEET 251	Electrical Apprenticeship V	6
OEET 252	Electrical Apprenticeship VI	6
OEET 253	Electrical Apprenticeship VII	6
OEET 254	Electrical Apprenticeship VIII	6
Total Credits		49

## **Electrical Lineworker - Certificate**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (32 credits)

The Electrical Lineworker Certificate option has its own separate requirements that are listed here.

**NOTE:** Students not possessing a commercial drivers license (CDL) will be required to take AUTO 130 Introduction to Transportation Industry and AUTO 131 Class A CDL, during the fall and spring semesters, respectively. Students must achieve a cumulative grade-point average of 2.0 with a final grade of *C* or better in all required OEET courses.

### **Related Requirements**

Select one from the following:		
C S 110	Computer Literacy <sup>1</sup>	
OECS 105	Introduction to Information Technology	
OECS 227	Computer Applications for Technicians	
OETS 102	Career Readiness Certification Preparation	1
OETS 118	Mathematics for Technicians	3
Technical Requirements		
OEET 110	Basic Electricity and Electronics	4

OEET 130	Introduction to Electrical Power Systems	2
OEET 131	Electrical Lineworker Lab I	6
OEET 140	Electrical Power Systems II	3
OEET 141	Electrical Lineworker II	6
OEET 221	Cooperative Experience I	4
Total Credits		32

Course is identical to those offered at New Mexico State University Las Cruces (main) Campus.

## **Electronics Technology**

Associate of Applied Science Degree

- · General Electronics Technology Option
- · Biomedical Electronics Option

Certificates of Completion - Important information about the educational debt, earnings, and completion rates of students who attend these certificate programs can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

- · General Electronics Technology
- · Biomedical Electronics

The explosion in the number and diversity of electronic devices used in home and industry settings has greatly intensified the demand for qualified technicians. As orders for high-tech communications equipment and electronic products continue to rise, job opportunities for electronics technicians will expand even more. Salaries in the various branches of electronics are among the highest for all technology areas.

Students in the Electronics Technology program learn using state-ofthe-art equipment and instrumentation. They work and train in spacious, modern laboratories similar to those used in industry. Students have the opportunity to analyze and troubleshoot actual problems while learning from knowledgeable and experienced instructors.

The Electronics Technology program may be completed on a part-time basis by taking classes during the evening or during the day. Those who wish to pursue a bachelor of science degree in Engineering Technology at New Mexico State University may apply up to 36 credit hours from the Electronics Technology program toward the four-year degree.

While pursuing this program, whether they are taking classes or working as apprentices, students will be required to perform the same job duties and be able to meet the same physical requirements that they will as a graduate in the field. Depending where they find employment, graduates may be required to lift up to 50 pounds from the ground, work safely around electrical equipment using the appropriate safety equipment, work safely using hand and power tools, ascend and descend stairs and ladders, and stand, squat, stoop or kneel for long periods of time.

Two program options are available:

## **General Electronics Option**

The General Electronics Option prepares graduates for entry-level employment as technical assistants and technicians in the fabrication, testing, maintenance, and repair of electrical and electronic equipment. Job opportunities exist in the areas of manufacturing and repair of electronic instruments, audio and video electronics, computers, medical equipment, and industrial and consumer electronic equipment. While

positions for electronics technicians are found in all sectors of the economy, many of the jobs in southern New Mexico are in government and defense-related industries. Opportunities for advancement in the electronics field are above average.

## **Biomedical Electronics Option**

The Biomedical Electronics Option is a specialized program focusing on medical equipment. Career opportunities exist in hospital and clinical settings, engineering departments, and medical equipment manufacturing companies, as well as other organizations serving the rapidly expanding medical equipment service market. This course of study will also help prepare the electronics student for the Biomedical Equipment Technician Certification Exam of the International Certification Commission for Clinical Engineering and Biomedical Technology.

## **Additional Graduation Requirements**

To receive either an associate degree or a certificate of completion, students are required to obtain a Career Readiness Certificate in the areas of Applied Math, Reading for Information, and Locating Information at the appropriate level for their respective degree option. To facilitate success in obtaining their Career Readiness Certificate, students will be required to take 1 credit of OETS 102 Career Readiness Certification Preparation. A program advisor can provide additional information.

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General Electronics Technology - Certificate of Completion (p. 135)

Biomedical Electronics - Certificate of Completion (p. 135)

## ELT 103. Math Study Skills for Electronics 1 Credit

Covers specific math study skills and critical thinking processes to reinforce practical applications of math and its use with electronics. The student will be introduced to electronic mathematical formulas during the problem-solving steps required for circuit analysis. May be repeated up to 4 credits.

**Prerequisite(s)/Corequisite(s):** ET 183 OR ET 184. Restricted to Community Colleges only.

# ELT 105. Basic Electricity and Electronics 3 Credits (2+2P)

Fundamentals of electricity and electronics, basic circuit devices, meters, transistors, integrated circuits and other solid state devices, computers, fiber optics, and industrial application topics. Minimum math proficiency of CCDM 103 or CCDM 104 required or math placement into CCDM 114 or higher. Restricted to: Community Colleges only. Crosslisted with:

### ELT 110. Electronics I 4 Credits (3+3P)

Fundamentals of electronics including: components, schematics, Ohm's law, Thevenin's and Norton's theorems, and series/parallel circuits incorporating passive, active and magnetic elements. Introduction to AC circuits. Crosslisted with: AERT123. Restricted to: Community Colleges only.

### ELT 120. Mathematics for Electronics

### 4 Credits

Includes fundamental mathematics, algebra, sine, cosine, and other elementary functions as they specifically apply to the operation, manipulation, and evaluation of direct current (DC) and alternating current (AC) circuits. Minimum math proficiency of CCDM 114 required or math placement into MATH 120 or higher. Restricted to: Community Colleges only. Crosslisted with: AERT 124

### ELT 135. Electronics II

### 4 Credits (3+3P)

Analysis of AC circuits, filters, and resonance. Introduction to solid state fundamentals including diodes and rectifier circuits, voltage regulators, various transistors and transistor characteristics, amplification and amplifiers, photoelectric effects, gates and timing circuits. Restricted to Community Colleges campuses only.

Prerequisite(s): ELT 110 and ELT 120.

### ELT 155. Electronics CAD and PCB Design

### 3 Credits (2+2P)

Introduction to and the use of commercially available CAD software covering schematic representation of electronic components and circuits. Printed circuit board layout techniques including proper schematic capture, netlist generation, design rule checking and manual routing covered.

### ELT 160. Digital Electronics I

### 4 Credits (3+3P)

Number systems, codes, Boolean algebra, logic gates, Karnaugh maps, combination circuits, flip-flops, and digital troubleshooting techniques. Restricted to: Community Colleges only.

Prerequisite(s): ELT 110 and (ELT 120 or MATH 120).

### **ELT 175. Soldering Practices**

### 3 Credits (2+2P)

Methods and techniques of hand soldering in the production of high quality and reliable soldering connections. Restricted to: Community Colleges only.

### **ELT 205. Semiconductor Devices**

### 4 Credits (3+3P)

Analysis and trouble shooting of linear electronic circuits including amplifiers, op-amps, power supplies, and oscillators. Restricted to: Community Colleges only.

Prerequisite(s): ELT 110 and ELT 135.

### ELT 215. Microprocessor Applications I

### 4 Credits (3+2P)

Fundamentals of microprocessor architecture and assembly language with an emphasis on hardware interfacing applications.

Prerequisite(s)/Corequisite(s): ELT 235. Prerequisite(s): ELT 160.

Restricted to: Community Colleges only.

# ELT 220. Electronic Communication Systems 4 Credits (3+2P)

Principles and applications of circuits and devices used in the transmission, reception, and processing of RF, microwave, digital and telecommunications systems.

Prerequisite(s)/Corequisite(s): ELT 205. Prerequisite(s): ELT 135.

Restricted to: Community Colleges only.

### ELT 221. Cooperative Experience I

### 1-6 Credits

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U.

Prerequisite: consent of instructor.

### ELT 222. Cooperative Experience II

### 1-6 Credits

Continuation of ELT 221. Maximum of 6 credits. Graded S/U.

Prerequisite: consent of instructor.

### ELT 225. Computer Applications for Technicians

### 3 Credits (2+2P)

An overview of computer hardware, software applications, operating systems, high level programming languages and networking systems.

### ELT 230. Microprocessor Applications II

### 4 Credits (3+2P)

Advanced microprocessor interfacing techniques. Topics in A/D and D/A conversion, I/O port address decoding, direct memory accessing, and peripheral device interfacing applications.

Prerequisite: ELT 215.

### ELT 235. Digital Electronics II

### 3 Credits (2+2P)

Sequential logic circuits, latches, counters, shift-registers, fault analysis and troubleshooting of digital IC s, multiplexers, timers, encoders/decoders, arithmetic circuits, pulse shaping, and memory devices.

Restricted to: Community Colleges only.

Prerequisite(s): ELT 160.

### **ELT 240. Introduction to Photonics**

### 4 Credits (3+2P)

Nature of light, light emitters, lasers, detectors, fiber optics communications systems, and other applications of light to electronics.

Prerequisite: ELT 135 or consent of instructor.

### ELT 250. Electronics Systems Analysis

### 2 Credits (1+3P)

Capstone course emphasizing a systems approach to troubleshooting and maintaining complex electronics systems. Includes program review in preparation for technician certification.

Prerequisite: consent of instructor.

# ELT 260. Instrumentation Control and Signal Conditioning 4 Credits (3+2P)

Introduction to sensors and transducers, signal conditioning and transmission for measuring and process control systems. Includes AD, DA converter, small servos and actuators. Prerequisite:ELT 205.

### **ELT 265. Special Topics**

### 1-6 Credits

Topic to be announced in the Schedule of Classes.

# ELT 270. Biomedical Equipment Instrumentation 4 Credits (3+2P)

Principles and applications of electronic circuits and devices used in biomedical equipment. Skills taught to include evaluating, troubleshooting and repairing various types of medical equipment.

Prerequisite(s)/Corequisite(s): ELT 260. Prerequisite(s): ELT 205.

Restricted to: Community Colleges only.

### ELT 295. Professional Development/Leadership 1 Credit

As members and/or officers of student professional organizations, electronics technology students gain experience in leadership, team building, and community services. May be repeated for a maximum of 6 credit. Restricted to ELT and ET E majors.

Name: Luis Meza, Department Chair

Office Location: DAWD 116A

Phone: (575) 527-7599

Website: https://dacc.nmsu.edu/elt/electronics-technology/

Electronics I

## **Biomedical Electronics - Certificate** of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (48 credits)

### **Prerequisites**

**ELT 110** 

LLI IIO	Licetronics	7
ELT 120	Mathematics for Electronics	4
ELT 205	Semiconductor Devices	4
ELT 260	Instrumentation Control and Signal Conditioning	4
Related Require	ements	
AHS 120	Medical Terminology	3
AHS 202	Legal and Ethical Issues in Health Care	3
BIOL 154	Introductory Anatomy and Physiology	4
OETS 102	Career Readiness Certification Preparation	1
Technical Requ	irements	
ELT 135	Electronics II	4
ELT 155	Electronics CAD and PCB Design	3
ELT 160	Digital Electronics I	4
ELT 175	Soldering Practices	3
ELT 225	Computer Applications for Technicians	3
ELT 270	Biomedical Equipment Instrumentation	4

## **Electronics Technology - Associate of Applied Science**

## (67-68 credits)

### **Core Requirements**

**Total Credits** 

•		
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 203G	Business and Professional Communication <sup>1</sup>	3
or ENGL 218G	Technical and Scientific Communication	
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
Select one from the	following:	3

Total Credits	s or Biomedical Electronics option	14-15 67-68
OETS 102	Career Readiness Certification Preparation	1
ELT 260	Instrumentation Control and Signal Conditioning	4
ELT 250	Electronics Systems Analysis	2
ELT 240	Introduction to Photonics	4
ELT 225	Computer Applications for Technicians	3
ELT 205	Semiconductor Devices	4
ELT 175	Soldering Practices	3
ELT 160	Digital Electronics I	4
ELT 155	Electronics CAD and PCB Design	3
ELT 135	Electronics II	4
ELT 110	Electronics I	4
Technical Requiren	nents <sup>4</sup>	
ELT 120	Mathematics for Electronics <sup>3</sup>	
MATH 190G	Trigonometry and Precalculus <sup>1,2</sup>	
Select one from the	e following:	4
BMGT 240	Human Relations	
SOC 101G	Introductory Sociology 1	
PSY 201G	Introduction to Psychology <sup>1</sup>	

- Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.
- Recommended for transfer track.
- Recommended for career track.
- A final grade of C or better is required in all 100-level ELT courses to progress to 200-level ELT courses.

### **General Electronics Option**

ELT 215	Microprocessor Applications I	4
ELT 220	Electronic Communication Systems	4
ELT 230	Microprocessor Applications II	4
ELT 235	Digital Electronics II	3
Total Credits		15

### **Biomedical Electronics Option**

AHS 120	Medical Terminology	3
AHS 202	Legal and Ethical Issues in Health Care	3
BIOL 154	Introductory Anatomy and Physiology	4
ELT 270	Biomedical Equipment Instrumentation	4
Total Credits		14

## **General Electronics Technology -Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (26 credits)

### **Technical Requirements**

ELT 110	Electronics I	4

ELT 120	Mathematics for Electronics	4
ELT 135	Electronics II	4
ELT 155	Electronics CAD and PCB Design	3
ELT 160	Digital Electronics I	4
OETS 102	Career Readiness Certification Preparation	1
Approved ELT electives		6
Total Credits		26

## **Emergency Medical Services**

Associate of Applied Science Degree: Emergency Medical Services

### **Certificates of Achievement:**

- · First Responder Prehospital
- · EMT Basic
- · EMT Intermediate

**Certificate of Completion** - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

Paramedic

Prehospital emergency medical care is a challenging and exciting profession. People's lives often depend on the quick reaction and competent care of emergency medical technicians (EMTs) and paramedics.

Emergency medical services (EMS) professionals may work at any of four different levels: first responder, EMT-basic, EMT-intermediate, and paramedic. Upon successful completion of training, students are eligible for employment in many types of emergency medical systems nationwide—in fire departments, municipal services, private ambulance services, federal services, industry, hospital emergency departments, and hospital-based ambulance systems. The demand for EMS professionals is increasing.

DACC offers all levels of EMS education, as well as an opportunity to earn an associate of applied science degree at the paramedic level. Successful completion of an EMS program will allow for certification/licensure testing at the state and national level.

At each EMS program level, students gain additional knowledge and skills to enable them to function in the clinical and field settings with nurses, physicians, and other healthcare professionals. In classes, students learn about anatomy and physiology, the pathophysiology of diseases, traumatic injuries, pharmacology, and cardiac care. Students acquire skills through laboratory practice, clinical experience in hospitals, and field experience with ambulance services throughout the state. Students may be scheduled at a variety of clinical and field sites which include areas outside Las Cruces.

## **Program Accreditation**

The Emergency Medical Services Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org (http://www.caahep.org)) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Profession (CoAEMSP).

## Commission on Accreditation of Allied Health Education Programs (CAAHEP)

1361 Park Street Clearwater, FL 33756 727-210-2350

www.caahep.org (http://www.caahep.org)

### Committee on Accreditation of Educational Programs for the Emergency Medical Services Profession (CoAEMSP)

8301 Lakeview Parkway Suite 111-312

Rowlett, TX 75088 214-703-8445

FAX: 214-703-8992

www.coaemsp.org (http://www.coaemsp.org)

In addition, the program is approved by the New Mexico Office of Health Emergency Management.

## **Required Skills and Abilities**

All EMS programs require that the student be able to:

- lift, carry and balance up to 125 pounds (250 pounds with assistance)
- carry out emergency and non-emergency patient care, including, light extrication (i.e., be able to assume a variety of postural positions and be capable of physical maneuvers ranging from crawling, kneeling, squatting, twisting, turning, and bending, to climbing stairs and ladders)
- withstand varied environmental conditions such as extreme heat, cold, and moisture

# Program Prerequisites and Entrance Requirements

Specific entrance requirements and prerequisites vary depending on the qualifications of the applicant and the level of training/licensure sought:

### EMT-Basic

- · Completion of background check and drug screening
- · Documentation of vaccinations:
  - MMR twice since 1980;
  - · TB with expiration past end of semester;
  - · varicella titer and tetanus within 10 years
- OEEM 153 Introduction to Anatomy and Physiology for the EMS
   Provider
- · Eligible for ENGL 111G Rhetoric and Composition

### **EMT-Intermediate**

- Copy of current New Mexico State Emergency Technician—Basic license OR successful completion of EMT—Basic coursework and EMT—Basic license in hand by first day of class of EMT—Intermediate program
- Score of no less than 80 percent on departmental entrance exam
- Completion of background check and drug screening
- · Copy of current healthcare provider CPR card
- · Documentation of vaccinations:
  - · rubella twice since 1980;
  - · TB with expiration past end of semester;
  - · varicella titer and tetanus within 10 years

### **EMT-Paramedic**

Applicants will be judged according to the following criteria and submissions:

- · Copy of current New Mexico EMT-Basic or EMT-Intermediate license
- Written, oral, and practical assessment exams at the EMT-Basic or EMT-Intermediate level, depending on current licensure
- · Score of no less than 80 percent on departmental entrance exam
- · Completion of the following courses:

OEEM 153	Introduction to Anatomy and Physiology for the EMS Provider	3
OEEM 201	Human Pathophysiology	3
OEEM 206	Introduction to Advanced Prehospital Care	3
OEEM 207	Introduction to Pharmacology	3

- · Copy of current healthcare provider CPR card
- · High school and/or college transcript(s) and GPA
- · Accuplacer/ACT scores in English and math
- Completed departmental application, including résumé, and letter of intent
- · Letters of recommendation
- · Completion of background check and drug screening

To graduate with a certificate or an associate degree, students must earn a *C* or better in all required departmental and non-departmental courses.

Associate of Applied Science Degree: Emergency Medical Services (p. 139)

Certificate of Achievement: First Responder Prehospital (p. 140)

Certificate of Achievement: EMT - Basic (p. 140)

Certificate of Achievement: EMT - Intermediate (p. 140)

Certificate of Completion: Paramedic (p. 140)

## OEEM 101. CPR for the Health Care Professional 1 Credit

Students learn identification and response to airway and circulation emergencies, including use of a SAED and accessing the EMS system. This course is taught using the American Heart Association guidelines for course completion. Required: grade of C or better.

## OEEM 103. Heartsaver First Aid/CPR 1 Credit

Students learn how to identify and respond to airway, circulation and basic first aid emergencies, to include using a SAED and accessing the EMS system. This course is intended for students who are not Allied Health Majors and utilizes the American Heart Association guidelines for course completion. Restricted to: Community Colleges only.

### **OEEM 106. Advanced First Aid**

### 2 Credits

Theory and advanced first aid skills taught emphasizing recognition and providing care for injury or sudden illness until professional medical help arrives. Course meets and/or exceeds the Red Cross or National Safety Council standards.

Corequisite: OEEM 101 or consent of instructor.

# OEEM 115. First Responder Prehospital Professional 3 Credits (2+3P)

Provides training in prehospital medical and traumatic emergencies.

Requires a C or better to pass. Restricted to majors.

Prerequisite: consent of instructor.

Corequisite: OEEM 101.

# OEEM 116. Emergency Medical Technician Bridge 5 Credits (3+6P)

Enhanced skill instruction and didactic integration designed to meet the requirements for an EMT-Basic certificate. Requires a "C" or better to pass. May be repeated up to 5 credits. Consent of Instructor required. **Corequisite(s):** OEEM 121.

Prerequisite(s)/Corequisite(s): OEEM 153. Prerequisite(s): OEEM 101, OEEM 115. Restricted to: OEMS,OEEM majors. Restricted to Community Colleges campuses only.

## OEEM 120. Emergency Medical Technician Basic 6 Credits

EMT-Basic skills to include care of soft tissue and muscular/skeletal injuries, circulatory, nervous, general medical and respiratory emergencies. Requires a "C" or better to pass. May be repeated up to 6 credits. Consent of Instructor required.

Corequisite(s): OEEM 101, OEEM 120L, OEEM 121.

**Prerequisite(s)/Corequisite(s):** OEEM 153. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

## OEEM 120 L. Emergency Medical Technician Basic Lab 2 Credits

EMT-Basic skills development with emphasis on assessment, skills competency and team-work in patient care in the prehospital setting. May be repeated up to 2 credits.

Corequisite(s): OEEM 101, OEEM 120, OEEM 121.

**Prerequisite(s)/Corequisite(s):** OEEM 153. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

# OEEM 121. Emergency Medical Technician Basic Field/Clinical 1 Credit

Covers the patient care experience provided through assigned shifts in the hospital and/or ambulance setting. Requires a "C" or better to pass. May be repeated up to 1 credits. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): OEEM 101, OEEM 120, OEEM 120L
OEEM 153. Restricted to: OEEM majors. Restricted to Community
Colleges campuses only.

### OEEM 122. Emergency Medical Technician Basic Advanced Field/ Internship

### 2 Credits

Expanded patient care experience provided through assigned shifts in the hospital and/or ambulance setting. May be repeated up to 2 credits. Consent of Instructor required. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Current EMT-basic license and consent of instructor.

## OEEM 150. Emergency Medical Technician Intermediate 5 Credits

Theory of the roles, responsibilities and scope of practice of the EMT-Intermediate. Assessment and management of respiratory, cardiac, trauma, environmental, behavior, reproduction, and childhood emergencies. May be repeated up to 5 credits. Consent of Instructor required. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

**Prerequisite(s):** Current EMT-basic license, pretest and consent of instructor.

## OEEM 150 L. Emergency Medical Technician Intermediate Lab 2 Credits

EMT-Intermediate skills development with an emphasis on assessment, skills competency, and team work in patient care in the prehospital setting. Requires a C or better to pass.

**Prerequisite(s)/Corequisite(s):** OEEM 150,0EEM 151. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

## OEEM 151. Emergency Medical Technician Intermediate Field/Clinical 2 Credits

Patient care experience provided through assigned shifts in the hospital and/or ambulance setting.

**Prerequisite(s)/Corequisite(s):** OEEM 150, OEEM 150 L. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

## OEEM 153. Introduction to Anatomy and Physiology for the EMS Provider 3 Credits

To properly assess and manage a patient, a prehospital provider must have a solid foundation in human anatomy and physiology. This course provides a systematic approach to building this foundation. Grade of "C" or better is required to pass the course. Consent of Instructor required. Restricted to Community Colleges campuses only.

### **OEEM 155. Special Topics**

### 1-6 Credits

Specific topics to be listed in Schedule of Classes. May be repeated for a maximum of 10 credits.

## OEEM 158. Emergency Medical Technician-Combination Refresher 2 Credits

A comprehensive review of prehospital medicine for the prehospital care provider from the first responder level through the EMT Intermediate. New material relevant to recertification of the New Mexico First Responder, EMT Basic and EMT Intermediate licensure included. Graded S/U.

## OEEM 177. Emergency Medical Services Instructor

Theory of student learning, methodology, instructional components, evaluation, and course coordination for the EMS profession. May be repeated up to 4 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

Prerequisite(s): Minimum of an EMT-Basic License required.

# OEEM 201. Human Pathophysiology 3 Credits (2+3P)

Overview of anatomy and physiology. Emphasis on human body pathophysiology including a medical illness component. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEMS, OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 120, OEEM 120 L.

# OEEM 202. EMT-Paramedic Respiratory Emergencies 3 Credits (2+3P)

Review anatomy, physiology and pathophysiology of the respiratory system. Assessment and management of respiratory emergencies and acute respiratory failure in the prehospital setting. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEMS,OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 212.

## OEEM 203. EMT-Paramedic Trauma Emergencies 3 Credits (2+3P)

Study of the effects of trauma on the human body. Assessment and management of trauma patients and scenes, including vehicular extrication. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 216.

## OEEM 206. Introduction to Advanced Prehospital Care 3 Credits (2+3P)

Overview of prehospital care including roles and responsibilities of EMT-P, EMS systems, medical, legal, ethical issues, stress management, medical terminology, medical report writing and communication. Includes ridealong with ambulance and dispatch observation. Requires a C or better to pass. Restricted to majors. Consent of instructor required. Restricted to: Community Colleges only. Restricted to OEEM majors.

Prerequisite(s): OEEM 120.

## OEEM 207. Introduction to Pharmacology 3 Credits (2+3P)

Drug actions, factors modifying drugs and dosages: characteristics of drug effects, and drug history and dosages. Prehospital protocol, transport, and common patient prescription medications. Restricted to majors. Requires a C or better to pass. Restricted to: Community Colleges only. Restricted to OEEM majors.

Prerequisite(s): OEEM 120.

# OEEM 210. Cardiac Rhythm Interpretation 3 Credits (2+3P)

Cardiac conduction system: electrophysiology, electrocardiogram, monitor, atrial, sinus, ventricular and junctional dysrhythmias, multiple lead EKG and 12 lead EKG interpretation. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEEM, OEMS majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 201, OEEM 206, OEEM 207.

# OEEM 212. EMT-Paramedic Cardiovascular Emergencies 3 Credits (2+3P)

Review anatomy, physiology, and pathophysiology of cardiovascular system. Assessment and management of cardiovascular emergencies in the prehospital setting. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEMS,OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 210.

# OEEM 213. EMT-Paramedic: Medical Emergencies I 3 Credits (2+3P)

Study of the disease process; assessment and management of neurological, endocrine, gastrointestinal, renal emergencies and infectious disease. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEEM, OEMS majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 212.

## OEEM 214. EMT--Paramedic: Medical Environmental Emergencies II 3 Credits (2+3P)

Study of disease process, assessment, and management of poisoning, drug and alcohol abuse, environmental, behavioral and geriatric emergencies. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEMS, OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 213.

# OEEM 216. EMT-Paramedic: Reproductive and Childhood Emergencies 3 Credits (2+3P)

Covers anatomy, physiology, disease processes, assessment and management of male and female reproductive system emergencies, childhood emergencies and growth and development. Restricted to majors. Requires a C or better to pass. Restricted to: Community Colleges only.

Prerequisite(s): OEEM 214 and consent of instructor.

### OEEM 218. Pediatric Advance Life Support for the Healthcare Professional

#### 1 Credit

Identify and respond to life threatening pediatric emergencies. Taught using the American Heart Association guidelines for course completion.

Prerequisite: OEEM 101.

## OEEM 219. Advance Cardiac Life Support for the Healthcare Provider 1 Credit

Identify and respond to life threatening cardiac emergencies. Taught using the American Heart Association guidelines for course completion. Graded S/U.

Prerequisite: OEEM 101.

### OEEM 230. EMT-Paramedic Clinical Experience I

#### 3 Credits

Assigned clinical experiences in patient assessment and specific management techniques. Successful completion includes minimum required hours and completion of course objectives. Restricted to majors. Requires a C or better to pass.

Prerequisite: consent of instructor.

## OEEM 231. EMT-Paramedic Clinical Experience II 3 Credits

Assigned clinical experiences in patient assessment and specific management techniques. Successful completion includes minimum required hours and completion of course objectives. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required.

**Prerequisite(s)/Corequisite(s):** OEEM 230. Restricted to: OEMS,0EEM majors. Restricted to Community Colleges campuses only.

## OEEM 240. EMT-Paramedic Field Experience I 3 Credits

Advanced prehospital skills and knowledge. Successful completion of at least the minimum required hours and course objectives. Restricted to majors. Requires a C or better to pass.

Prerequisite: consent of instructor.

## OEEM 241. EMT-Paramedic Field Experience II 3 Credits

Continued focus on advanced prehospital skills and knowledge, with increasing responsibility for patient care. Successful completion includes meeting at least the minimum required hours and course objectives. Pre/Requires a C- or better to pass.

Corequisites: OEEM 240 Restricted to majors.

## OEEM 242. EMT-Paramedic Field Internship 3 Credits

Emphasis on total patient care responsibility and team leadership skills. Successful completion includes meeting the minimum hours required and course objectives. Pre/ Consent of Instructor required. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 231, OEEM 241.

## OEEM 243. EMT-Paramedic Preparation for Practice 2 Credits

Comprehensive final program testing to prepare for licensing examination. Requires a "C" or better to pass. May be repeated up to 2 credits. Consent of Instructor required. Restricted to: OEMS, OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 242.

## OEEM 247. Emergency Medical Technician - Paramedic Refresher 2 Credits (1+3P)

A comprehensive review of prehospital emergency medicine for the EMT Paramedic. New material relevant to recertification of the New Mexico and Nationally Registered Paramedic licensure. Graded S/U.

# OEEM 253. Critical Care Emergency Medical Transport Program 6 Credits (5+6P)

This course will provide further education to Paramedics, Registered Nurses and Registered Respiratory Therapists who wish to function as part of a critical care transport team. Consent of instructor required. Restricted to: Community Colleges only.

**Prerequisite(s):** Licensed Paramedic, Registered Nurse or Registered Respiratory Therapist with one or more years experience.

Name: Ann Bellows, Program Director

Office Location: DASR 220J

Phone: (575) 527-7645

Website: https://dacc.nmsu.edu/ems/

# **Associate of Applied Science: Emergency Medical Services**

Students wishing to graduate with an Associate Degree of Applied Science in Emergency Medical Services will need to complete a minimum of 69 credits and this is only an additional 22 credits above those required for the Paramedic Certificate. The Core and Related Requirements can be completed before, during, or after the Technical Requirements.

Students may take the general education courses for the associate of applied science at any time; however, courses listed in the "Technical Program Requirements" section (which are common to both the associate degree and certificate programs) must be taken in the prescribed sequence. In order to progress through the program, students must meet specific departmental grading criteria in every course taken. This portion of the curriculum must be completed within a three-year period. Thus, those opting to study on a part-time basis are advised to plan carefully in order to take courses in the correct sequence.

Applications for the Paramedic program may be requested directly from the EMS office (room DASR 220, telephone 575-527-7645).

To graduate with a certificate or an associate degree, students must earn a *C* or better in all required departmental and non-departmental courses.

## (69 credits)

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
C S 110	Computer Literacy <sup>1</sup>	3
COMM 265G	Principles of Human Communication	3
MATH 120	Intermediate Algebra <sup>1</sup>	3
or AHS 116	Math for Health Occupations	

PSY 201G	Introduction to Psychology <sup>1</sup>	3
or SOC 101G	Introductory Sociology	
Related Requireme	ents	
BMGT 140	Principles of Supervision I	3
AHS 120	Medical Terminology	3
or HIT 150	Introduction to Medical Terminology	
Technical Require		
OEEM 201	Human Pathophysiology <sup>2</sup>	3
OEEM 202	EMT-Paramedic Respiratory Emergencies	3
OEEM 203	EMT-Paramedic Trauma Emergencies	3
OEEM 206	Introduction to Advanced Prehospital Care <sup>2</sup>	3
OEEM 207	Introduction to Pharmacology <sup>2</sup>	3
OEEM 210	Cardiac Rhythm Interpretation	3
OEEM 212	EMT-Paramedic Cardiovascular Emergencies	3
OEEM 213	EMT-Paramedic: Medical Emergencies I	3
OEEM 214	EMT-Paramedic: Medical Environmental Emergencies II	3
OEEM 216	EMT-Paramedic: Reproductive and Childhood Emergencies	3
OEEM 230	EMT-Paramedic Clinical Experience I	3
OEEM 231	EMT-Paramedic Clinical Experience II	3
OEEM 240	EMT-Paramedic Field Experience I	3
OEEM 241	EMT-Paramedic Field Experience II	3
OEEM 242	EMT-Paramedic Field Internship	3
OEEM 243	EMT-Paramedic Preparation for Practice	2
Total Credits		69

- Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.
- <sup>2</sup> Courses are required for admission to Paramedic program.

# Certificate of Achievement: EMT - Basic

## (10 credits)

This program makes possible rapid completion and quick entry into the workforce. Those who complete the program will be qualified to work in various settings within the emergency medical services field, including hospitals, ambulance services, and fire departments. The credits earned also may be applied toward completion of the EMT–Intermediate program and the associate degree in emergency medical services.

### Prerequisites for Entry into EMT-Basic Program

See overview page, "Program Prerequisites and Entrance Requirements (p. 136)."

### **Technical Requirements**

OEEM 101	CPR for the Health Care Professional	1
OEEM 120	Emergency Medical Technician Basic	6
OEEM 120 L	Emergency Medical Technician Basic Lab	2

OEEM 121	Emergency Medical Technician Basic Field/Clinical	1
Total Credits		10

# **Certificate of Achievement: EMT - Intermediate**

## (9 credits)

This program, which prepares students for EMT–Intermediate licensure, is also designed for those who desire to enter the workforce quickly. Graduates will be qualified to work in various settings within the emergency medical services field, including hospitals, ambulance services, and fire departments. Credits earned in this program also apply toward the associate degree in emergency medical services.

### Prerequisites for Entry into EMT-Intermediate Program

See overview page, "Program Prerequisites and Entrance Requirements (p. 136)."

### **Technical Requirements**

OEEM 150	Emergency Medical Technician Intermediate	5
OEEM 150 L	Emergency Medical Technician Intermediate Lab	2
OEEM 151	Emergency Medical Technician Intermediate Field/Clinical	2
Total Credits		9

# **Certificate of Achievement: First Responder Prehospital**

## (4 credits)

### **Technical Requirements**

Total Credite		1
OEEM 115	First Responder Prehospital Professional	3
OEEM 101	CPR for the Health Care Professional	1

# **Certificate of Completion: Paramedic**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

The EMT-Paramedic certificate program consists of a minimum of 47 credits while the associate of applied science degree program is a minimum of 69 credits in length. Students may take the general education courses for the associate of applied science degree at any time; however, courses listed in the "Technical Program Requirements" section (which are common to both the associate degree and certificate programs) must be taken in the prescribed sequence. In order to progress through the program, students must meet specific departmental grading criteria in every course taken. This portion of the curriculum must be completed within a three-year period. Thus, those opting to study on a part-time basis are advised to plan carefully in order to take courses in the correct sequence.

Applications for the Paramedic program may be requested from the EMS office (room DASR 220, telephone 575-527-7645).

To graduate with a certificate or an associate degree, students must earn a *C* or better in all required departmental and non-departmental courses.

### **Prerequisites for Entry into the Paramedic Program**

See overview page, "Program Prerequisites and Entrance Requirements (p. 136)."

OEEM 150	Emergency Medical Technician Intermediate <sup>1</sup>	5
OEEM 150 L	Emergency Medical Technician Intermediate Lab <sup>1</sup>	2
OEEM 151	Emergency Medical Technician Intermediate Field/Clinical <sup>1</sup>	2
OEEM 153	Introduction to Anatomy and Physiology for the EMS Provider	3
OEEM 201	Human Pathophysiology	3
OEEM 206	Introduction to Advanced Prehospital Care	3
OEEM 207	Introduction to Pharmacology	3

Students who are currently licensed in New Mexico at the EMT-Intermediate level may be allowed to take a proficiency exam in lieu of this course.

## (47 credits)

### **Technical Requirements**

OEEM 201	Human Pathophysiology <sup>2</sup>	3
OEEM 202	EMT-Paramedic Respiratory Emergencies	3
OEEM 203	EMT-Paramedic Trauma Emergencies	3
OEEM 206	Introduction to Advanced Prehospital Care <sup>2</sup>	3
OEEM 207	Introduction to Pharmacology <sup>2</sup>	3
OEEM 210	Cardiac Rhythm Interpretation	3
OEEM 212	EMT-Paramedic Cardiovascular Emergencies	3
OEEM 213	EMT-Paramedic: Medical Emergencies I	3
OEEM 214	EMTParamedic: Medical Environmental Emergencies II	3
OEEM 216	EMT-Paramedic: Reproductive and Childhood Emergencies	3
OEEM 230	EMT-Paramedic Clinical Experience I	3
OEEM 231	EMT-Paramedic Clinical Experience II	3
OEEM 240	EMT-Paramedic Field Experience I	3
OEEM 241	EMT-Paramedic Field Experience II	3
OEEM 242	EMT-Paramedic Field Internship	3
OEEM 243	EMT-Paramedic Preparation for Practice	2
Total Credits		47

Courses must be successfully completed before applying for entrance into the paramedic program.

# **Environmental and Energy Technologies**

**Associate of Applied Science Degree** 

- · Solar and Energy Conservation Option
- · Alternative Fuels Option

Certificates of Completion - Important information about the educational debt, earnings, and completion rates of students who attend these certificate programs can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

- · Basic Solar
- · Solar Energy Technology
- · Energy Conservation
- Energy Evaluation
- Alternative Fuels

### (575) 527-7590

The Environmental and Energy Technologies Program provides students with a strong foundation in Solar Technology, Energy Technology or Alternative Fuels along with relevant theory and concepts necessary to become successful in these fields. Within each technology emphasis, certificates are designed to be "stackable" and transferable into the associate of applied science degree allowing students to tailor their studies to their own interest and career goals.

This program is designed to provide students with a well-rounded curriculum that encompasses both lecture and hands-on laboratory exercises. Some of the certificates and the degree assist students in preparation for nationally recognized credentials within those disciplines.

Whether taking classes or working on a job site, students enrolled in this program will be required to perform the same job duties and be able to meet the same physical requirements that they will as graduates in the field. Depending where they find employment, graduates may be required to lift up to 50 pounds from the ground, work safely around hazardous chemicals using appropriate safety equipment, ascend and descend stairs and ladders to reach equipment, work safely around heavy equipment and electricity, work safely and effectively on uneven surfaces, and stand for long periods of time on concrete floors.

## **Additional Graduation Requirements**

To receive either an associate degree or a certificate of completion, students are required to obtain a Career Readiness Certificate in the areas of Applied Math, Reading for Information, and Locating Information at the appropriate level for their respective degree option. To facilitate success in obtaining their Career Readiness Certificate, students will be required to take DRFT 101 Introduction to Drafting and Design Technologies, for all degree options except Architecture, which requires OETS 102 Career Readiness Certification Preparation. A program advisor can provide additional information.

Environmental and Energy Technologies - Associate of Applied Science (p. 145)

Basic Solar - Certificate of Completion (p. 144)

Solar Energy Technology - Certificate of Completion (p. 146)

Energy Conservation - Certificate of Completion (p. 145)

Energy Evaluation - Certificate of Completion (p. 145)

Alternative Fuels - Certificate of Completion (p. 144)

# TCEN 101. Energy for the Next Generation 3 Credits (2+2P)

This course will survey a broad range of sources of energy, types of energy, energy storage, and the forms of energy. Students will be exposed to theory in the classroom, laboratory exercises, and field trips to provide them with a solid foundation for all subsequent energy related environmental courses. Crosslisted with: OETS 101.

**Prerequisite(s)/Corequisite(s):** OETS 118 or MATH 120. Restricted to: Community Colleges only.

### TCEN 105. Building Analyst I

### 3 Credits (2+2P)

This course is designed to provide the foundational knowledge and expertise necessary for the energy auditor and home performance contractor. Crosslisted with: OETS 105. Restricted to: Community Colleges only.

# TCEN 106. Building Analyst II 3 Credits (2+2P)

Designed to prepare the student for the BPI Building Analyst Certification. This course will walk the student through the hands-on process of conducting visual building inspections, diagnostic testing, identifying improvement opportunities, documenting a home's performance and preparing a scope of work. Crosslisted with: OETS106.

**Prerequisite(s)/Corequisite(s):** TCEN 105 or OETS 105. Restricted to: Community Colleges only.

## TCEN 110. Photovoltaic Application 4 Credits (3+2P)

Community Colleges only.

This course will provide an introduction to Photovoltaic (PV) installation. The course will provide instruction on site selection, prep, installation, and maintenance for photovoltaic applications. Students that complete the course and have the opportunity to take the entry level exam with the North American Board of Certified Energy Practitioners (NABCEP) en route to becoming Certified Installers. Crosslisted with: OETS110.

Prerequisite(s)/Corequisite(s): TCEN 101 or OETS 101. Restricted to:

## TCEN 111. Basic Electrical Principles I, DC Circuits 4 Credits (3+2P)

Course begins with the basics of electricity and DC circuits. Includes categorization of material properties within conductors, semiconductors, and insulators. Gradual progression tackles more complex topics like DC circuit analysis of series and parallel circuits, including Kirchhoff's laws, Thevenin's & Norton's theorems, and superposition. Finally DC combination circuits, magnetism and electromagnetism, generators and motors are covered. Emphasis on safety throughout. May be repeated up to 4 credits.

**Prerequisite(s)/Corequisite(s):** OETS 104 or MATH 120. Restricted to Community Colleges campuses only.

## TCEN 112. PV Power Generation Design Fundamentals 3 Credits (2+2P)

A study of photo voltaic design basics, photo voltaic (PV) Cells, modules, and system components; electrical circuits; grid-tied/grid-interactive PV system design and sizing for use on homes; solar electric products and applications; and understanding energy conversion from sunlight to electricity, and working with solar conversion equipment. Pre/ May be repeated up to 3 credits.

**Prerequisite(s)/Corequisite(s):** TCEN 111 and (OETS 104 or MATH 120). Restricted to Community Colleges campuses only.

## TCEN 113. OSHA 10 Hour Construction Hazard Identifications 1 Credit

Intended for entry-level participants to provide instruction on a variety of construction safety and health standards. Topics include Introduction to OSHA, Electrical, Ladder, Excavation, Scaffold, and Forklift Hazards, Fall Protection, Materials Handling, Personnel Protective Equipment and Confined Space Entry Hazards. Meets OSHA 10-Hour Requirements.

## TCEN 115. Wind Power Generation Design Fundamentals 3 Credits (2+2P)

Course covers wind turbine module descriptions and functions and wind system installation, operation, and troubleshooting. Additional topics include wind energy harvesting and the conversion process from the generator system to electricity. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): TCEN 111 and (OETS 104 or MATH 120). Restricted to Community Colleges campuses only.

# TCEN 121. Basic Electrical Principles II, AC Circuits 4 Credits (3+2P)

Course begins with an overview of the primary components of AC circuits, such as resistors, inductors, rectifiers, transformers and capacitors, and then gradually introduces new, more complicated topics like applying AC principles in power generation and generators, motors, parallel and combination circuits, troubleshooting and evaluation of circuit conditions. May be repeated up to 4 credits.

**Prerequisite(s)/Corequisite(s):** TCEN 111 and (OETS 104 or MATH 120). Restricted to Community Colleges campuses only.

## TCEN 130. Introducation to Biomass/Biogas 3 Credits (2+2P)

Introduction to utilization of renewable biological wastes including crops for production of fuels. Anaerobic digester, gasification, pyrolysis, combustion and fermentation will be covered.

**Prerequisite(s)/Corequisite(s):** TCEN 101 or OETS 101. Restricted to: Community Colleges only.

## TCEN 140. Biofuel Science 3 Credits (2+2P)

Fundamentals of basic organic chemistry and biochemistry applied to biofuel synthesis. Students will also be introduced to concept of conservation of matter and chemical reactions. Restricted to: Community Colleges only.

### TCEN 156. Building Envelope

### 3 Credits (2+2P)

Designed to prepare the student for the BPI Building Envelope Certification. This course will provide the principles behind building performance testing and the purpose of completing a comprehensive energy audit. Through lecture and subsequent field training, the student will learn how to use building diagnostics to develop a prescriptive plan for enhancing comfort, health & safety, building durability, and energy savings. The student will learn how to outline the follow-up process required after completion of the retrofit. Crosslisted with: OETS156. Restricted to: Community Colleges only.

Prerequisite(s): TCEN 106 or OETS 106.

### TCEN 180. Bio-diesel and Bio-ethanol Production 4 Credits (2+4P)

Overview of the production of biofuels. Students will be introduced to current biofuel production processes, trans-esterification, hydrolysis and fermentation reactions, distillation, and laboratory synthesis of biofuels and engine performance tests. Restricted to: Community Colleges only. Prerequisite(s): TCEN 140.

### TCEN 205. NEC for Alternative Energy 4 Credits (2+4P)

This hands-on course will cover the National Electrical Code specifics concerning photovoltaic installation. Also code compliant wiring of basic electrical systems will be covered. Existing installations will be visited and studied. Restricted to: Community Colleges only.

Prerequisite(s): TCEN 101 and ELT 105.

### TCEN 210. Solar Thermal 4 Credits (2+4P)

The purpose of this course is for students to learn to install solar thermal collectors for several applications, including domestic hot water, pool heating, and space heating. Students will be able to identify types of systems and components, adapt a system design, conduct a site assessment, install solar collectors, install components, install control systems, perform a system checkout, and maintain and troubleshoot a solar thermal system. Restricted to: Community Colleges only. Prerequisite(s): TCEN 101 or OETS 101.

### **TCEN 215. Fluid Thermal Systems**

4 Credits (2+4P)

Fluid properties and measurement, piping and tubing standards, pumps and operation. Restricted to: Community Colleges only.

Prerequisite(s): PHYS 110G or PHYS 211G.

### TCEN 220. Cooperative Experience

1-3 Credits (1-3)

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. May be repeated up to 6 credits. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): MAT 235. Prerequisite(s): TCEN 180. Restricted to: TCEN majors. S/U Grading (S/U, Audit). Restricted to: Community Colleges only.

### TCEN 221. Roofing Materials and Methods

3 Credits (2+2P)

Covers application techniques and estimation of asphalt and wood roofing products and accesories including gutters and flashing. Presents roof penetration, roof loading issues, and energy system installation requirements for mounting photo voltaic or solar thermal systems. Prerequisite(s): TCEN 112.

### TCEN 222. Photo Voltaic Grid Tie Installation 4 Credits (3+2P)

This is a more advanced course culminating in a PV system-togrid connection. This course includes gathering site specific data, design, wire type and sizing specific to project, installation of all solar modules and balance of system (BOS)components, and grounding and bonding of system components, all in accordance with the latest NEC. Upon project design approval a system will be commissioned for the grid. Decommissioning will commence after measurements and troubleshooting as directed by the instructor. May be repeated up to 4

Prerequisite(s)/Corequisite(s): TCEN 121 and TCEN 223. Prerequisite(s): TCEN 111 and TCEN 112. Restricted to Community Colleges campuses

### TCEN 223. Photo Voltaic National Electrical Code Principles 2 Credits (2+1P)

Focuses on all sections of the National Electrical Code and local code requirements applicable to photo voltaic electrical installation. A partial list of areas covered is chapters one through four and section 690, "Solar Photovoltaic Systems" of the National Electrical Code. Pre/

Prerequisite(s): TCEN 112. Corequisite(s): TCEN 222.

### **TCEN 224. Field Experience**

1-3 Credits (1-3)

Student will collaborate with instructor in proposing, defining, implementing, and analyzing outcomes of a project in the Environmental and Energy fields of study. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: TCEN majors. Restricted to: Community Colleges only.

### TCEN 240. Renewables and Sustainability 3 Credits

Various renewable energy technologies and sustainable design practices will be introduced. Restricted to: Community Colleges only.

Prerequisite(s): TCEN 101 or OETS 101.

### TCEN 241. Solar Thermal SHW Principles/Installation and Maintenance 3 Credits (2+2P)

Course presents the theory, installation, operation, and maintenance of solar hot water (SHW) systems. Topics include the types of systems to choose, the costs associated with SHW installation and operation, system sizing requirements, batteries and battery chemistry. May be repeated up to 3 credits. Restricted to Community Colleges campuses

Prerequisite(s): OETS 104 or MATH 120.

## TCEN 246. Building Weatherization & Auditor Fundamentals

Course provides information on how to locate air leaks and identify heat losses or gains through specific testing. Students will learn how to inspect and evaluate building envelopes, mechanical systems, and ventilation systems to determine the safety and energy consumption for each system. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): TCEN 113 and OETS 104.

Corequisite(s): TCEN 221.

## TCEN 250. Photo Voltaic System Integrator Fundamentals 3 Credits

Teaches the student project management fundamentals for working with homeowners, businesses, government, contractors, and manufacturers to design, build, and install complete alternative energy systems. Covers photovoltaic, small wind, and micro-hydro system designing, permitting, budgeting, and cost estimating requirments. Pre/

Prerequisite(s): E T 125. Corequisite(s): TCEN 222.

## TCEN 251. Advanced Photo Voltaic On/Off Grid Installation 3 Credits (2+2P)

Photo Voltaic advanced topics to include panel racking and installation, battery storage, charge controllers, mechanical integration of arrays on buildings, and key elements involved in choosing a mounting system. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): TCEN 222. Restricted to Community Colleges campuses only.

## TCEN 252. NABCEP Entry-Level Exam Review 1 Credit

Course presents knowledge, key terms, and concepts of photovoltaic systems and solar hot water systems as related to the NABCEP Entry-level exam. This exam is for those wanting to enter the workforce in either solar thermal or solar PV. Scheduling and taking the exam is the responsibility of the student. May be repeated up to 1 credits. Consent of Instructor required.

**Prerequisite(s)/Corequisite(s):** TCEN 253. Prerequisite(s): TCEN 222. Restricted to Community Colleges campuses only.

## TCEN 253. Renewable Energy System Troubleshooting and Maintenance 3 Credits (2+2P)

Covers wind, solar and solar thermal system troubleshooting and maintenance topics to include equipment, electrical, and installation problem areas. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): TCEN 251. Prerequisite(s): TCEN 222. Restricted to Community Colleges campuses only.

## TCEN 254. Renewable Energy Internship 2 Credits

Student will receive industry-related renewable energy experiences at an approved industry location. Typical areas of hands-on practices will be installing solar PV, solar hot-water systems, or wind energy systems. May be repeated up to 6 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

Prerequisite(s): TCEN 112 and 113 and 222.

Name: Chipper Moore, Department Chair

Office Location: DADM 200D Phone: (575) 527-7590

Website: https://dacc.nmsu.edu/tcen/

## **Alternative Fuels - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (29 credits)

**Core Requirements** 

Total Credits		29
TCEN 180	Bio-diesel and Bio-ethanol Production	4
TCEN 140	Biofuel Science	3
TCEN 130	Introducation to Biomass/Biogas	3
MAT 235	Programmable Logic Controllers Pneumatics	2
MAT 108	Metrology, Safety and Quality Control for Manufacturing	3
or OETS 103	Technical Career Skills	
ENGL 111G	Rhetoric and Composition <sup>5</sup>	4
Related and Techr	nical Requirements	
TCEN 101	Energy for the Next Generation	3
OETS 102	Career Readiness Certification Preparation	1
or OETS 118	Mathematics for Technicians	
MATH 120	Intermediate Algebra <sup>5</sup>	3
OECS 215	Spreadsheet Applications	
OECS 105	Introduction to Information Technology	
C S 110	Computer Literacy <sup>5</sup>	
Select 3 credits from	om the following.	3

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## **Basic Solar - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (18 credits)

## Core Requirements

•		
Select 3 credits fro	om the following:	3
C S 110	Computer Literacy <sup>1</sup>	
OECS 105	Introduction to Information Technology	
OECS 215	Spreadsheet Applications	
MATH 120	Intermediate Algebra <sup>1</sup>	3
or OETS 118	Mathematics for Technicians	
OETS 102	Career Readiness Certification	1
	Preparation	
TCEN 101	Energy for the Next Generation	3
Related and Techn	ical Requirements	
BCT 101	Introduction to Construction I	2
BCT 102	Introduction to Construction II	2
TCEN 110	Photovoltaic Application	4
Total Credits		18

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## **Energy Conservation - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (20 credits)

## **Core Requirements**

Select 3 credits from the following:		3
C S 110	Computer Literacy <sup>3</sup>	
OECS 105	Introduction to Information Technology	
OECS 215	Spreadsheet Applications	
MATH 120	Intermediate Algebra <sup>3</sup>	3
or OETS 118	Mathematics for Technicians	
OETS 102	Career Readiness Certification Preparation	1
TCEN 101	Energy for the Next Generation	3
Related and Technical Requirements		
BCT 101	Introduction to Construction I	2
BCT 102	Introduction to Construction II	2
TCEN 105	Building Analyst I	3
TCEN 106	Building Analyst II	3
Total Credits		20

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## **Energy Evaluation - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (30 credits)

## **Core Requirements**

Select 3 credits from the following:		3	
	C S 110	Computer Literacy <sup>4</sup>	
	OECS 105	Introduction to Information Technology	
	OECS 215	Spreadsheet Applications	
I	MATH 120	Intermediate Algebra <sup>4</sup>	3
	or OETS 118	Mathematics for Technicians	
	OETS 102	Career Readiness Certification Preparation	1
•	TCEN 101	Energy for the Next Generation	3
ı	Related and Technic	cal Requirements	
I	ENGL 111G	Rhetoric and Composition <sup>4</sup>	4
	or OETS 103	Technical Career Skills	
Ī	BCT 101	Introduction to Construction I	2
I	BCT 102	Introduction to Construction II	2
ı	DRFT 130	General Building Codes	3
•	TCEN 105	Building Analyst I	3

<b>Total Credits</b>		30
TCEN 156	Building Envelope	3
TCEN 106	Building Analyst II	3

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## Environmental and Energy Technologies - Associate of Applied Science

## (67 credits)

NOTE: Students must achieve at least a cumulative grade-point average of 2.0 with a final grade of *C* or better in ENGL 111G Rhetoric and Composition and all required TCEN courses.

### **Core Requirements**

oore riequiremento		
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
Select one from the	following:	3
ENGL 203G	Business and Professional Communication <sup>1</sup>	
ENGL 218G	Technical and Scientific Communication	
OECS 215	Spreadsheet Applications	
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
MATH 121G	College Algebra <sup>1</sup>	3
PHYS 110G	The Great Ideas of Physics <sup>1</sup>	4
or PHYS 211G	General Physics I	
Select one from the	following:	4
CHEM 110G	Principles and Applications of Chemistry	
CHEM 111G	General Chemistry I <sup>1</sup>	
AGRO 100G	Introductory Plant Science 1	
ES110G	Introductory Environmental Science <sup>1</sup>	
Related Requireme	nts	
Select 3 credits from	n the following:	3
C S 110	Computer Literacy <sup>1</sup>	
OECS 105	Introduction to Information Technology	
OECS 215	Spreadsheet Applications	
TCEN 101	Energy for the Next Generation	3
OETS 102	Career Readiness Certification Preparation	1
<b>Technical Requirem</b>	nents	
Solar and Energy Co	onservation or Alternative Fuels Option	39

Courses are identical to those offered at New Mexico State University
Las Cruces (main) Campus. The remaining courses are applicable
toward the bachelor of applied studies degree offered by the NMSU
College of Extended Learning.

## **Solar and Energy Conservation Option**

**Technical Requirements** 

**Total Credits** 

BCT 101	Introduction to Construction I	2
BCT 102	Introduction to Construction II	2
BCT 217	Building and the Environment	3
or ARCT 124	Global Issues and Sustainability	
DRFT 130	General Building Codes	3
Select 3-4 credits	from the following:	3-4
DRFT 151	Construction Principles and Print Reading	
MAT 102	Print Reading for Industry	
BCT 110	Blueprint Reading for Building Trades	
ELT 105	Basic Electricity and Electronics	3
TCEN 105	Building Analyst I	3
TCEN 106	Building Analyst II	3
TCEN 110	Photovoltaic Application	4
TCEN 156	Building Envelope	3
TCEN 205	NEC for Alternative Energy	4
Electives		
Select 6 credits fro Fuels Option:	om the following or from the Alternative	6
BMGT 140	Principles of Supervision I	
DRFT 109	Computer Drafting Fundamentals	
HVAC 103	Electrical and Mechanical Controls I	
TCEN 210	Solar Thermal	
Total Credits		39-40

## **Alternative Fuels Option**

## **Technical Requirements**

•		
MAT 108	Metrology, Safety and Quality Control for Manufacturing	3
MAT 235	Programmable Logic Controllers Pneumatics	2
TCEN 130	Introducation to Biomass/Biogas	3
TCEN 140	Biofuel Science	3
TCEN 180	Bio-diesel and Bio-ethanol Production	4
TCEN 215	Fluid Thermal Systems	4
TCEN 220	Cooperative Experience	1-3
or TCEN 224	Field Experience	
TCEN 240	Renewables and Sustainability	3
Electives		
	lits from the following or from the Solar and ion Option Technical Requirements:	14-15
BMGT 140	Principles of Supervision I	
DRFT 109	Computer Drafting Fundamentals	
HVAC 103	Electrical and Mechanical Controls I	
TCEN 210	Solar Thermal	
Total Credits		37-40

## **Solar Energy Technology - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (26 credits)

#### **Core Requirements**

Select 3 credits from the following:		
C S 110	Computer Literacy <sup>2</sup>	
OECS 105	Introduction to Information Technology	
OECS 215	Spreadsheet Applications	
MATH 120	Intermediate Algebra <sup>2</sup>	3
or OETS 118	Mathematics for Technicians	
OETS 102	Career Readiness Certification	1
	Preparation	
TCEN 101	Energy for the Next Generation	3
Related and Technical Requirements		
ENGL 111G	Rhetoric and Composition <sup>2</sup>	4
or OETS 103	Technical Career Skills	
BCT 101	Introduction to Construction I	2
BCT 102	Introduction to Construction II	2
TCEN 110	Photovoltaic Application	4
TCEN 205	NEC for Alternative Energy	4
Total Credits		26

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## **Fire Investigations**

#### **Associate of Applied Science Degree**

Fire investigations is a complex career field that involves multiple disciplines, including the criminal justice system. Fire investigators must be analytical, as well as knowledgeable in criminal investigations, the rule of law, and arrest, search and seizure. They usually rely on scientific principles and research in an analysis of fire remains to determine the cause and origin of the fire. Investigators work to determine whether the fire was deliberately set and what contributed to its subsequent growth. These findings can become an integral part of a criminal investigation that may require legal action to be taken against the responsible party.

Fire investigation findings can also be used in the evaluation of existing fire codes and development of legislation to prevent and reduce the loss of life and property due to fire. The fire investigations program provides the fire student with a basic foundation in fire science and law enforcement to actively seek a career in the field of fire investigations.

NOTE: All courses in this program may be applied toward a Bachelor of Applied Studies or Bachelor of Individualized Studies degree at NMSU. This program does not certify the student as a fire investigator, but promotes professional development to help reduce the loss of life and property from fire. Students seeking fire investigator certification should consult the various professional associations granting certifications. Students may receive IFSAC certification through the New Mexico Firefighters Training Academy.

## **Physical Abilities**

This program requires that the student be able to-

- · lift, carry and balance up to 125 pounds (250 pounds with assistance)
- assume a variety of postural positions and be capable of physical maneuvers ranging from crawling, kneeling, squatting, twisting, turning, and bending, to climbing stairs and ladders

 withstand varied environmental conditions such as extreme heat, cold, and moisture

## **Technology Competencies**

In an effort to assist students with adequate preparation for their coursework at DACC, technology competencies have been identified and established. These competencies are in effect for all courses taken in the Fire Investigations program. Students must possess the following minimum competencies. Additional competencies may be required for particular courses/programs:

- Access course and program material on CANVAS using applicable web browser
- · Correspond with DACC students and faculty using e-mail and the web
- · Read/print e-mail and attachments/files from students and faculty
- Complete, send, and receive assignments using e-mail and attachments/files
- Use the DACC Library e-books, e-journals, databases, or credible World Wide Web resources for research and completion of course assignments
- Prepare and conduct presentations in the classroom using presentation equipment as required.
- Use the appropriate software for a given course (DACC uses as standards Microsoft products, including MS Word, MS Project, MS Excel, and MS PowerPoint)
- Use an appropriate anti-virus application to ensure the files transmitted and received are virus free
- Use recommended plagiarism review software to ensure work is not plagiarized

## Background Checks for Related Fire and Law Enforcement Majors

Every student focusing on the related career fields of fire, law enforcement, Homeland Security, private security, corrections, parole or probation will at some point be subject to a background and criminal history check.

A background check requires that a student complete a multi-part background questionnaire identifying most of the following:

- · All names and aliases used; marriages and divorces
- Previous home and work addresses, names of employers, teachers, and schools, including dates of work and attendance and or transcripts
- · Medical history including any mental health or drug use
- Credit history
- Criminal history to include arrests, traffic and infraction tickets (Juvenile arrest histories may not be shielded from background checks even if the juvenile record has been sealed.)
- · Military service record
- Driving record, suspensions, tickets and possession of a current driver's license
- Citizenship and/or immigration status to include birth certificate and valid social security number
- And any other background informational requirements unique to each agency
- Current and past Internet social networking information, profiles, postings, e-mail addresses, and cyber-vetting

**NOTE:** The following categories will eliminate a person from access to internships, training academies, off-site law enforcement related workstudy opportunities, and most criminal justice related jobs:

- Arrest for domestic violence, DUI/DWI, drug use and possession, felony crimes, and misdemeanor crimes (agency dependent)
- Mental impairment based on mental illness and/or drug-alcohol abuse
- · False statements on an application or background check
- Social networking or Internet postings deemed inappropriate or damaging to a candidate's reputation or reputation of potential hiring entities; also, any postings, images, etc., demonstrating a lack of moral turpitude
- · Violations of laws involving moral turpitude
- · Bad credit
- Objectionable visible body art, body modifications or piercings (tattoos on the neck may also disqualify if visible while participating/working)
- Failure to pass any job-related testing process, including, but not limited to, the following: written examination, oral interview board, physical fitness exam, background check, polygraph examination, psychological examination, medical examination

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## FIRE 101. Firefighter I 8 Credits (6+6P)

This course will train the student to the Firefighter I level as outlined in NFPA 1001, Standard for Firefighter Professional Qualifications. Firefighter I certification issued through the New Mexico Firefighter's Training Academy upon successful completion (IFSAC accredited). May be repeated up to 8 credits. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): OEEM 103 and FIRE 115. Restricted to

Community Colleges campuses only.

## FIRE 102. Fire Fighter I and II 12 Credits

This course will train the student as outlined in NFPA 1001, Fire Fighter Professional Qualifications. Firefighter I & II Certification issued through the New Mexico Firefighter's Training Academy (NMFTA) upon successful completion [International Fire Service Accreditation Congress (IFSAC) & Pro Board accredited]. Consent of Instructor required.

**Prerequisite(s)/Corequisite(s):** FIRE 115, FIRE 252, OEEM 103. Restricted to Dona Ana campus only.

## FIRE 104. Firefighter II 8 Credits (6+6P)

This course will train the student to the Firefighter II level as outlined in NFPA 1001, Standard for Firefighter Professional Qualifications. Firefighter II certification issued through the New Mexico Firefighter's Training Academy upon successful completion (IFSAC accredited). May be repeated up to 8 credits. Consent of Instructor required.

**Prerequisite(s)/Corequisite(s):** FIRE 252. Prerequisite(s): FIRE 101. Restricted to Community Colleges campuses only.

## FIRE 112. Principles of Emergency Services 3 Credits

This course provides an overview to fire protection and emergency services including career opportunities in fire protection and related fields. The organization and function of public and private fire protection services is studied including how fire departments fit as part of local government. An overview of laws and regulations affecting the fire service is explored along with specific fire protection functions and responsibilities including basic fire chemistry and physics, introduction to fire strategy and tactics and life safety initiatives. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

## FIRE 114. Fire Behavior and Combustion 3 Credits

This course explores the theories and fundamentals of how and why fires start, spread, and are controlled. Restricted to: Community colleges only.

## FIRE 115. Hazardous Materials Awareness and Operations 3 Credits

This course will train the student to the Hazardous Materials Awareness and Operations level as outlined in NFPA 472, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents and OSHA 29 CFR 1910.120. Hazardous Materials Awareness and Operations certification issued through the New Mexico Firefighter's Training Academy upon successful completion (IFSAC accredited). May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

## FIRE 120. Fire Protection Hydraulics and Water Supply 3 Credits

This course will train students on requirements for becoming a safe and effective fire apparatus driver/operator. The focus will be on pump operation, construction, testing, and mathematical calculation required for effective pump operation and fire control. Responsibilities of the driver/operator will be taught and assessed consistent with applicable NFPA standards and the New Mexico Firefighters' Training Academy (NMFTA) guidelines. Students who meet all course requirements will be eligible for International Fire Service Accreditation Congress (IFSAC) certification through the NMFTA. May be repeated up to 3 credits. Prerequisite(s)/Corequisite(s): FIRE 128. Restricted to Community Colleges campuses only.

## FIRE 126. Fire Prevention

## 3 Credits

This course will educate students about the principles and techniques of fire prevention and life-safety inspection and code compliance in accordance to NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner, Level I. Students who meet all course requirements will be eligible for International Fire Service Accreditation Congress (IFSAC) certification through the New Mexico Firefighters' Training Academy (NMFTA). Restricted to Community Colleges campuses only.

## FIRE 128. Apparatus and Equipment

2 Credits

This course is a pre/co-requisite to FIRE 120. The course will train students on attitude and skill requirements for becoming a safe and effective fire apparatus driver/operator. The focus will be on apparatus inspection, operation, maintenance, and specification. Responsibilities of the driver/operator will be taught and assessed consistent with applicable NFPA standards and the New Mexico Firefighters' Training Academy (NMFTA) guidelines. Students pursuing certification must posses a current and valid New Mexico driver's license. Students who meet all course requirements will be eligible for International Fire Service Accreditation Congress (IFSAC) certification through the NMFTA. Restricted to Community Colleges campuses only.

## FIRE 130. Principles of Fire and Emergency Services Safety and Survival 3 Credits

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services. Consent of instructor required. Restricted to: Community colleges only.

## FIRE 200. Special Topics

1-12 Credits (1-12)

Specific subjects to be announced in the Schedule of Classes. Course may be repeated for credit as topics change. May be repeated up to 12 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

## FIRE 201. Independent Study

1-3 Credits

Research on an approved topic to meet graduation requirements. Meets or exceeds NFPA standards. May be repeated for total of 9 credits. **Prerequisite:** consent of instructor.

## FIRE 202. Wildland Fire Control

#### 1-3 Credits

Focuses on factors affecting wildland fire control and prevention, fire behavior, control techniques, command structure and other operations including Standards for Survival I-100, S-130 and S-190 Meets or exceeds NWCG Training Curriculum and NFPA 1051 standards. Restricted to: Community Colleges Only.

## FIRE 203. Fire and Emergency Services Administration 3 Credits

This course will provide students entry-level training in company operations and administration at the first-line supervisory level. The student will learn how to effectively manage human resources and community/public relations. Students will learn about fire department organization and administration; including budgets, reports, and planning. Students will learn the process involved in fire inspection, investigation, public education, emergency service delivery, and safety, per NFPA Standard 1021, Fire Officer Professional Qualifications. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

## FIRE 210. Building Construction for Fire Protection 3 Credits

This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. Restricted to: Community colleges only.

## FIRE 220. Cooperative Experience I

#### 1-3 Credits

Supervised cooperative work program. Student is employed in an approved occupation and rated by the employer and instructor. May be repeated for a maximum of 6 credits. Graded S/U.

Prerequisite: consent of instructor.

#### FIRE 221. Cooperative Experience II

#### 3 Credits

Apply advanced firefighting knowledge and skills while working with fire protection agencies. Meets or exceeds NFPA standards. Consent of instructor required. Graded: S/U. Restricted to: Community Colleges only. **Prerequisite(s):** FIRE 220.

#### FIRE 223. Fire Investigations I

#### 3 Credits

This course meets the requirements set forth in NFPA 1033 Professional Qualifications for Fire Investigator. This course will give a comprehensive understanding of the principles of fire investigation, scene examination, documentation, evidence collection/preservation, interview techniques, and post-incident investigations. Student who meet all course requirements are eligible for International Fire Service Accreditation Congress (IFSAC) certification through New Mexico Firefighters' Training Academy (NMFTA). Restricted to Community Colleges campuses only.

## FIRE 224. Strategy and Tactics

#### 3 Credits

Provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment and extinguishing agents on the fire ground. Covers the development of systematic action plans for emergency situations. Includes recognizing and prioritizing emergency scene needs and developing related strategies, tactics and contingencies. Educates students on how resources should be deployed to implement those plans. Restricted to Community Colleges campuses only.

## FIRE 225. Fire Protection Systems

### 3 Credits

This course provides information relating to the features and 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. Restricted to: Community colleges only.

## FIRE 226. Fire Investigations II

#### 3 Credits

This course is intended to provide the student with advanced technical knowledge on the rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation and court-room testimony. Restricted to: Community colleges only.

### FIRE 230. Fire Service Instructor

## 3 Credits

Provides the instructor candidate with methods and techniques of instruction including oral communications, preparing lesson plans, writing performance objectives, use of audio and other training aids, and the selection, evaluation and preparation of performance tests. Meets and exceeds NFPA 1041 Level I standards. Restricted to: Community Colleges only.

## FIRE 232. Firefighter Internship

#### 3 Credits

Application of knowledge, skills and abilities in a fire service department, as a firefighter intern and integrated member of a fire affiliated agency. Restricted to majors.

**Prerequisites:** FIRE 101, FIRE 102, FIRE 115, FIRE 202 and EMT-B and consent of instructor.

## FIRE 233. Practical Approach to Terrorism

#### 3 Credits

Gives responder an overall safety approach in recognizing and responding to incidents involving terrorism. Presents an overview in types of harm, explosive weapons, chemical weapons, biological weapons and radiological weapons. Restricted to: Community Colleges only. Crosslisted with: LAWE 233

#### FIRE 252. Vehicle Extrication

#### 2 Credits (1+2P)

This course will train the student to the Vehicle & Machinery Extrication level I as outlined in NFPA 1006, Standard for Technical Rescuer Professional Qualifications. Vehicle & Machinery Extrication certification issued through the New Mexico Firefighter's Training Academy upon successful completion (IFSAC accredited). May be repeated up to 2 credits. Restricted to Community Colleges campuses only.

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## Fire Investigations - Associate of Applied Science

## **Leveling Courses (21 credits)**

Students without a degree in Fire Science Technology will also need to complete the courses in this section. They may be taken while enrolled in the Fire Investigations program.

## **Leveling Courses**

FIRE 114	Fire Behavior and Combustion	3
FIRE 126	Fire Prevention	3
FIRE 210	<b>Building Construction for Fire Protection</b>	3
FIRE 223	Fire Investigations I	3
FIRE 225	Fire Protection Systems	3
FIRE 233	Practical Approach to Terrorism	3
OEEM 115	First Responder Prehospital Professional	3
Total Credits		21

## **Associate Degree (67 credits)**

## **Core Requirements**

Core nequirements		
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 203G	Business and Professional Communication <sup>1</sup>	3
or ENGL 218G	Technical and Scientific Communication	
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
CHEM 110G	Principles and Applications of Chemistry	4
PSY 201G	Introduction to Psychology <sup>1</sup>	3
SOC 101G	Introductory Sociology 1	3
Select any course lis Education Common	sted in Area II of the New Mexico General Core.	3

#### **Related Requirements**

C S 110	Computer Literacy <sup>1</sup>	3
Technical Requi	rements <sup>2</sup>	
C J 101G	Introduction to Criminal Justice <sup>1</sup>	3
C J 205	Criminal Law <sup>1</sup>	3
C J 210	The American Law Enforcement System	3
C J 221	Fundamentals of Criminal Investigation <sup>1</sup>	3
C J 250	Courts and the Criminal Justice System <sup>1</sup>	3
LAWE 201	Introduction to Juvenile Delinquency	3
LAWE 202	Police Patrol Procedures	3
LAWE 205	Practical Field Investigations	4
LAWE 207	Legal Aspects of Law Enforcement	3
FIRE 226	Fire Investigations II	3
Electives		
	n in consultation with advisor. (Leveling seed to fulfill this requirement.)	10
Total Credits		67

- Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.
- Some of the following courses may have prerequisites found in the "Leveling Courses" section.

## **Fire Science Technology**

**Associate of Applied Science Degree** 

Certificate of Completion: Basic Firefighter - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (575) 528-7321

Every year, fire and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters help protect the public against these dangers. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries, or perform other vital functions.

Employment of firefighters is expected to grow about as fast as the average for all occupations. According to the United States Fire Administration, nearly 70 percent of fire companies are staffed by volunteer firefighters. Most job growth will occur as volunteer fire-fighting positions are converted to paid positions. In addition to job growth, openings are expected to result from the need to replace firefighters who retire, stop working for other reasons, or transfer to other emergency service entities.

Doña Ana Community College provides training for firefighting personnel through its Fire Science Technology program, which is accredited by the International Fire Service Accreditation Congress (IFSAC). Students will receive training in the basic concepts of firefighting and will participate in live evolution that will give them real experience in the firefighting career field. This program provides classroom instruction leading to an associate of applied science degree in fire science technology or a

certificate of completion in firefighting. It is suited to those who are new to the field, as well as incumbent firefighters.

- Career and volunteer firefighters and NMSU student firefighters will improve their job performance and prepare for higher level positions in the fire protection fields.
- Students who wish to enter the field of fire protection will benefit from the basic foundations provided in the technical courses as well as general education courses.

**NOTE**: An articulation agreement with the N.M. Firefighters Training Academy makes it possible to receive college credit for experience and IFSAC certification. All courses in this program may be applied toward a Bachelor of Applied Studies or Bachelor of Individualized Studies degree at NMSU.

**NOTE:** Students wishing to enter the fire service will benefit from the educational background provided and may receive certifications in various fire-related areas through the New Mexico Firefighters Training Academy in Socorro, N.M., and the IFSAC.

## **Program Accreditation**

The Fire Science Program is accredited by the International Fire Service Accreditation Congress (https://ifsac.org/).

## **Medical Clearances and Background Checks**

Several courses in the program may require the student to submit a medical clearance physical, mask fit test, and a background check. See a program advisor for details.

**NOTE:** A criminal history may prohibit students from being hired or certified by agencies. Students are encouraged to check with the prospective agency and identify that agency's specific requirements prior to enrolling in this program.

## **Physical Abilities**

This program requires that the student be able to:

- lift, carry and balance up to 125 pounds (250 pounds with assistance)
- assume a variety of postural positions and be capable of physical maneuvers ranging from crawling, kneeling, squatting, twisting, turning, and bending, to climbing stairs and ladders
- withstand varied environmental conditions such as extreme heat, cold, and moisture

## **Technology Competencies**

In an effort to assist students with adequate preparation for their coursework at DACC, technology competencies have been identified and established. These competencies are in effect for all courses taken in the Fire Science Technology program. Students must possess the following minimum competencies. Additional competencies may be required for particular courses/programs:

- Access course and program material on the Web using CANVAS and an applicable web browser
- · Correspond with DACC students and faculty using e-mail and the Web
- · Read/print e-mail and attachments/files from students and faculty
- Complete, send, and receive assignments using e-mail and attachments/files
- Use the DACC Library e-books, e-journals, databases, or credible World Wide Web resources for research and completion of course assignments

- Prepare and conduct presentations in the classroom using presentation equipment as required.
- Use the appropriate software for a given course (DACC uses as standards Microsoft products, including MS Word, MS Project, MS Excel, and MS PowerPoint)
- Use an appropriate anti-virus application to ensure the files transmitted and received are virus free
- Use recommended plagiarism review software to ensure work is not plagiarized

Fire Science Technology - Associate of Applied Science (p. 153)

Basic Firefighter - Certificate of Completion (p. 153)

## FIRE 101. Firefighter I 8 Credits (6+6P)

This course will train the student to the Firefighter I level as outlined in NFPA 1001, Standard for Firefighter Professional Qualifications. Firefighter I certification issued through the New Mexico Firefighter's Training Academy upon successful completion (IFSAC accredited). May be repeated up to 8 credits. Consent of Instructor required.

**Prerequisite(s)/Corequisite(s):** OEEM 103 and FIRE 115. Restricted to Community Colleges campuses only.

## FIRE 102. Fire Fighter I and II 12 Credits

This course will train the student as outlined in NFPA 1001, Fire Fighter Professional Qualifications. Firefighter I & II Certification issued through the New Mexico Firefighter's Training Academy (NMFTA) upon successful completion [International Fire Service Accreditation Congress (IFSAC) & Pro Board accredited]. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): FIRE 115, FIRE 252, OEEM 103. Restricted to Dona Ana campus only.

## FIRE 104. Firefighter II 8 Credits (6+6P)

This course will train the student to the Firefighter II level as outlined in NFPA 1001, Standard for Firefighter Professional Qualifications. Firefighter II certification issued through the New Mexico Firefighter's Training Academy upon successful completion (IFSAC accredited). May be repeated up to 8 credits. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): FIRE 252. Prerequisite(s): FIRE 101. Restricted to Community Colleges campuses only.

## FIRE 112. Principles of Emergency Services 3 Credits

This course provides an overview to fire protection and emergency services including career opportunities in fire protection and related fields. The organization and function of public and private fire protection services is studied including how fire departments fit as part of local government. An overview of laws and regulations affecting the fire service is explored along with specific fire protection functions and responsibilities including basic fire chemistry and physics, introduction to fire strategy and tactics and life safety initiatives. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

## FIRE 114. Fire Behavior and Combustion 3 Credits

This course explores the theories and fundamentals of how and why fires start, spread, and are controlled. Restricted to: Community colleges only.

## FIRE 115. Hazardous Materials Awareness and Operations 3 Credits

This course will train the student to the Hazardous Materials Awareness and Operations level as outlined in NFPA 472, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents and OSHA 29 CFR 1910.120. Hazardous Materials Awareness and Operations certification issued through the New Mexico Firefighter's Training Academy upon successful completion (IFSAC accredited). May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

## FIRE 120. Fire Protection Hydraulics and Water Supply 3 Credits

This course will train students on requirements for becoming a safe and effective fire apparatus driver/operator. The focus will be on pump operation, construction, testing, and mathematical calculation required for effective pump operation and fire control. Responsibilities of the driver/operator will be taught and assessed consistent with applicable NFPA standards and the New Mexico Firefighters' Training Academy (NMFTA) guidelines. Students who meet all course requirements will be eligible for International Fire Service Accreditation Congress (IFSAC) certification through the NMFTA. May be repeated up to 3 credits. Prerequisite(s)/Corequisite(s): FIRE 128. Restricted to Community Colleges campuses only.

## FIRE 126. Fire Prevention 3 Credits

This course will educate students about the principles and techniques of fire prevention and life-safety inspection and code compliance in accordance to NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner, Level I. Students who meet all course requirements will be eligible for International Fire Service Accreditation Congress (IFSAC) certification through the New Mexico Firefighters' Training Academy (NMFTA). Restricted to Community Colleges campuses only.

## FIRE 128. Apparatus and Equipment 2 Credits

This course is a pre/co-requisite to FIRE 120. The course will train students on attitude and skill requirements for becoming a safe and effective fire apparatus driver/operator. The focus will be on apparatus inspection, operation, maintenance, and specification. Responsibilities of the driver/operator will be taught and assessed consistent with applicable NFPA standards and the New Mexico Firefighters' Training Academy (NMFTA) guidelines. Students pursuing certification must posses a current and valid New Mexico driver's license. Students who meet all course requirements will be eligible for International Fire Service Accreditation Congress (IFSAC) certification through the NMFTA. Restricted to Community Colleges campuses only.

## FIRE 130. Principles of Fire and Emergency Services Safety and Survival 3 Credits

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services. Consent of instructor required. Restricted to: Community colleges only.

## FIRE 200. Special Topics 1-12 Credits (1-12)

Specific subjects to be announced in the Schedule of Classes. Course may be repeated for credit as topics change. May be repeated up to 12 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

#### FIRE 201. Independent Study

#### 1-3 Credits

Research on an approved topic to meet graduation requirements. Meets or exceeds NFPA standards. May be repeated for total of 9 credits. **Prerequisite:** consent of instructor.

#### FIRE 202. Wildland Fire Control

#### 1-3 Credits

Focuses on factors affecting wildland fire control and prevention, fire behavior, control techniques, command structure and other operations including Standards for Survival I-100, S-130 and S-190 Meets or exceeds NWCG Training Curriculum and NFPA 1051 standards. Restricted to: Community Colleges Only.

## FIRE 203. Fire and Emergency Services Administration 3 Credits

This course will provide students entry-level training in company operations and administration at the first-line supervisory level. The student will learn how to effectively manage human resources and community/public relations. Students will learn about fire department organization and administration; including budgets, reports, and planning. Students will learn the process involved in fire inspection, investigation, public education, emergency service delivery, and safety, per NFPA Standard 1021, Fire Officer Professional Qualifications. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

## FIRE 210. Building Construction for Fire Protection 3 Credits

This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. Restricted to: Community colleges only.

## FIRE 220. Cooperative Experience I

## 1-3 Credits

Supervised cooperative work program. Student is employed in an approved occupation and rated by the employer and instructor. May be repeated for a maximum of 6 credits. Graded S/U.

Prerequisite: consent of instructor.

#### FIRE 221. Cooperative Experience II

## 3 Credits

Apply advanced firefighting knowledge and skills while working with fire protection agencies. Meets or exceeds NFPA standards. Consent of instructor required. Graded: S/U. Restricted to: Community Colleges only. **Prerequisite(s)**: FIRE 220.

## FIRE 223. Fire Investigations I

#### 3 Credits

This course meets the requirements set forth in NFPA 1033 Professional Qualifications for Fire Investigator. This course will give a comprehensive understanding of the principles of fire investigation, scene examination, documentation, evidence collection/preservation, interview techniques, and post-incident investigations. Student who meet all course requirements are eligible for International Fire Service Accreditation Congress (IFSAC) certification through New Mexico Firefighters' Training Academy (NMFTA). Restricted to Community Colleges campuses only.

#### FIRE 224. Strategy and Tactics

#### 3 Credits

Provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment and extinguishing agents on the fire ground. Covers the development of systematic action plans for emergency situations. Includes recognizing and prioritizing emergency scene needs and developing related strategies, tactics and contingencies. Educates students on how resources should be deployed to implement those plans. Restricted to Community Colleges campuses only.

## FIRE 225. Fire Protection Systems

#### 3 Credits

This course provides information relating to the features and 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. Restricted to: Community colleges only.

### FIRE 226. Fire Investigations II

#### 3 Credits

This course is intended to provide the student with advanced technical knowledge on the rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation and court-room testimony. Restricted to: Community colleges only.

#### FIRE 230. Fire Service Instructor

#### 3 Credits

Provides the instructor candidate with methods and techniques of instruction including oral communications, preparing lesson plans, writing performance objectives, use of audio and other training aids, and the selection, evaluation and preparation of performance tests. Meets and exceeds NFPA 1041 Level I standards. Restricted to: Community Colleges only.

## FIRE 232. Firefighter Internship

#### 3 Credits

Application of knowledge, skills and abilities in a fire service department, as a firefighter intern and integrated member of a fire affiliated agency. Restricted to majors.

**Prerequisites:** FIRE 101, FIRE 102, FIRE 115, FIRE 202 and EMT-B and consent of instructor.

#### FIRE 233. Practical Approach to Terrorism

#### 3 Credits

Gives responder an overall safety approach in recognizing and responding to incidents involving terrorism. Presents an overview in types of harm, explosive weapons, chemical weapons, biological weapons and radiological weapons. Restricted to: Community Colleges only. Crosslisted with: LAWE 233

### FIRE 252. Vehicle Extrication

## 2 Credits (1+2P)

This course will train the student to the Vehicle & Machinery Extrication level I as outlined in NFPA 1006, Standard for Technical Rescuer Professional Qualifications. Vehicle & Machinery Extrication certification issued through the New Mexico Firefighter's Training Academy upon successful completion (IFSAC accredited). May be repeated up to 2 credits. Restricted to Community Colleges campuses only.

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Phone: (575) 528-7321

Email: allujan@dacc.nmsu.edu ()

Website: https://dacc.nmsu.edu/fire/

## **Basic Firefighter - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (25 credits)

### **Technical Requirements**

OEEM 120	Emergency Medical Technician Basic	6
OEEM 120 L	Emergency Medical Technician Basic Lab	2
OEEM 121	Emergency Medical Technician Basic Field/Clinical	1
FIRE 101	Firefighter I	8
FIRE 104	Firefighter II	8
Total Credits		25

# Fire Science Technology - Associate of Applied Science (66 credits)

#### Cara Daguiramanta

Core Requirements		
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 203G	Business and Professional Communication <sup>1</sup>	3
or ENGL 218G	Technical and Scientific Communication	
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
UNIV 150	The Freshman Year Experience <sup>1</sup>	3
CHEM 110G	Principles and Applications of Chemistry	4
GOVT 100G	American National Government <sup>1</sup>	3
or GOVT 110G	Introduction to Political Science	
Select one from the	following:	3
PSY 201G	Introduction to Psychology <sup>1</sup>	
SOC 101G	Introductory Sociology 1	
SOC 201G	Contemporary Social Problems <sup>1</sup>	
HIST 201G	Introduction to Early American History <sup>1</sup>	3
or HIST 202G	Introduction to Recent American History	
Select 3 credits in A Education Common	rea II of the New Mexico General Core.	3
<b>Technical Requirem</b>	ents	
FIRE 112	Principles of Emergency Services	3
FIRE 114	Fire Behavior and Combustion	3
FIRE 120	Fire Protection Hydraulics and Water Supply	3
FIRE 126	Fire Prevention	3
FIRE 130	Principles of Fire and Emergency Services Safety and Survival	3
FIRE 203	Fire and Emergency Services Administration	3

Building Construction for Eiro Protection	3
<u> </u>	
	3
Strategy and Tactics	3
Fire Protection Systems	3
Practical Approach to Terrorism	3
es	
n the following:	4
Emergency Medical Technician Basic	
Emergency Medical Technician Basic Lab	
Emergency Medical Technician Basic Field/Clinical	
Firefighter I	
Firefighter II	
Special Topics	
Independent Study	
Wildland Fire Control	
Cooperative Experience I	
Cooperative Experience II	
Fire Investigations II	
Fire Service Instructor	
Firefighter Internship	
Vehicle Extrication	
	66
	Practical Approach to Terrorism  es  In the following: Emergency Medical Technician Basic Emergency Medical Technician Basic Lab Emergency Medical Technician Basic Field/Clinical Firefighter I Firefighter II Special Topics Independent Study Wildland Fire Control Cooperative Experience I Fire Investigations II Fire Service Instructor Firefighter Internship

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## **General Engineering**

## **Associate of Science Degree**

The job market for qualified engineering professionals has entered a new age. Regardless of industry trends and forecasts, one thing remains certain—engineers are an essential component to developing new ideas, and furthering the many fields of engineering. From mechanical engineering to environmental engineering, to civil engineering, there is opportunity for graduates to put their professional practice where passion lies.

If a student has thought about the field of engineering or any of its many subfields as a career, an associate degree can be a good starting point to pursue higher education. Within an associate's degree program, students become familiar with the many subfields of engineering, allowing them to identify where their specific professional interests lie when they progress to a four-year institution.

The small classes at DACC result in a student/instructor ratio that allows personal interaction, which strengthens the educational process. This is particularly a great benefit in higher levels of math and science courses. Community colleges have a higher retention rate and success rate. In addition, the cost of attending a community college for the first two years greatly reduces the cost of an engineering degree.

The General Engineering degree is designed to provide students a set of courses that will articulate into the four-year engineering programs at New Mexico State University, the University of New Mexico, and New Mexico Tech as well as the Bachelor of Science in Engineering Technology at New Mexico State University. This program will make available to a far wider range of students the ability to pursue their

dreams of becoming engineers. Within the program, they will learn the business aspects of engineering, a foundation of what it takes to be successful in the field and the trends in a growing, energy-conscience market.

Once students have completed the associate's degree, they are well on their way to a bachelor's degree program in their selected field. The individual students must work closely with an Advisor to select the best options for successful transition to the four-year institution of their choice.

For high school students who are interested in a career in engineering, courses in mathematics and science are essential.

General Engineering - Associate of Science (p. 154)

## ENGR 100. Introduction to Engineering 3 Credits (2+3P)

An introduction to the various engineering disciplines, the engineering approach to problem solving, and the design process. Projects emphasize the importance of teamwork, written & oral communication skills, as well as ethical responsibilities.

Prerequisite(s)/Corequisite(s): MATH 121G.

## ENGR 100H. Introduction to Engineering 3 Credits (2+3P)

An introduction to the various engineering disciplines, the engineering approach to problem solving, and the design process. Projects emphasize the importance of teamwork, written & oral communication skills, as well as ethical responsibilities. Pre/
Corequisite(s): MATH 190G.

## ENGR 111. Mathematics for Engineering Applications 3 Credits

An introduction to engineering mathematics and basic programming skills needed to perform elementary data manipulation and analysis. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): MATH 190G. Prerequisite(s): MATH 121G.

## ENGR 198. Special Topics in Engineering 1-3 Credits

Directed individual study of topics in engineering. Written reports covering work required. May be repeated for a maximum of 6 credits. Restricted to engineering majors. Graded S/U.

Prerequisite: consent of academic dean.

Name: Luis Meza, Department Chair

Office Location: DAWD 116A

Phone: (575) 527-7599

Website: https://dacc.nmsu.edu/engr/

## **General Engineering - Associate of Science**

## (66-67 credits)

### **General Education Requirements**

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COLL 101	College/Life Success (and any additional course to meet or exceed the 2-credit requirement, if needed)	2-3
Area I Requirements	: Communications	
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 218G	Technical and Scientific Communication	3
COMM 265G	Principles of Human Communication <sup>1</sup>	3
or COMM 253G	Public Speaking	
•	s: Mathematics/Algebra	
MATH 191G	Calculus and Analytic Geometry I	4
MATH 192G	Calculus and Analytic Geometry II <sup>1</sup>	4
•	s: Laboratory Sciences	
Select 16 or more c	redits from the following:	16
CHEM 111G	General Chemistry I	
CHEM 112G	General Chemistry II	
GEOL 111G	Introductory Geology <sup>1</sup>	
PHYS 215G	Engineering Physics I 1	
PHYS 215GL	Engineering Physics I Laboratory <sup>1</sup>	
PHYS 216G	Engineering Physics II <sup>1</sup>	
PHYS 216GL	Engineering Physics II Laboratory <sup>1</sup>	
Other approved I	ab-science course(s)	
Area IV Requirement	ts: Social/Behavioral Sciences	
ECON 251G	Principles of Macroeconomics <sup>1</sup>	3
	m any of the following categories: omics, Political Science, Psychology,	6
Area V Requirements	s: Humanities and Fine Arts	
	m any of the following categories: Art, Music, Philosophy, Theater, Second	6
Engineering and Re		
ENGR 100	Introduction to Engineering 1	3
C E/E T/DRFT 109	Computer Drafting Fundamentals <sup>1</sup>	3
or DRFT 114	Introduction to Solid Modeling	
ENGR 111	Mathematics for Engineering Applications <sup>1</sup>	3
Select at least 6 cre	edits from the following:	6
C E 233	Mechanics-Statics <sup>1</sup>	
MATH 291G	Calculus and Analytic Geometry III <sup>1</sup>	
C E 151	Introduction to Civil Engineering <sup>1</sup>	
Total Credits		66-67

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## **Health Information Technology**

**Associate of Applied Science Degree** 

Certificate of Completion - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

Health Information Technicians are counted among the many highly qualified health professionals necessary to meet the growing needs of the healthcare industry. One of the things that sets this field apart is that there is little or no direct contact with patients.

The following are a sampling of the duties health information technicians typically perform:

- Analyzing and evaluating health records that comply with health information standards and regulations;
- Compiling various types of administrative and health statistics for research and public policy planning and assessment;
- Coding symptoms, diseases, operations, procedures, and other therapies for maximum reimbursement;
- Ensuring that health information is complete and available to legitimate users while protecting patient privacy and maintaining information security; and
- Maintaining and utilizing a variety of health record indexes and storage and retrieval systems.

DACC offers a rigorous course of study to prepare graduates for employment as health information technicians. It includes medical terminology, anatomy and physiology, health data requirements and standards, classification and coding systems, healthcare reimbursement methods, healthcare statistics, computer literacy, professional practice skills, and life skills such as critical analytical thinking, problem solving, and good study habits.

Upon successful completion of the program, graduates will have numerous options. Job prospects for HIT professionals are very good because their skills are necessary throughout the entire healthcare industry. Typical work settings are physician practices, hospitals, managed care organizations, long-term care facilities, behavioral health facilities, ambulatory care facilities, rehabilitation centers, home healthcare providers, pharmaceutical companies, insurance companies, consulting and law firms, skilled nursing facilities, and federal and state governmental agencies. Current salary ranges and the job outlook for this field can be found in the *Occupational Outlook Handbook* at the U.S. Department of Labor website: bls.gov (https://www.bls.gov)

Graduates of the Health Information Technology program are eligible to apply to take several different certification examinations, which include those offered by the following professional organizations (among others):

- American Academy of Professional Coders (AAPC) Certified Professional Coder (CPC), Certified Professional Coder–Hospital Based (CPC-H), and Certified Professional Coder–Payer (CCP-P)
- American Health Information Management Association (AHIMA) Certified Coding Associate (CCA), Certified Coding Specialist (CCS), and Certified Coding Specialist—Physician Based (CCS-P)

To graduate from the HIT program, students must complete an internship work-experience component. Because this work takes place in a health-care setting, the employer/site may require students to complete and pass a security background check. Past criminal violations could prevent

a student from completing the degree or from obtaining employment in the field.

Health Information Technology - Associate of Applied Science (p. 156)

Health Information Technology - Certificate of Completion (p. 157)

## HIT 110. Electronic Health Records 3 Credits

Current electronic health record principles, methods and procedures, and computerized medical record concepts and software applications will be introduced. Restricted to: Community Colleges only.

Prerequisite(s): C S 110 or OECS 105.

## HIT 120. Health Information Introduction to Pharmacology 3 Credits

Introduction to the principles of pharmacology, including drug terminology; drug origins, forms, and actions; routes of administration; as well as the use of generic name drugs, trade name drugs and categories of drugs to treat multiple and specific body systems.

## HIT 130. Health Information Technology Anatomy & Physiology 3 Credits

An introductory course in the basics of human structure and function. Body systems are examined as to how they relate to proper code selection and as part of the functioning of the body as a whole. Restricted to Community Colleges campuses only.

## HIT 140. Health Information Introduction to Pathophysiology 3 Credits

Introduction to the nature of disease and its effect on body systems. Disease processes affecting the human body via an integrated approach to specific disease entities will be presented including a review of normal functions of the appropriate body systems. Diseases will be studied in relation to their etiology, pathology, physical signs and symptoms, diagnostic procedures, complications, treatment modalities and prognosis.

## HIT 150. Introduction to Medical Terminology 3 Credits

The study and understanding of medical terminology as it relates to diseases, their causes and effects, and the terminology used in various medical specialties. Emphasis will be placed on learning the basic elements of medical words, appropriate spelling and use of medical terms, and use of medical abbreviations. Restricted to: Community Colleges only.

## HIT 158. Advanced Medical Terminology 3 Credits

Builds upon the concepts covered in HIT 150 or AHS 120 providing greater understanding of how to properly use and apply medical terminology used in the various health fields. Medical terminology associated with the body system's anatomy and physiology, pathology, diagnostic and therapeutic procedures, pharmacology, and abbreviations will be emphasized. Restricted to Community Colleges campuses only. **Prerequisite(s):** HIT 150 or AHS 120.

## HIT 221. Internship I

1-3 Credits (1-3)

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: HIT & BOT majors. S/U Grading (S/U, Audit). Restricted to Dona Ana campus only.

## HIT 228. Medical Insurance Billing

#### 3 Credits

Comprehensive overview of the insurance specialist's roll and responsibilities. Concepts and applications that will assist the student in understanding the steps necessary for successfully completing the insurance claim filing and reimbursement processes for various insurance carriers, both private and government, will be emphasized.

Restricted to Carlsbad campus only. **Prerequisite(s):** HIT/NURS 150; BOT 208.

## HIT 240. Health Information Quality Management 3 Credits

Introduction to basic concepts of quality improvement and performance improvement as they apply to health record systems and the health care industry. Quality assessment and improvement standards and requirements of licensing, accrediting fiscal and other regulatory agencies will be presented.

## HIT 248. Medical Coding I

#### 3 Credits (2+2P)

Comprehensive overview of the fundamentals, coding conventions, and principles of selecting the most appropriate ICD-10-CM/PCS diagnostic and procedure codes. The most recent version of ICD-10-CM/PCS and an in depth study of current Official Coding Guidelines for coding and reporting will be emphasized. Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 228.

## HIT 255. SPECIAL TOPICS

Specific topics to be announced in the Schedule of Classes. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

## HIT 258. Medical Coding II

#### 3 Credits (2+2P)

Continuation of Medical Coding I. Comprehensive overview of the coding and reporting guidelines, fundamentals, coding conventions, and principles of selecting the most appropriate CPT and HCPCS procedural codes for all medical specialties. The most recent version of CPT and a continued study of the ICD-10-CM/PCS coding conventions and principles will be emphasized. Designed as a medical coding capstone course. Restricted to Community Colleges campuses only.

Prerequisite(s): HIT 248.

## HIT 268. Health Information Systems

#### 3 Credits

Overview of health data management, work planning, and organization principles; an introduction to health care information systems; and review of the fundamentals of information systems for managerial, clinical support, and information systems.

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# Health Information Technology - Associate of Applied Science (61–62 credits)

## Core/General Education Requirements (16 credits)

Core/General Educ	ation Requirements (16 credits)	
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
BOT 209	Business and Technical Communications	3
or ENGL 203G	<b>Business and Professional Communication</b>	
or ENGL 218G	Technical and Scientific Communication	
BOT 106	Business Mathematics	3
or MATH 120	Intermediate Algebra	
MGT 201	Introduction to Management	3
or BMGT 140	Principles of Supervision I	
or BMGT 240	Human Relations	
STAT 251G	Statistics for Business and the Behavioral Sciences <sup>1</sup>	3
or PHLS 295	Essentials of Public Health	
Related/Profession	nal Requirements (18 credits)	
HIT 110	Electronic Health Records	3
or BOT 110	Records Management	
BOT 239	Personal Development	3
or BMGT 201	Work Readiness and Preparation	
HIT 221	Internship I <sup>2</sup>	3
or BOT 221	Internship I	
or BOT 222	Internship II	
HIT 240	Health Information Quality Management	3
HIT 268	Health Information Systems	3
AHS 202	Legal and Ethical Issues in Health Care	3
Technical/Major Re	equirements (27-28 credits)	
BOT 208	Medical Office Procedures	3
BOT 228	Medical Insurance Billing	3
HIT 120	Health Information Introduction to Pharmacology	3
HIT 130	Health Information Technology Anatomy & Physiology	3-4
or BIOL 154	Introductory Anatomy and Physiology	
HIT 140	Health Information Introduction to Pathophysiology	3
HIT 150	Introduction to Medical Terminology	3
or AHS 120	Medical Terminology	
HIT 158	Advanced Medical Terminology	3
HIT 248	Medical Coding I	3
HIT 258	Medical Coding II	3
Total Credits		61-62

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

HIT 221 Internship I/BOT 221 Internship I and BOT 222 Internship II are restricted to majors; a maximum of 6 credits of HIT 221 Internship I/BOT 221 Internship I and BOT 222 Internship II may be applied toward a degree.

## **Health Information Technology - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (31-32 credits)

NOTE: Students who lack prior health and/or general office experience may need to take course-related prerequisites.

#### Core Requirements (7 Credits)

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
BOT 106	Business Mathematics	3
or MATH 120	Intermediate Algebra	
Related Requireme	ents (9 credits)	
HIT 110	Electronic Health Records	3
or BOT 110	Records Management	
BOT 239	Personal Development	3
or BMGT 201	Work Readiness and Preparation	
AHS 202	Legal and Ethical Issues in Health Care	3
Technical Requirer	ments (15-16 credits)	
BOT 208	Medical Office Procedures	3
BOT 228	Medical Insurance Billing	3
HIT 130	Health Information Technology Anatomy & Physiology	3-4
or BIOL 154	Introductory Anatomy and Physiology	
HIT 150	Introduction to Medical Terminology	3
or AHS 120	Medical Terminology	
HIT 158	Advanced Medical Terminology	3
Total Credits		31-32

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## Heating, Ventilation, Air Conditioning and Refrigeration

**Associate of Applied Science Degree** 

**Certificates of Completion** - Important information about the educational debt, earnings, and completion rates of students who attend these certificate programs can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

- · HVAC/R
- Residential HVAC

The climate in New Mexico creates a demand for skilled technicians in both heating and cooling because people prefer to live and work in comfort. Every new home, hospital, university building, shopping mall, or office complex requires installation mechanics, service technicians, operating engineers, maintenance foremen, and trained crews to keep complex environmental systems operating efficiently.

The heating, air conditioning, and refrigeration industry is one of the country's most stable. The supply of qualified, trained people has not kept

pace with the demand, and new opportunities are constantly developing. The demand for trained HVACR graduates is also increasing due to Environmental Protection Agency requirements that refrigerants be handled by a certified technician.

Technicians knowledgeable in heating, air conditioning, and refrigeration are also needed in defense, space exploration, and manufacturing. Because climate control is important wherever microprocessors are used in manufacturing or scientific research, skilled technicians are in demand in these fields. Many experienced technicians own and manage their own businesses.

The Heating, Ventilation, Air Conditioning and Refrigeration program at DACC uses training facilities equipped with the most modern test equipment and tools available. As a student, you will learn to—

- service, repair, and maintain heating, air conditioning, and refrigeration systems;
- read and interpret technical drawings, schematics, and symbols to diagnose and troubleshoot problems in a system;
- evaluate, diagnose, and service various mechanical and electrical controls;
- apply the mathematics related to the heating, air conditioning, and refrigeration trade;
- handle customer relations, shop management procedures, and record keeping relative to the trade;
- · properly use special tools and testing equipment; and
- · become certified in Section 608, EPA certification.

A unique cooperative training program is offered during the final semester to provide students with field experiences. Working side by side with journeymen technicians, students are offered an opportunity to practice and refine their new skills.

After the first semester, full-time heating, air conditioning, and refrigeration students must purchase a personal set of technician's tools (approximate cost, which may vary, \$1200). The tool set includes the basic tools that most employers require on the job. Part-time students will purchase only those tools required by the specific course(s) in which they are enrolled.

Students will also provide their own medical/accident insurance. They need to be in good physical condition and possess the ability and desire to work with their minds and hands.

The curriculum is competency and performance based and uses multimedia classroom instruction and hands-on laboratory exercises. Classroom and laboratory hours are listed in the Schedule of Classes.

All heating, air conditioning, and refrigeration students are eligible to join SkillsUSA. Membership provides students an opportunity to develop their leadership skills and to become proficient in public speaking and parliamentary procedure. SkillsUSA also offers students a chance to demonstrate their occupational skills. Skill competitions are conducted each year in New Mexico for all postsecondary students.

Whether taking classes or working on a job site, students enrolled in this program will be required to perform the same job duties and be able to meet the same physical requirements that they will as a graduate in the field. Depending where they find employment, graduates may be required to

· work in inclement weather,

- · lift up to 50 pounds from the ground,
- · have good eye-hand coordination,
- work safely around electrical hazards using the appropriate safety equipment,
- · work safely using hand and power tools,
- · ascend and descend stairs and ladders, and
- · stand, squat, stoop, or kneel for long periods of time.

Licensure for journeyman gas fitters, journeyman refrigeration workers, and journeyman sheet metal workers require both a written and practical exam. Not all licensing agencies provide special testing accommodations.

## **Additional Graduation Requirements**

To receive either an associate degree or a certificate of completion, students are required to obtain a Career Readiness Certificate in the areas of Applied Math, Reading for Information, and Locating Information at the appropriate level for their respective degree option. To facilitate success in obtaining their Career Readiness Certificate students will be required to take 1 credit of OETS 102 Career Readiness Certification Preparation. A program advisor can provide additional information.

Heating, Ventilation, Air Conditioning and Refrigeration - Associate of Applied Science (p. 159)

HVAC/R - Certificate of Completion (p. 159)

Residential HVAC - Certificate of Completion (p. 160)

## HVAC 100. EPA Clean Air Act: Section 608 1 Credit

Refrigerant certification preparation to include basics of refrigerant bearing equipment, ozone depletion and the new legislation, technician categories covered and the certification examination.

## HVAC 101. Fundamentals of Refrigeration 4 Credits (3+2P)

Refrigeration cycle and the various mechanical components. Use of special tools, equipment, and safety precautions.

## HVAC 102. Fundamentals of Electricity 4 Credits (3+2P)

Introduction to electricity theory, OHM s Law, circuits, AC/DC, and practical applications.

## HVAC 103. Electrical and Mechanical Controls I 4 Credits (3+2P)

Applications of basic electrical and mechanical controls. Reading and drawing diagrams of simple refrigerating equipment. Safe use of testing equipment.

Prerequisites: HVAC 101 and HVAC 102, or consent of instructor.

## HVAC 110. Professional Development and Leadership 1 Credit

As members and/or officers of various student professional organizations, students gain experience in leadership, team building, and community service. Students competing in Skills USA are required to register for the course. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: HVAC majors. S/U Grading (S/U, Audit). Restricted to: Community Colleges only.

#### **HVAC 113. Job Shadowing**

#### 1 Credit

Course will expose students to actual HVAC/R field work and provide them knowledge of the expectations of field work as they shadow an HVAC/R technician. Consent of instructor required. Restricted to: Community colleges only.

## HVAC 205. Commercial Refrigeration Systems 4 Credits (3+2P)

Service and maintenance of commercial refrigeration equipment to include evacuation and charging procedures, electrical diagrams, and compressors and accessories.

Prerequisites: HVAC 103 or consent of instructor.

## HVAC 207. Residential Air Conditioning Systems 4 Credits (3+2P)

Applications and types of equipment used in comfort cooling. Preventive maintenance, service, and repairs common to evaporative coolers and refrigerated air conditioning systems. Air properties and psychometrics.

Prerequisite: HVAC 103 or consent of instructor.

## HVAC 209. Residential Heating Systems 4 Credits (3+2P)

Gas and electric systems used in comfort heating. Maintenance procedures, safety, troubleshooting, and servicing malfunctions in equipment.

Prerequisite: HVAC 103 or consent of instructor.

## HVAC 210. Commercial Air Conditioning and Heating Systems 4 Credits (3+3P)

Covers troubleshooting mechanical and electrical problems associated with HVAC equipment in commercial buildings. Includes gas, electric, and heat pump systems. Restricted to Community Colleges campuses only. **Prerequisite(s):** HVAC 103 or consent of instructor.

## **HVAC 211. Heat Pump Systems**

## 4 Credits (3+2P)

Reverse cycle refrigeration systems utilized in comfort heating and cooling. Troubleshooting mechanical electrical problems associated with heat pumps. HVAC 103 or consent of instructor.

### **HVAC 213. Practicum**

## 3 Credits

Working in the field with journeymen service technicians. Develop and apply job skills. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: HVAC majors. Restricted to Community Colleges campuses only

Prerequisite(s): HVAC 113 and Consent of instructor.

## HVAC 220. Introduction to Sheet Metal Fabrication 4 Credits (3+2P)

Introduction to sheet metal fabrication to include hands-on practical laboratory applications, cutting and forming procedures, identifying types and gauges. Design and layout techniques.

Prerequisite: OETS 118 or equivalent math or consent of instructor.

## HVAC 225. New Mexico Mechanical Codes: HVAC 1-4 Credits

Principles and regulations developed for HVAC, sheet metal, and plumbing occupations to include terminology, ventilation air supply, exhaust systems, duct systems, combustion air, chimneys and vents, boilers/water heaters, refrigeration, panel and hydronic panel heating, fuel gas piping, storage systems, solar systems, and workmanship standards. May be repeated for a maximum of 12 credits.

#### **HVAC 255. Special Topics**

#### 1-6 Credits

Topics to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

Prerequisite: consent of instructor.

#### **HVAC 290. Special Problems**

#### 1-4 Credits

Individual studies related to heating, air conditioning, and refrigeration. **Prerequisites:** HVAC 101, HVAC 102, and consent of instructor.

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Office Location: DATS 155A Phone: (575) 527-7596

Website: https://dacc.nmsu.edu/hvac/

# Heating, Ventilation, Air Conditioning and Refrigeration - Associate of Applied Science

## (66 credits)

NOTE: Students must receive a final grade of  ${\it C}$  or better in all required HVAC courses.

### **Core Requirements**

Core Requirements		
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
Select one from the	following:	3
BOT 209	Business and Technical Communications	
ENGL 203G	Business and Professional Communication <sup>1</sup>	
ENGL 218G	Technical and Scientific Communication	
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
PSY 201G	Introduction to Psychology <sup>1</sup>	3
or SOC 101G	Introductory Sociology	
Related Requirement	nts	
BMGT or any appro	ved ECON <sup>1</sup> elective	3
Select one from the	following:	3
C S 110	Computer Literacy <sup>1</sup>	
OECS 105	Introduction to Information Technology	
OECS 227	Computer Applications for Technicians	
OETS 102	Career Readiness Certification Preparation	1
OETS 118	Mathematics for Technicians	3
Electives		
Select 6 credits from	n the following:	6
DRFT 115	General Construction Safety	
HVAC 110	Professional Development and Leadership	
HVAC 220	Introduction to Sheet Metal Fabrication	
HVAC 225	New Mexico Mechanical Codes: HVAC	
TCEN 105	Building Analyst I	
TCEN 106	Building Analyst II	

WELD 102	Welding Fundamentals	
and/or other app	roved elective(s)	
Technical Requirem	ents	
HVAC 100	EPA Clean Air Act: Section 608 <sup>2</sup>	1
HVAC 101	Fundamentals of Refrigeration	4
HVAC 102	Fundamentals of Electricity	4
HVAC 103	Electrical and Mechanical Controls I	4
HVAC 113	Job Shadowing	1
HVAC 205	Commercial Refrigeration Systems	4
HVAC 207	Residential Air Conditioning Systems	4
HVAC 209	Residential Heating Systems	4
HVAC 210	Commercial Air Conditioning and Heating Systems	4
HVAC 211	Heat Pump Systems	4
HVAC 213	Practicum	3
Total Credits		66

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## **HVAC/R** - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (42 credits)

The following curriculum is designed for students who choose the certificate option in HVAC/R. The certificate program requires approximately a year and a half to complete.

**NOTE:** A final grade of *C* or better is required in all required HVAC courses.

## **Related Requirements**

Total Credits		42
HVAC 213	Practicum	3
HVAC 211	Heat Pump Systems	4
HVAC 210	Commercial Air Conditioning and Heating Systems	4
HVAC 209	Residential Heating Systems	4
HVAC 207	Residential Air Conditioning Systems	4
HVAC 205	Commercial Refrigeration Systems	4
HVAC 113	Job Shadowing	1
HVAC 103	Electrical and Mechanical Controls I	4
HVAC 102	Fundamentals of Electricity	4
HVAC 101	Fundamentals of Refrigeration	4
HVAC 100	EPA Clean Air Act: Section 608 <sup>1</sup>	1
<b>Technical Requirem</b>	nents	
OETS 103	Technical Career Skills	4
OETS 102	Career Readiness Certification Preparation	1

A fee of \$55 is required for study guide and testing; must pass Type 1 and Type 2 tests.

A fee of \$55 is required for study guide and testing; must pass Type 1 and Type 2 tests.

## Residential HVAC - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (30 credits)

The following curriculum, which requires approximately one year to complete, is designed to prepare a student to install, service, and maintain residential heating and air conditioning systems.

NOTE: A final grade of C or better is required in all HVAC courses.

## **Related Requirements**

•		
OETS 102	Career Readiness Certification Preparation	1
OETS 103	Technical Career Skills	4
<b>Technical Requirem</b>	ents	
HVAC 100	EPA Clean Air Act: Section 608 <sup>2</sup>	1
HVAC 101	Fundamentals of Refrigeration	4
HVAC 102	Fundamentals of Electricity	4
HVAC 113	Job Shadowing	1
HVAC 207	Residential Air Conditioning Systems	4
HVAC 209	Residential Heating Systems	4
HVAC 213	Practicum	3
HVAC 220	Introduction to Sheet Metal Fabrication	4
Total Credits		30

A fee of \$55 is required for study guide and testing; must pass Type 1 and Type 2 tests.

## **Hospitality and Tourism**

## **Associate of Applied Science Degree**

- Food and Beverage Emphasis
- · Lodging and Tourism Emphasis

Hospitality and tourism is one of the fastest growing industries in the U.S. and in New Mexico it is the largest employment sector. The industry is highly promoted in Las Cruces, as well as throughout the state.

One reason the hospitality industry has such broad appeal is because there are so many different types of positions available in such a large variety of settings. Graduates may work in—

- · front-office operations and reservations
- · sales and promotion
- · food and beverage operations
- · culinary arts, banquets, and catering
- · travel and tours
- finance and accounting

in such settings as-

- resorts
- cruise lines
- · hotels and motels
- · convention facilities
- · restaurants

The Hospitality and Tourism associate of applied science degree has two options:

- · Food and Beverage, and
- · Lodging and Tourism.

Training is offered in supervision, communication, marketing, finance, and operations, as well as in subject matter specific to the option chosen. Through classroom work, volunteering at industry-sponsored events, culinary laboratory experience, and on-site training, students acquire the skills needed to succeed in the hospitality-services industry.

This program is designed for people who are entering the hospitality and tourism field, as well as for those who are already employed in the industry and who want to upgrade their professional skills.

The majority of the credits earned in the DACC Hospitality and Tourism program may be applied toward a bachelor's degree in Hospitality, Restaurant and Tourism Management at NMSU.

Hospitality and Tourism - Associate of Applied Science (p. 162)

#### **HOST 155. Special Topics**

#### 1-3 Credits (1-3)

Specific subjects to be announced in the Schedule of Classes. Restricted to: Community Colleges only.

## HOST 201. Introduction to Hospitality Industry 3 Credits

Overview of hospitality industry; organization and operation of lodging, food and beverage, and travel and tourism segments; focus on career opportunities and future trends of hospitality industry. Restricted to: Community College campuses only.

## **HOST 202. Front Office Operations**

#### 3 Credits

Hotel/motel front office procedures detailing flow of business, beginning with reservations and extending to the night audit process. Restricted to: Community College campuses only.

## HOST 203. Hospitality Operations Cost Control

Management of Food & Beverage facilities using cost control techniques. Functional training in menu analysis and development with all phases of product flow through a Food & Beverage organization explored. Restricted to: Community Colleges only.

## **HOST 204. Promotion of Hospitality Services**

#### 3 Credits

Organization of hotel marketing functions; developing a marketing plan to sell the varied services of the hotel/motel property. Restricted to: Community College campuses only.

## HOST 205. Housekeeping, Maintenance, and Security 3 Credits

Function of housekeeping departments, including personnel, sanitation, maintenance, and materials. A survey of security procedures to include guest protection and internal security of hotel/motel assets. Restricted to: Community College campuses only.

## HOST 206. Travel and Tourism Operations 3 Credits

Transportation, wholesale and retail operations, attractions, the traveler, tourism development, and operational characteristics of tourism business. Restricted to: Community College campuses only.

## HOST 207. Customer Service for the Hospitality Industry 3 Credits

Concepts of service and the customer, integrating the need for service quality, and the continuing efforts to maximize returns for the operation. Classic service styles as well as more modern service techniques are covered. Students gain in-depth managerial knowledge, planning skills, and hands-on techniques for consistently delivering quality and service in a variety of operations. Restricted to: Community College campuses only.

## **HOST 208. Hospitality Supervision**

#### 3 Credits

Strategies for directing, leading, managing change and resolving conflict. Prepares students to meet expectations of management, guests, employees, and governmental agencies. Restricted to: Community College campuses only.

## HOST 209. Managerial Accounting for Hospitality 3 Credits

Prepares students to make effective business decisions based on financial report information; forecasting, budgeting, cost analysis. Restricted to: Community College campuses only.

Prerequisite(s): BOT 120 or ACCT 252.

## HOST 210. Catering and Banquet Operations 3 Credits

Teaches the basics of catering and banquet operations, including computer coordination, planning, set up, service, and completion. Restricted to Community Colleges campuses only.

## HOST 214. Purchasing and Kitchen Management

Technical purchasing concepts, product selection, and specifications. Safety and sanitation as they relate to food service establishments. Prepares student for work with HACCP programs. Restricted to Community Colleges campuses only.

## **HOST 216. Event, Conference and Convention Operations 3 Credits**

The ability to successfully plan, organize, arrange, and execute special events is critical to the success of many hospitality organizations. This course gives the student a grounding in the skills necessary to achieve success in this area. A variety of events are discussed and the similarities and differences with conferences and conventions are explored. Students are taught to organize and plan events of varying type and durations. Sales, logistics, and organizing skills are emphasized. Restricted to: Community College campuses only.

## **HOST 219. Safety, Security and Sanitation in Hospitality Operations 3 Credits**

It is the responsibility of the manager to provide appropriate security, sanitation, and safety precautions in hospitality operations. Preparation for internal and external disasters is an important task for the Hospitality Manager. This course uses the National Restaurant Association ServSafe¬ training material. Restricted to: Community College campuses only.

#### **HOST 220. Experiential Travel**

#### 1-3 Credits (1-3)

Course provides an opportunity for students to plan, prepare for and experience travel to destinations they might not otherwise have visited. Students experience local culture and peoples. May be repeated up to 9 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): HOST 201 or consent of instructor.

### HOST 221. Internship I

#### 1-3 Credits (1-3)

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEHS,HOST majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

#### **HOST 222. Cooperative Experience II**

#### 3 Credit

Continuation of HOST 221. Restricted to majors. Graded: S/U. Restricted to: Community College campuses only. Restricted to HOST majors. **Prerequisite(s):** HOST 221.

## **HOST 223. Travel Agency Principles**

#### 3 Credits

Travel agents are called upon to exhibit broad knowledge about many different tourism products. This course prepares students to undertake the challenging job of an agent in a travel agency. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

## HOST 224. Travel Agency Booking & Operations

## 3 Credits

Course trains students to use the common electronic booking software that is found in travel agencies. Familiarization with operational procedures of travel agencies. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): HOST 223.

## **HOST 230. Wedding Events Management**

### 3 Credits

This course will address various issues that could potentially arise in the preparation and management of a wedding or related event. All aspects of planning and attention to details that will ensure that students are prepared to provide services as a professional wedding planner. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

## HOST 239. Introduction to Hotel Management 3 Credits

This course covers basic management functions in hotels, resorts, Boutique Hotels, Bed & Breakfast establishments, and other lodging operations. All aspects of the operation are covered including guest management, operations, and sales and marketing. Restricted to: Branch campuses only.

#### **HOST 255. Special Topics**

## 3 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated up to 9 credits. Restricted to Community Colleges campuses only.

## **HOST 298. Independent Study**

1-3 Credits (1-3)

Individual studies directed by consenting faculty with prior approval of department chair. May be repeated for a maximum of 3 credits.

Restricted to: Community College campuses only.

Prerequisite(s): Minimum 3.0 GPA and sophomore standing.

Name: Kim Seifert, Department Chair

Office Location: DAEM 100G Phone: (575) 527-7518

Website: https://dacc.nmsu.edu/host/

# Hospitality and Tourism - Associate of Applied Science (61 credits)

#### Core/General Education Requirements

	-	
ENGL 111G	Rhetoric and Composition (grade of C or better required) <sup>1</sup>	4
ECON 201G	Introduction to Economics	3
Select one from the	following:	3
BMGT 240	Human Relations	
PSY 201G	Introduction to Psychology <sup>1</sup>	
SOC 101G	Introductory Sociology <sup>1</sup>	
Select one from the following:		3
BOT 106	Business Mathematics	
MATH 120	Intermediate Algebra <sup>1</sup>	
Select one from the	following:	3
BOT 209	Business and Technical Communications	
ENGL 203G	Business and Professional Communication <sup>1</sup>	
ENGL 218G	Technical and Scientific Communication	

Related/Profession	onal Requirements	
BMGT 201	Work Readiness and Preparation	3
BMGT 231	Legal Issues in Business	3
BOT 120	Accounting Procedures I	3
HOST 209	Managerial Accounting for Hospitality	3
OECS 215	Spreadsheet Applications	3
or BOT 215	Spreadsheet Applications	
Technical/Major Requirements		
HOST 201	Introduction to Hospitality Industry	3
HOST 203	<b>Hospitality Operations Cost Control</b>	3
HOST 208	Hospitality Supervision	3
HOST 219	Safety, Security and Sanitation in Hospitality Operations	3
HOST 221	Internship I (restricted to HOST majors)	3
Area of Emphasis		
Lodging and Tour	ism or Food and Beverage <sup>2</sup>	15
Total Credits		61

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

Select courses total 15 credits from one of the areas of emphasis. It is permissible to combine courses from more than one area with the permission of an advisor.

## **Lodging and Tourism Emphasis**

5 5	•	
HOST 202	Front Office Operations	3
HOST 204	Promotion of Hospitality Services	3
HOST 205	Housekeeping, Maintenance, and Security	3
HOST 206	Travel and Tourism Operations	3
HOST 216	Event, Conference and Convention Operations	3
HOST 220	Experiential Travel	3
HOST 223	Travel Agency Principles	3
HOST 224	Travel Agency Booking & Operations	3
HOST 230	Wedding Events Management	3
HOST 239	Introduction to Hotel Management	3

## **Food and Beverage Emphasis**

CHEF 125	Introductory Cake Decorating	1
CHEF 126	Intermediate Cake Decorating	1
CHEF 127	Chocolate Work	1
CHEF 128	Advanced Chocolate Work	1
CHEF 129	Wedding Cake Design and Construction	1
CHEF 233	Culinary Arts Fundamentals I	4
CHEF 234	Culinary Arts Fundamentals II	4
CHEF 240	Baking Fundamentals I	4
CHEF 241	Baking Fundamentals II	4
CHEF 260	Nutrition for Chefs	3
HOST 210	Catering and Banquet Operations	3
HOST 214	Purchasing and Kitchen Management	3

## **Hospitality Services Management**

## **Associate of Applied Science Degree**

Students who earn an associate degree in Hospitality Services
Management will have completed the first two years of the four-year
Hotel, Restaurant and Tourism Management degree offered by the
College of Agricultural, Consumer and Environmental Sciences at NMSU.
Enrollment in upper-division HRTM courses requires admission to the
School of HRTM.

To complete this associate degree, 60 credits are required, including the general education requirements and lower-division HRTM core (or the HOST equivalent listed here). Courses may be taken at any NMSU two-year campus and will apply toward this degree. A minimum cumulative GPA of 2.0 is also required. The last 15 credits must be completed at DACC.

Hospitality Services Management - Associate of Applied Science (p. 164)

## **HOST 155. Special Topics**

1-3 Credits (1-3)

Specific subjects to be announced in the Schedule of Classes. Restricted to: Community Colleges only.

## HOST 201. Introduction to Hospitality Industry

#### 3 Credits

Overview of hospitality industry; organization and operation of lodging, food and beverage, and travel and tourism segments; focus on career opportunities and future trends of hospitality industry. Restricted to: Community College campuses only.

#### **HOST 202. Front Office Operations**

#### 3 Credits

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#### 3 Credits

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## 3 Credits

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3 Credits

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Prepares students to make effective business decisions based on financial report information; forecasting, budgeting, cost analysis. Restricted to: Community College campuses only.

Prerequisite(s): BOT 120 or ACCT 252.

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### 3 Credits

Teaches the basics of catering and banquet operations, including computer coordination, planning, set up, service, and completion. Restricted to Community Colleges campuses only.

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## **HOST 220. Experiential Travel**

#### 1-3 Credits (1-3)

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Prerequisite(s): HOST 201 or consent of instructor.

## HOST 221. Internship I

## 1-3 Credits (1-3)

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## **HOST 222. Cooperative Experience II**

#### 3 Credits

Continuation of HOST 221. Restricted to majors. Graded: S/U. Restricted to: Community College campuses only. Restricted to HOST majors. **Prerequisite(s)**: HOST 221.

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Prerequisite(s): HOST 223.

## HOST 230. Wedding Events Management 3 Credits

This course will address various issues that could potentially arise in the preparation and management of a wedding or related event. All aspects of planning and attention to details that will ensure that students are prepared to provide services as a professional wedding planner. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

## HOST 239. Introduction to Hotel Management 3 Credits

This course covers basic management functions in hotels, resorts, Boutique Hotels, Bed & Breakfast establishments, and other lodging operations. All aspects of the operation are covered including guest management, operations, and sales and marketing. Restricted to: Branch campuses only.

## **HOST 255. Special Topics**

#### 3 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated up to 9 credits. Restricted to Community Colleges campuses only.

### **HOST 298. Independent Study**

#### 1-3 Credits (1-3)

Individual studies directed by consenting faculty with prior approval of department chair. May be repeated for a maximum of 3 credits.

Restricted to: Community College campuses only.

Prerequisite(s): Minimum 3.0 GPA and sophomore standing.

Name: Kim Seifert, Department Chair

Office Location: DAEM 100G

Phone: (575) 527-7518

Website: http://dacc.nmsu.edu/hsm/

## Hospitality Services Management -Associate of Applied Science (60 credits)

## Area I: Communications

/ II ca ii commanicatio	5110	
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 203G	Business and Professional Communication <sup>1</sup>	3
or ENGL 211G	Writing in the Humanities and Social Sciences	
or ENGL 218G	Technical and Scientific Communication	
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
Area II: Mathematics		
A ST 251G	Statistics for Business and the Behavioral Sciences <sup>1</sup>	3
Area III: Laboratory S	Ccience	
Select two from the	following:	8
ASTR 110G	Introduction to Astronomy 1	
CHEM 110G	Principles and Applications of Chemistry	
GEOL 111G	Introductory Geology <sup>1</sup>	
PHYS 110G	The Great Ideas of Physics <sup>1</sup>	

## Area IV & V: Social/Behavioral Sciences and Humanities/Fine Arts

Н	115		
		5 combined credits from Areas IV and V, dits in one of the two areas:	15
V		Behavioral Sciences:	
		ts from the following:	
	ANTH 125G	Introduction to World Cultures <sup>1</sup>	
	ANTH 201G	Introduction to world cultures	
		Introduction to Anthropology	
	ECON 201G	_	
	GOVT 110G	Introduction to Political Science	
	PSY 201G	Introduction to Psychology <sup>1</sup>	
	SOC 101G	Introductory Sociology <sup>1</sup>	
		ties and Fine Arts:	
		ts from the following:	
	ART 101G	Orientation in Art <sup>1</sup>	
	HIST 101G	Roots of Modern Europe	
	HIST 102G	Modern Europe <sup>1</sup>	
	HIST 201G	Introduction to Early American History <sup>1</sup>	
	HIST 202G	Introduction to Recent American History	
	MUS 101G	An Introduction to Music <sup>1</sup>	
	PHIL 101G	The Art of Wondering <sup>1</sup>	
	PHIL 201G	Introduction to Philosophy <sup>1</sup>	
	THTR 101G	The World of Theatre <sup>1</sup>	
T	echnical Require	ments	
C	HEF 233	Culinary Arts Fundamentals I	4
C	HEF 234	Culinary Arts Fundamentals II	4
Н	IOST 201	Introduction to Hospitality Industry	3
Α	pproved Elective	s	13
	elect a total of 13 dvisor.	3 credits of electives in consultation with an	
	HOST 206	Travel and Touriem Operations	

advisor.		
HOST 20	6 Travel and Tourism Operations	
HOST 20	8 Hospitality Supervision <sup>2</sup>	
HOST 21	6 Event, Conference and Convention Operations <sup>2</sup>	
HOST 21	9 Safety, Security and Sanitation in Hospitality Operations	
HOST 23	9 Introduction to Hotel Management	
Total Credit	s	60

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

#### NOTES:

In order to complete the Bachelor of Science in HRTM, students are required to take 48 credits of upper division work.

Courses are **NOT** accepted for upper-division credit at NMSU.

## **Library Science**

\*\*NOTICE\*\*: On March 6, 2018, the NMSU Board of Regents approved the proposal to close the DACC Library Science program. Students who currently have a declared major in Library Science (working toward either a certificate or an AAS degree) will be offered a reasonable opportunity (approximately 24 months) to complete their program of study. No new students will be admitted into the Library Science program.

**Associate of Applied Science Degree** 

Certificates of Completion - Important information about the educational debt, earnings, and completion rates of students who attend these certificate programs (excluding Specialized Topics in Library Science) can be found on the following https://dacc.nmsu.edu/qainfulemployment/.

- · Customized Study in Library Science
- · Fundamentals of Library Science
- · Specialized Topics in Library Science
- · Children's Literature

#### School Library Media Specialist Endorsement

In this Information Age, the role of libraries in providing for the knowledge needs of all sectors of the population is expanding. The changing needs of information management in our society have sparked an increasing demand for the work of library and information specialists who can organize, manage, and retrieve information from the vast storehouses that exist.

While libraries retain their traditional study tables and shelves full of books, increasingly they are being transformed to accommodate the rapidly evolving information technology. Electronic catalogs, online databases, CD-ROM and DVD products, the Internet and Web 2.0 tools provide almost unlimited access to the information people need for lifelong learning, and for both professional and recreational activities.

Employment opportunities in libraries remain steady. Acquiring, organizing and preserving, and providing access to the vast wealth of materials that exist in increasingly automated environments are ongoing challenges. Those who have strong skills in these areas will find themselves in great demand.

Library Science program graduates are prepared to work in numerous positions and settings, including public libraries and school or academic libraries. They may also choose from the wide spectrum of special library positions found in corporate, institutional, and government settings.

Additional information on career opportunities and salaries may be obtained from the Occupational Outlook Handbook, available online at http://www.bls.gov/oco.

## **Program Options**

Besides the associate of applied science degree, the program offers four certificate options in library science skills. Courses required for the certificates may be applied to the associate of applied science degree. In addition, courses offered through this program may be applied to fulfill state requirements for a School Library Media Specialist Endorsement, for those with a teaching certificate.

**NOTE:** All of the certificate options and the associate degree may be completed entirely online. All courses with the "L SC" prefix are available only through online education.

Library Science - Associate of Applied Science (p. 169)

Customized Study in Library Science - Certificate of Completion (p. 168)

Fundamentals of Library Science - Certificate of Completion (p. 168)

Specialized Topics in Library Science - Certificate of Completion (p. 170)

Children's Literature - Certificate of Completion (p. 168)

School Library Media Specialist Endorsement (p. 170)

#### L SC 100. Introduction to Libraries

#### 3 Credits

Overview of libraries, including history and development, responsibilities of library personnel, types of libraries and services, and technology and trends. Restricted to Dona Ana campus only.

## L SC 110. Reference and Information Resources I

#### 3 Credits

Overview of reference services. Introduction to, and evaluation of, basic types of information resources (both print and electronic) and their application in libraries.

## L SC 111. Introduction to Information Literacy in an Electronic Environment

#### 3 Credits

Introduction to the basics of the research process; the organization, location and evaluation of information using print, non-print and electronic resources. Restricted to: Community Colleges only.

## L SC 112. Introduction to Consumer Health Information Literacy in an Electronic Environment

#### 3 Credits

Introduction to consumer health information literacy; the process and organization, location, and evaluation of online information. Restricted to: Community Colleges only.

## L SC 120. Cataloging Basics I: Descriptive Cataloging 3 Credits

Introduction to descriptive cataloging. Restricted to: Dona Ana campus only.

## L SC 125. Cataloging Basics II: Classification and MARC Cataloging 3 Credits

Continuation of descriptive cataloging basics. Introduction to subject analysis, classification and MARC coding. Restricted to: Dona Ana campus only.

## L SC 130. Introduction to Technical Services in Libraries 3 Credits

Introduction to technical services in libraries, including acquisitions, bindery, cataloging, gifts, and serials. Restricted to Dona Ana campus only.

## L SC 140. Multimedia Materials and Presentations in Libraries 3 Credits

Overview of media formats and equipment. Introduction to desktop publishing, presentations, and web-page creation applications in libraries. Restricted to: Community Colleges only.

## L SC 150. Library Services for Children and Young Adults 3 Credits

Library services for children and young adults with an overview of materials, programs, and services for this population. Restricted to: Dona Ana campus only.

## L SC 153. Picture Books and Young Children

#### 1 Credit

If children are to enjoy reading they need to be exposed to books at an early age. This course will provide information to help guide librarians, preschool teachers, parents, and care givers in choosing appropriate books for those younger than six, and how to use books with this age group. Restricted to Dona Ana campus only.

#### L SC 154. State Children's Book Awards

#### 1 Credit

Students will explore the state book award offered by their state. Students will read some of the books and plan library programs to promote the award. Restricted to: Dona Ana campus only.

## L SC 155. Award Winning Books for Children

#### 1 Credit

A review of book awards and how to integrate award winning books into school curriculum or public school programming. Restricted to: Community Colleges only.

## L SC 156. Boys and Books

#### 1 Credit

This course looks at why, in general, boys are less interested in books than girls. Students will discover ways libraries can encourage boys to read and develop activities and programs which entice them to do so. Students will also be reading some books recommended for boy readers. Restricted to Dona Ana campus only.

## L SC 160. Introduction to Public Services in Libraries 3 Credits

Introduction to public services in libraries, including circulation, inter-library loan, reference, media services, special collections, and government documents. Restricted to Dona Ana campus only.

## L SC 175. Civic Involvement in Library Science

#### 1-3 Credits

Involvement in an organized community service project or group with a library or information technology component. Promotes awareness of volunteer and community service opportunities. May be repeated for a maximum of 6 credits. Graded: S/U. Restricted to: Dona Ana campus only.

## L SC 191. Children's Books and their Movie Adaptations 1 Credit

For almost as long as there have been popular books for children in the United States, there have been dramatic adaptations of them. What is gained, and lost, when children's books are adapted for the big screen? What is the relationship-or what should the connection be-between works of children's literature and their seemingly inevitable film adaptations? Students will be expected to read several children's books and view the movies based on them and make comparisons. Restricted to: Community Colleges only.

## L SC 192. Myths and Legends in Children's Literature 1 Credit

The student will explore myths and legends from diverse cultures; from European and Asian to those who have their roots in Africa and the Americas. Myths which are similar across several cultures will be compared.

#### L SC 193. Poetry for Children

#### 1 Credit

This course will explore the genre of poetry for children. In this class, participants will focus on reading and reviewing poetry for kids, exploring poetry on the Web, and trying interactive approaches for sharing poetry with children. Topics include: study and analysis of poetry, ways to use poetry in the classroom, writing poetry with children. Restricted to: Community Colleges only.

### L SC 195. Mysteries for Children

#### 1 Credit

In this course the student will become familiar with a wide variety of mysteries for children. Ways to use mysteries in the classroom and school library will also be covered. Restricted to Community Colleges campuses only.

#### L SC 196. Historical Fiction for Children

#### 1 Credit

This course looks at historical fiction as a genre. Topics include: fiction vs. history, American history in children's literature, world history in children's literature, activities for using historical fiction in a school setting. Restricted to: Community Colleges only.

### L SC 197. Fantasy and Speculative Fiction

#### 1 Credit

This course offers professionals serving school students the opportunity to increase your appreciation and knowledge of fantasy and speculative fiction through intense reading and discussion of representative works. The course will also investigate and consider options using fantasy and speculative fiction in a school setting. Restricted to: Community Colleges only.

## L SC 200. Collection Management and Development in Libraries 3 Credits

Principles of identifying, selecting, acquiring, managing, and evaluating resources for libraries. Restricted to Dona Ana campus only.

#### L SC 201. Public Libraries

### 3 Credits

A study of the American public library and its place in communities. Topics may include history, philosophy, and standards, operations and procedures, governance, funding, personnel materials, user services, outreach and advocacy. Restricted to: Dona Ana campus only.

## L SC 203. School Library Media Specialist

#### 3 Credits

Principles and practice of managing the school library media center, with an emphasis on its specific educational mission. Topics may include collection development, classes and lesson plans, public relations, administrative procedures, and use of technology. Restricted to Dona Ana campus only.

## L SC 210. Technology Planning in Libraries

## 3 Credits

Overview of computer applications in libraries. Topics may include automated systems and electronic resources, introduction to evaluation of technology, and writing a technology plan. Restricted to Dona Ana campus only.

## L SC 220. Innovative Technology Applications for Libraries 3 Credits

A look at uses for innovative technologies in libraries. Topics may include blogs, wikis, podcasting and virtual reality libraries. Restricted to Dona Ana campus only.

#### L SC 221. Experiential Learning I

#### 1-3 Credits

Student is employed (paid or non-paid) in an approved work site and evaluated by their supervisor. Each credit requires a specified number of hours of on-the job work experience. Consent of Instructor required. S/U Grading (S/U, Audit). Restricted to Dona Ana campus only.

Prerequisite(s): Consent of instructor.

## L SC 222. Experiential Learning II

#### 1-3 Credits

Continuation of L SC 221. Each credit requires specified number of hours of on-the-job work experience. Consent of Instructor required. S/U Grading (S/U, Audit). Restricted to Dona Ana campus only.

Prerequisite(s): L SC 221 and consent of instructor.

#### L SC 230. Issues and Ethics in Libraries

#### 3 Credits

Discussions of current and continuing challenges to effective library service. Topics may include copyright, censorship, intellectual freedom, Internet filtering, problem patrons, security, or other current issues. Restricted to Dona Ana campus only.

#### L SC 234. Intellectual Freedom in Libraries

#### 1 Credit

Philosophical and practical information related to library policies about access to library materials. Restricted to: Dona Ana campus only.

#### L SC 236. Banned Books

#### 1 Credit

Banned books, selection policies, and responding to challenges. Restricted to: Dona Ana campus only.

## L SC 240. Internet Resources and Research Strategies 3 Credits

Introduction to retrieving and evaluating information found on the Internet and in selected Internet-accessible databases. Restricted to: Dona Ana campus only.

## L SC 250. Reference and Information Resources II

#### 3 Credits

Evaluation and use of specialized information resources to offer reference services. Emphasis is on virtual reference and other innovative techniques. Restricted to: Dona Ana campus only.

## L SC 255. Special Topics

#### 1-3 Credits

Special topics to be announced in Schedule of Classes. May be repeated for a maximum of 12 credits. Restricted to: Dona Ana campus only.

## L SC 260. Cataloging Non-Book Formats

#### 3 Credits

Introduction to cataloging of various non-book formats and MARC coding. Restricted to: Dona Ana campus only.

## L SC 270. Library Science Capstone

#### 3 Credits

A culmination of all technical courses that are required to receive an Associate of Applied Science from the program centering around the completion of a library related project. Discussions on the role of paraprofessionals in libraries. Restricted to: Dona Ana campus only.

#### L SC 275. Fundamentals of Library Supervision

#### 3 Credits

An introduction to supervision of library employees, including student assistants, to create a productive workplace. Restricted to: Dona Ana campus only.

## L SC 281. Grant Writing for Libraries

#### 1 Credit

Introduction to grant writing for libraries. Restricted to: Dona Ana campus only.

## L SC 286. Children's Literature and the Primary Curriculum 3 Credits

The student will research the use of picture books and other children's literature across the curriculum with students in kindergarten through second grade. Topics include: using literature to teach writing, using literature to teach science, using literature to teach math, using literature to teach social studies. Restricted to: Community Colleges only.

## L SC 287. Children's Literature and the Intermediate Curriculm 3 Credits

The student will research the use of picture books and other children's literature across the curriculum with students in grades three through five. Topics include: using literature to teach writing, using literature to teach science, using literature to teach math, using literature to teach social studies. Restricted to: Community Colleges only.

## L SC 288. Children's Literature and the Middle School Curriculum 3 Credits

The student will research the use of picture books and other children's literature across the curriculum in grades six through eight. Topics include: using literature to teach writing, using literature to teach science, using literature to teach math, using literature to teach social studies. Restricted to: Community Colleges only.

## L SC 290. Introduction to Children's Literature for Libraries 3 Credits

This course will introduce current and potential library personnel to a wide variety of literature written for children. The course explores the history of children's literature and the path it has taken. Students will read many books from a variety of genre, explore the literary elements found in those books, and develop some evaluation criteria and ways for children to respond to the literature they read. Restricted to Dona Ana campus only.

#### L SC 291. Southwestern Children's Literature

#### 1 Credit

This course will introduce students to books which can teach the children visiting your library more about the people and places of the southwest. Restricted to: Dona Ana campus only.

#### L SC 292. Native American Children's Literature

## 1 Credit

This course will introduce students to some children's and young adult books written by and about Native Americans. Restricted to: Dona Ana campus only.

## L SC 295. Introduction to Young Adult Literature 3 Credits

The course will expose students to quality adolescent literature available for reading and study in middle and high school classes. It provides a broad survey of young adult literature and focuses on building an appreciation of literature, encouraging student reading, developing lifelong readers, and developing activities for critical thinking. Restricted to: Community Colleges only.

## L SC 296. Multicultural Books for Children and Youth 3 Credits

This course explores a wide range of multicultural children's literature including: African American, Native American, Latino, Asian, Jewish, and Middle Eastern. Topics covered include: nonfiction of the cultures, historical fiction of the cultures, and contemporary literature of the cultures. Restricted to: Community Colleges only.

## L SC 298. Independent Study

#### 1-3 Credits

Individual studies directed by consenting faculty with prior approval of department chair. May be repeated for a maximum of 12 credits. Restricted to: Dona Ana campus only.

Name: Shannon Bradley, Department Chair

Office Location: DAAR 100C

Phone: (575) 528-7338 or 527-7629

Website: https://dacc.nmsu.edu/lsc/

## **Children's Literature - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

\*\*NOTICE\*\*: On March 6, 2018, the NMSU Board of Regents approved the proposal to close the DACC Library Science program. Students who currently have a declared major in Library Science (working toward either a certificate or an AAS degree) will be offered a reasonable opportunity (approximately 24 months) to complete their program of study. No new students will be admitted into the Library Science program.

## (18 credits)

This certificate is designed for those who desire a specialization in children's literature.

## **Important Facts About This Certificate Program**

For information concerning the total cost, financing, time to completion, and job placement rates associated with this program, visit the following web page: https://dacc.nmsu.edu/vd/GEI/DA-LISC-CT/Gedt.html

#### **Technical Requirements**

L SC 155	Award Winning Books for Children	1
L SC 156	Boys and Books	1
Select one from the	following:	3
L SC 286	Children's Literature and the Primary Curriculum	
L SC 287	Children's Literature and the Intermediate Curriculm	
L SC 288	Children's Literature and the Middle School Curriculum	
L SC 290	Introduction to Children's Literature for Libraries	3
or L SC 295	Introduction to Young Adult Literature	
L SC 296	Multicultural Books for Children and Youth	3

Electives		
Select 7 credits from	n the following:	7
L SC 153	Picture Books and Young Children	
L SC 154	State Children's Book Awards	
L SC 191	Children's Books and their Movie Adaptations	
L SC 192	Myths and Legends in Children's Literature	
L SC 193	Poetry for Children	
L SC 195	Mysteries for Children	
L SC 196	Historical Fiction for Children	
L SC 197	Fantasy and Speculative Fiction	
L SC 236	Banned Books	
L SC 291	Southwestern Children's Literature	
L SC 292	Native American Children's Literature	
Total Credits		18

## **Customized Study in Library Science** - **Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

\*\*NOTICE\*\*: On March 6, 2018, the NMSU Board of Regents approved the proposal to close the DACC Library Science program. Students who currently have a declared major in Library Science (working toward either a certificate or an AAS degree) will be offered a reasonable opportunity (approximately 24 months) to complete their program of study. No new students will be admitted into the Library Science program.

## (36 credits)

This certificate is designed for those who desire to customize their study of library science.

#### **Technical Requirements**

Select five 3-credit L SC 100-level courses	15
Select five 3-credit L SC 200-level courses	15
Select six 1-credit L SC courses	6
Total Credits	36

## Fundamentals of Library Science - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/qainfulemployment/.

\*\*NOTICE\*\*: On March 6, 2018, the NMSU Board of Regents approved the proposal to close the DACC Library Science program. Students who currently have a declared major in Library Science (working toward either a certificate or an AAS degree) will be offered a reasonable opportunity (approximately 24 months) to complete their program of study. No new students will be admitted into the Library Science program.

## (24 credits)

This certificate is designed for those who desire a knowledge of the fundamentals of library science.

## **Technical Requirements**

L SC 100	Introduction to Libraries	3
	Reference and Information Resources I	
L SC 110		3
Select one from the	following:	3
L SC 120	Cataloging Basics I: Descriptive Cataloging	
L SC 125	Cataloging Basics II: Classification and MARC Cataloging	
L SC 260	Cataloging Non-Book Formats	
L SC 130	Introduction to Technical Services in Libraries	3
L SC 140	Multimedia Materials and Presentations in Libraries	3
or L SC 220	Innovative Technology Applications for Libraries	
L SC 160	Introduction to Public Services in Libraries	3
L SC 210	Technology Planning in Libraries	3
L SC 240	Internet Resources and Research Strategies	3
Total Credits		24

## **Library Science - Associate of Applied Science**

\*\*NOTICE\*\*: On March 6, 2018, the NMSU Board of Regents approved the proposal to close the DACC Library Science program. Students who currently have a declared major in Library Science (working toward either a certificate or an AAS degree) will be offered a reasonable opportunity (approximately 24 months) to complete their program of study. No new students will be admitted into the Library Science program.

## (66 credits)

_	_		_
Core	Rec	IIIIrei	ments

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
Select one from the	e following:	3
BOT 209	Business and Technical Communications	
ENGL 203G	Business and Professional Communication <sup>1</sup>	
ENGL 211G	Writing in the Humanities and Social Sciences <sup>1</sup>	
ENGL 218G	Technical and Scientific Communication	
COMM 253G or COMM 265G	Public Speaking <sup>1</sup> Principles of Human Communication	3

Select one from the	following:	3
BOT 106	Business Mathematics	
EDUC 150	Math for Paraprofessionals <sup>1</sup>	
MATH 210G	Mathematics Appreciation <sup>1</sup>	
MATH 120	Intermediate Algebra <sup>1</sup>	
Select one from the	-	3
ANTH 201G	Introduction to Anthropology <sup>1</sup>	
BMGT 240	Human Relations	
C EP 110G	Human Growth and Behavior <sup>1</sup>	
PSY 201G	Introduction to Psychology <sup>1</sup>	
SOC 101G	Introductory Sociology 1	
Related Requirement		
Select one from the		3
BMGT 140	Principles of Supervision I	
MGT 201	Introduction to Management <sup>1</sup>	
L SC 275	Fundamentals of Library Supervision	
Select 1-3 credits fr		1-3
BMGT 201	Work Readiness and Preparation	
L SC 175	Civic Involvement in Library Science	
Select one from the	•	3
C S 110	Computer Literacy <sup>1</sup>	
L SC 111	Introduction to Information Literacy in an	
	Electronic Environment	
OECS 105	Introduction to Information Technology	
Approved elective		3
Technical Requirem	ents <sup>2</sup>	
L SC 100	Introduction to Libraries	3
L SC 110	Reference and Information Resources I	3
Select one from the	following:	3
L SC 120	Cataloging Basics I: Descriptive Cataloging	
L SC 125	Cataloging Basics II: Classification and MARC Cataloging	
L SC 260	Cataloging Non-Book Formats	
L SC 130	Introduction to Technical Services in Libraries	3
L SC 140	Multimedia Materials and Presentations in Libraries	3
or L SC 220	Innovative Technology Applications for Librarie	es
L SC 160	Introduction to Public Services in Libraries	3
L SC 200	Collection Management and Development in Libraries	3
L SC 210	Technology Planning in Libraries	3
L SC 221	Experiential Learning I	2-3
L SC 240	Internet Resources and Research Strategies	3
L SC 270	Library Science Capstone	3
L SC electives	·	6-7
Total Credits		64-68

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

If the minimum number of credits is taken in either Related or Technical Requirements, then the maximum must be taken in the other category. Total credits must equal at least 66.

## School Library Media Specialist Endorsement

\*\*NOTICE\*\*: On March 6, 2018, the NMSU Board of Regents approved the proposal to close the DACC Library Science program. Students who currently have a declared major in Library Science (working toward either a certificate or an AAS degree) will be offered a reasonable opportunity (approximately 24 months) to complete their program of study. No new students will be admitted into the Library Science program. The School Library Media Specialist Endorsement program offers courses that meet or exceed the State Board of Education required competencies for the endorsement. It prepares entry-level library media specialists for positions in both elementary and secondary schools.

The program consists of a minimum of 24 credits from the courses shown in the following list. These are offered through Doña Ana Community College and New Mexico State University. All courses are 3 credits unless noted.

In New Mexico, at least 12 credits need to be upper-division courses for a K–12 endorsement. It is recommended that at least one course be taken from each area, and the student should consult an advisor. Endorsement is applied for by the student directly to the State Department of Education, and granted by the State, not DACC or NMSU. Out-of-state students should check with their state for specific requirements.

**NOTE:** All L SC and ELA courses are offered only ONLINE. Other courses may be available periodically online. Upper-division courses are offered through NMSU, where undergraduate and graduate tuition rates apply.

## School Library Media Specialist Endorsement (minimum of 24 credits)

Select one or more courses (3 or more credits) from at least eight of the following categories.

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Fm	nd	an	nei	nta	ls

ELA 412/512

;	Select one from the	e following:	3
	L SC 130	Introduction to Technical Services in Libraries	
	L SC 160	Introduction to Public Services in Libraries	
	ELA 411/511	Foundation for School Library Specialists	

## Organization and Administration

or L SC 203	School Library Media Specialist	
<b>Collection Develop</b>	ment and Management	
ELA 414/514	Collection Management and Development in School Libraries <sup>1</sup>	3
or L SC 200	Collection Management and Development in	

Administration of the School Library 1

## **Instructional Design and Development**

Libraries

ELA 413/513	Curriculum Role of the School Library Specialist <sup>1</sup>	3
or ECED 235	Introduction to Language, Literacy and Reading	

#### Reference

Select one from the	following:	3
L SC 110	Reference and Information Resources I	
or L SC 111	Introduction to Information Literacy in an Electron Environment	ıic
L SC 240	Internet Resources and Research Strategies	
or L SC 250	Reference and Information Resources II	
or LIB 311V	Information Literacy	

#### Cataloging

Cataloging		
Select one from the following:		
L SC 120	Cataloging Basics I: Descriptive Cataloging	
L SC 125	Cataloging Basics II: Classification and MARC Cataloging	
L SC 260	Cataloging Non-Book Formats	
Technology and Aut	omation	
EDLT 574	Technology Planning and Grant Writing <sup>1</sup>	3
or L SC 210	Technology Planning in Libraries	
Design and Utilizati	on of Media	
Select one from the	following:	3
L SC 140	Multimedia Materials and Presentations in Libraries	

L SC 220	Innovative Technology Applications for Libraries
EDUC 518	Technology and Pedagogy 1

## Literature

Select one from the	following:	3
L SC 290	Introduction to Children's Literature for Libraries	
L SC 295	Introduction to Young Adult Literature	
ENGL 363	Literature for Children and Young Adults	
RDG 414/514	Content Area Literacy <sup>1</sup>	
RDG 360/560	Elementary School Literacy I <sup>1</sup>	
RDG 361/561	Elementary School Literacy II <sup>1</sup>	
Total Credits		27

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## **Specialized Topics in Library Science** - Certificate of Completion

\*\*NOTICE\*\*: On March 6, 2018, the NMSU Board of Regents approved the proposal to close the DACC Library Science program. Students who currently have a declared major in Library Science (working toward either a certificate or an AAS degree) will be offered a reasonable opportunity (approximately 24 months) to complete their program of study. No new students will be admitted into the Library Science program.

## (12 credits)

This certificate is designed for those who desire an in-depth knowledge of specialized topics in library science.

#### **Technical Requirements**

Select 12 one-credit L SC courses

**Total Credits** 

12

## **New Mexico Common Core Certificate Program**

**Certificate of Completion** - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

Phone: (575) 528-7272

Website: https://dacc.nmsu.edu/nmcc/

The 36-credit New Mexico General Education Common Core Certificate of Completion program prepares a student to transfer to any public college or university in the state. It also satisfies many or all of the Core Requirements contained in the associate degree career programs offered at DACC.

Students enrolled in the following DACC associate degree programs may be eligible to receive this certificate upon completing the required general education common core courses contained in their curricula:

- Associate of Arts (p. 67)
- · Associate of Science (p. 69)
- · Criminal Justice (p. 100)
- Early Childhood Education (p. 120)
- · Education (p. 123)
- · Hospitality Services Management (p. 162)
- · Pre-Business (p. 187)
- · Public Health (p. 188)

This certificate is also a good choice for students who are undecided as to their major or program choice. Students should consult an advisor when applying for this certificate.

## **Nursing**

## **Associate in Nursing Degree**

Licensed Practical Nurse Certificate - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/ gainfulemployment/.

The Nursing program at DACC affords students the opportunity to become Licensed Practical Nurses or Registered Nurses and members of a respected and rewarding profession. Nursing is a dynamic and exciting discipline offering not only the rewarding experiences of helping others achieve their health care goals, but also enabling the nurse to become a part of the rapidly advancing health delivery system of the future.

Upon completion of all prerequisite courses and acceptance into the nursing program, four semesters of study prepare the new graduate for a career as an entry-level generalist in Licensed Practical Nursing or Registered Nursing. Graduates of the program are eligible to take the NCLEX-PN or NCLEX-RN licensure exams and become licensed Practical Nurses or Registered Nurses anywhere in the United States. Students should note, however, that program completion does not in and of itself

guarantee licensure, which is a function of the various state boards of nursing, nor does it guarantee employment.

The DACC nursing program philosophy embraces the concepts of caring, health, and wellness. Faculty assist adult learners with achievement of their maximum educational potential through exposure to a variety of teaching and evaluation methods. Special emphasis is placed upon the nursing process, critical-thinking, evidence-based practice, patient-centered care, teamwork and collaboration, safety, professionalism, nursing informatics, and the evolving teaching-learning process.

## **Accreditation/Approval**

The DACC Nursing program is approved for operation by the New Mexico Board of Nursing. Further information may be obtained by contacting the Board directly:

New Mexico Board of Nursing 6301 Indian School Road NE, Suite 710 Albuquerque, NM 87110 Phone: (505) 841-8340

Please refer to the DACC Nursing program website for more information regarding the accreditation and/or approval status of the Nursing program.

## **Categories of Essential Functions**

In order to participate in the Nursing Program, the student must be capable of performing the following:

#### Observation

- Visually discriminate incremental readings on various medical equipment
- · Visually discriminate between different colored objects
- · Discriminate between various auditory stimuli

#### Communication

- Communicate effectively in English using verbal, nonverbal and written formats
- · Read and interpret the English language without assistance
- Communicate effectively via electronic means, including computers and "smart" devices

#### Motor

- · Stand for long periods of time
- · Lift 50 pounds
- · Perform patient care procedures with manual dexterity

## Intellectual

· Collect, interpret, and integrate information

## **Special Admission Criteria**

As a professional educational program, the Nursing Program is a limitedentry program. To be considered for admission, students are required to successfully complete:

- 1. all prerequisites,
- 2. the designated entrance exam, and

3. submitting all materials required for the student selection process.

Information on requirements, transfers, and deadlines for applications are available on the Nursing program website, or by calling (575) 527-7735.

Prior to the first day of classes, each student must submit documentation of the following: current immunizations, TB test, American Heart Association CPR for Healthcare Providers, background clearance for Healthcare Providers and drug screening. Additional information regarding specific requirements is available from the Nursing Program office.

## **Nursing Program Prerequisites**

Prior to applying to the Nursing Program, students must be admitted to DACC. Students are also responsible for understanding all of the information in the related-requirement science courses of Anatomy and Physiology I and II, regardless of when these courses were taken. In the event that they were taken more than seven years prior to admission to the Nursing program, these courses must be repeated for credit.

## **Security Background Check**

Prospective students are required to complete and pass a security background check in order to take clinical courses. Past criminal violations may prevent a student from completing the degree and gaining a nursing license or employment in the field.

## Requirements to Remain in the Nursing Program

In order to remain in the program, students must receive a C or better in each technical course attempted.

## **Course Fees**

In addition to tuition, a fee of \$250 is charged for each of the following courses:

NURS 136	Foundations of Nursing Practice	6
NURS 147	Adult Health I	6
NURS 226	Adult Health II	6
NURS 236	Nursing Preceptorship - Adult Health III	6

Nursing - Associate in Nursing (p. 174)

Nursing - Licensed Practical Nurse Certificate (p. 174)

## NURS 130. Foundations of Pharmacology 3 Credits

This course provides the nursing student with an introduction to the foundations of pharmacology including: science of drug action, principles of medication administration, accurate calculation of drug doses, medication therapy across the lifespan, application of medications to treat health alterations, normal and adverse responses by the client to medication therapy, medication safety, medication regulation, national patient safety goals, and appropriate nursing interventions to achieve the desired goals of medication therapy. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 147 & NURS 149.

## NURS 134. Foundation of Nursing Skills and Assessment 3 Credits (1+6P)

This course provides nursing students with introductory nursing knowledge related to performance of nursing skills and assessment including: techniques of fundamental nursing care, basic and intermediate nursing skills, and foundational physical assessment techniques associated with care across the lifespan. Open to students who have been accepted into the nursing program. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 136 & NURS 137 or permission of the Program Director.

## NURS 136. Foundations of Nursing Practice 6 Credits (4+6P)

This course will introduce the nursing student to foundational theoretical concepts of professional nursing practice, the nursing process, and foundational nursing skills. It includes developmental concepts related to clients across the lifespan. Clinical experiences in the simulation lab, long-term care, the community, and rehabilitation settings will provide the student with the opportunity to apply learned skills to provide total care to meet needs of one adult client and to develop care planning skills related to actual problems. Students must be concurrently enrolled in both the lecture and lab sections of the course. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NUR majors. Restricted to: Community Colleges only. Prerequisite(s): Admission into the Nursing Program.

**Corequisite(s):** NURS 134, NURS 136 lab & NURS 137 or permission of the Program Director.

## NURS 137. Care of Geriatric Patient 3 Credits

This course will introduce the nursing student to foundational concepts of age-appropriate/specific care of the older adult who represents the largest population of individuals placing demands on the healthcare system. It includes basic and complex concepts and issues related to care of the older client across the care continuum, provision of cost-effective care in a resource sparse environment. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NURS majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Admission into the nursing program.

Corequisite(s): NURS 134 & NURS 136 or permission of the Program Director.

## NURS 147. Adult Health I 6 Credits (4+6P)

This course focuses on application of the nursing process and theoretical concepts of care for adults with commonly occurring health problems. Selected clinical learning experiences in the simulation lab, acute care, and community settings will allow the student to continue development of: prioritization skills, proficiency in performance of nursing skills, collaborative skills with clients, families, peers and health care team members, care planning skills related to patient actual, psychosocial, and potential problems in the delivery of total nursing care to meet needs of one adult client. Students must be concurrently enrolled in both the lecture and lab sections of the course. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NUR majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 130, NURS 147 lab, & NURS 149, or permission of the Program Director.

## NURS 149. Mental Health Nursing 3 Credits (2+3P)

This course will allow the nursing student to develop skills necessary to provide nursing care for clients with mental health problems in various health care settings including: common mental health disorders, psychosocial dysfunction, psychosocial safety/substance abuse issues, violence, suicide, restraints, developmental age related pathophysiology, psychopharmacology, cultural/religious considerations, grief/loss, promotion of mental health, and therapeutic communication. Selected clinical learning experiences in the simulation lab, acute care, and community settings will allow the student to develop ability to develop: proficiency in performance of nursing skills, collaborative skills with clients, families, peers and health care team members, care planning skills related to patient actual, psychosocial, and potential problems in the delivery of total nursing care to meet needs of one client across the life span with acute/chronic mental health needs. Students must be concurrently enrolled in both the lecture and lab sections of this course. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 130, NURS 147, & NURS 149L, or permission of the Program Director.

## **NURS 201. Special Topics**

#### 1-4 Credits

Specific topics to be announced in the Schedule of Classes. May be repeated for a maximum of 10 credits. Restricted to: Community Colleges only.

Prerequisite: admission to the nursing program.

## NURS 224. Maternal Child Nursing 5 Credits (4+3P)

This course provides the intermediate nursing student with an in-depth review of care of the childbearing woman, family structures and roles, and nursing care of the child from birth through adolescence. Emphasis includes the care of pre-partum, intra-partum and postpartum clients, the neonate and health deviations in pediatric clients. Clinical experiences in the simulation lab, the community, and acute care settings will provide the student with the opportunity to apply learned skills to provide total care to meet needs of up to two adult, neonatal, or pediatric clients and to apply care planning skills related to actual, psychosocial and potential problems. Students must be concurrently enrolled in both the lecture and lab sections of the course. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 224 lab, NURS 235, & NURS 236, or permission of the Program Director.

## NURS 226. Adult Health II 6 Credits (4+6P)

This course focuses on application of nursing process and theoretical concepts of care for adults with complex health alterations. Selected clinical learning experiences in the simulation lab, acute care, and community settings will allow the student to apply: prioritization skills, maintain proficiency in performance of nursing skills, collaborative skills with clients, families, peers and health care team members, and care planning skills related to patient actual, psychosocial, and potential problems in the delivery of nursing care to meet needs of three adult clients. Students must be concurrently enrolled in both the lecture and lab sections of the course. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 224, NURS 226 lab, & NURS 235 or permission of the Program Director.

## NURS 235. Nursing Leadership and Management 1 Credit

This course introduces the intermediate nursing student to professional practice principles of nursing leadership and management including: health policy and politics, fiscal management & budgeting, conflict management, decision making, interdisciplinary practice, working with teams, roles in disaster planning and management, application of standards of care to risk management, organization of care delivery, health care systems, processes, and practice environments. May be repeated up to 1 credits. Restricted to: NUR majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Admission into the Nursing Program.

**Corequisite(s):** NURS 224,NURS 226 & Clinical Or Permission of the Program Director.

## NURS 236. Nursing Preceptorship - Adult Health III 6 Credits (2+12P)

This course is the final course involving care of the patient with acute or chronic illness. It focuses on care of patients with complex or multisystem problems allowing the graduating nursing student to discuss and apply all the skills learned in previous nursing courses. After successfully passing the HESI exam, students have clinical practice with preceptor in various health care settings. Selected clinical learning experiences in the simulation lab, acute care, and community settings will allow the student to: organize care of a group of clients, maintain proficiency in performance of nursing skills, collaborate with clients, families, peers and health care team members, and support care planning skills related to patient actual, psychosocial, and potential problems in the delivery of nursing care to meet needs of the preceptors group of clients. Students must be concurrently enrolled in both the lecture and lab sections of the course. Only students who have been admitted to the nursing program and have successfully completed all level 1, 2 and 3 nursing courses may enroll in this course. Clinical may include inpatient or outpatient care, days, evenings, nights, or weekend experiences. Students are required to work the preceptors assigned schedule. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 201, NCLEX Review or permission of the Program Director.

Name: Tracy Lopez, Program Director

Office Location: DAHL 191E

Phone: (575) 527-7735

Website: https://dacc.nmsu.edu/nurs/

## Nursing - Associate in Nursing (68–69 credits)

Four additional courses (15 credits) beyond the LPN program are required to complete the ADN program. Students must pass a RN exit exam selected by the faculty to qualify for the Associate Degree in Nursing.

## **Core Requirements**

•		
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
PSY 201G	Introduction to Psychology <sup>1</sup>	3
Related Requireme	ents	
MATH 120	Intermediate Algebra <sup>1</sup>	3
C EP 110G	Human Growth and Behavior <sup>1</sup>	3
Select one from th	e following:	7-8
BIOL 253 & BIOL 254	Human Anatomy and Human Physiology <sup>1</sup>	
BIOL 225 & BIOL 226	Human Anatomy and Physiology I and Human Anatomy and Physiology II <sup>1</sup>	
CHEM 110G	Principles and Applications of Chemistry	4
Common Technica	l Requirements	
NURS 130	Foundations of Pharmacology	3
NURS 134	Foundation of Nursing Skills and	3
	Assessment	
NURS 136	Foundations of Nursing Practice	6
NURS 137	Care of Geriatric Patient	3
NURS 147	Adult Health I	6
NURS 149	Mental Health Nursing	3
NURS 224	Maternal Child Nursing	5
Additional Technic	al Requirements	
NURS 201	Special Topics (NCLEX RN Review)	2
NURS 226	Adult Health II	6
NURS 235	Nursing Leadership and Management	1
NURS 236	Nursing Preceptorship - Adult Health III	6
Total Credits		68-69

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## Nursing - Licensed Practical Nurse Certificate

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (53-54 credits)

This certificate program provides an option for those desiring to begin working as licensed practical nurses before finishing the Associate Degree Nursing Program (ADN) program. The certificate curriculum consists of the first two semesters of the ADN program and NURS 224 Maternal Child Nursing. Students must pass a PN exit exam selected by the faculty to qualify for the LPN certificate.

## Core Requirements

Core Requirements		
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
PSY 201G	Introduction to Psychology <sup>1</sup>	3
<b>Related Requiremen</b>	nts	
MATH 120	Intermediate Algebra <sup>1</sup>	3
C EP 110G	Human Growth and Behavior <sup>1</sup>	3
Select one from the	following:	7-8
BIOL 253 & BIOL 254	Human Anatomy and Human Physiology <sup>1</sup>	
BIOL 225 & BIOL 226	Human Anatomy and Physiology I and Human Anatomy and Physiology II <sup>1</sup>	
CHEM 110G	Principles and Applications of Chemistry	4
<b>Common Technical</b>	Requirements	
NURS 130	Foundations of Pharmacology	3
NURS 134	Foundation of Nursing Skills and Assessment	3
NURS 136	Foundations of Nursing Practice	6
NURS 137	Care of Geriatric Patient	3
NURS 147	Adult Health I	6
NURS 149	Mental Health Nursing	3
NURS 224	Maternal Child Nursing	5

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

## **Office Administration Technology**

### **Associate of Applied Science Degree**

**Total Credits** 

- · Administrative Assistant Option
- Bookkeeping Assistant Option
- Medical Office Assistant Option

Certificate of Completion - Important information about the educational debt, earnings, and completion rates of students who attend these certificate programs can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

- · Bilingual Office Specialist Option
- · General Office Assistant Option

**Medical Billing Certificate** - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

Medical Transcription Certificate - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

Because today's business world is constantly being transformed by new information processing technologies, employment opportunities in office careers are on the rise. The smooth functioning of today's automated office depends on the support of well-trained administrative, bookkeeping, and medical office assistants.

If you find satisfaction in working as a team member, are well organized, and enjoy meeting and helping new people, Office Administration

Technology could be the right program for you. This program has some significant advantages: it not only allows you to specialize in an area of interest to you, but it also provides a fast track to an entry-level position. Students may obtain a general office assistant certificate of completion in as little as one year and then begin earning money while studying for their associate of applied science degree.

In the second year of the associate of applied science degree program in Office Administration Technology, you can prepare for a more challenging position as either a general administrative assistant, bookkeeping assistant, or medical office assistant. You will learn to use state-of-the-art microcomputers, become familiar with various up-to-date software applications, and become proficient in a specific area of study.

The work settings where program graduates find employment are as varied as the organizations themselves. They include educational institutions; federal, state, and local government offices; medical facilities; financial institutions; corporate settings; and small and large businesses. Not only are the work settings varied, but so are the positions within each organization. Current salary ranges can be found in the Occupational Outlook Handbook at the U.S. Department of Labor web site: http://www.bls.gov.

#### Office Administration Technology Certificates

Two Office Administration Technology certificate options are available. The General Office Administration Technology option prepares students for receptionist, clerk-typist, or other entry-level positions. The Bilingual Office Specialist option qualifies students for positions requiring Spanish-English language proficiency. Also available are 18-credit specialized certificates in Medical Billing and Medical Transcription. Coursework for the certificates are applicable toward the Office Administration Technology and/or Health Information Technology associate of applied science degrees with the exception of the BOT 170 Office Communication in Spanish I and BOT 171 Office Communication in Spanish II courses.

Office Administration Technology - Associate of Applied Science (p. 177)

Office Administration Technology - Certificate (p. 178)

Medical Billing - Certificate (p. 179)

Medical Transcription - Certificate (p. 179)

## **BOT 101. Keyboarding Basics**

#### 3 Credits (2+2P)

Covers correct fingering and mastery of the keyboard to develop skillful operation. Formatting basic business letters, memos, and manuscripts.

## BOT 102. Keyboarding: Document Formatting 3 Credits (2+2P)

Designed to improve keyboarding speed and accuracy; introduce formats of letters, tables and reports. A speed and accuracy competency requirement must be met.

Prerequisite: BOT 101 or consent of instructor.

## BOT 105. Business English I

#### 3 Credits

Training and application of the fundamentals of basic grammar, capitalization and sentence structure (syntax).

### **BOT 106. Business Mathematics**

### 3 Credits (2+2P)

Mathematical applications for business, including training in the touch method of the 10-key calculator.

Prerequisite: CCDM 103 N or adequate score on math placement exam.

## BOT 109. Business English II

#### 3 Credits

Training and application of the fundamentals of punctuation, numbers, basic writing and editing skills.

Prerequisite: C or better in BOT 105.

#### **BOT 110. Records Management**

#### 3 Credite

Principles, methods and procedures for the selection, operation and control of manual and automated records systems.

## **BOT 120. Accounting Procedures I**

#### 3 Credits (2+2P)

Business accounting principles and procedures. Use of special journals, cash control, and merchandising concepts. Reports for sole proprietorships.

## **BOT 121. Accounting Procedures II**

## 3 Credits (2+2P)

Continuation of BOT 120, emphasizing accounting principles and procedures for notes and interest, depreciation, partnerships and corporations, cash flow and financial statement analysis. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 120 or ACCT 221.

## **BOT 135. Keyboarding Technique Review**

## 3 Credits

Emphasis on improving keyboarding speed and accuracy.

Prerequisite: BOT 101 or equivalent.

## **BOT 140. Payroll Accounting**

#### 3 Credits (2+2P)

Payroll procedures including payroll tax forms and deposits. May be repeated up to 3 credits. Restricted to Community Colleges campuses only

Prerequisite(s): ACCT 221 or BOT 120.

## **BOT 150. Medical Terminology**

#### 3 Credits

Understanding of the basic elements of medical words. Use of medical abbreviations. Same as NURS 150 and OEHO 120.

## BOT 169. Spanish Grammar for Business Administration 3 Credits

Introductory course in Spanish grammar and practical business terms required for the proper application of fundamental oral and written business communication skills for Spanish speakers in the field of business administration. Restricted to Community Colleges campuses only.

**Prerequisite(s)**: Spanish-speaking ability and computer keyboarding ability.

#### BOT 170. Office Communications in Spanish I

## 3 Credits

Develop oral and written communications skills of native or near-native speakers of Spanish. The student will learn basic letter writing skills, customer service techniques, and telephone etiquette in Spanish. Restricted to Community Colleges campuses only.

**Prerequisite(s)**: BOT 169, Spanish-speaking ability, and computer keyboarding ability.

## **BOT 171. Office Communications in Spanish II**

#### 3 Credits

Develop oral and written communications skills of native or near-native speakers of Spanish. Emphasis placed on learning the office assistant's role within the office environment. Compose complex business correspondence and learn to make international travel arrangements. **Prerequisite:** BOT 101 or BOT 170.

## **BOT 191. Taking Minutes & Proofreading**

#### 3 Credits

Preparation and practice producing minutes suited for different meeting types and purposes. Provides strategies to prepare for meetings, to record proceedings, and to transcribe minutes while incorporating proofreading skills practice. Topics include legal requirements, meeting types, minute formats, and duties/expectations of the minute taker and the meeting chair. Graded: S/U. Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 109 or consent of instructor.

## BOT 202. Keyboarding Document Production 3 Credits (2+2P)

Further development of keyboarding speed and accuracy. Production of complex letters, memos, tables, reports and business forms. A speed and accuracy competency requirement must be met.

Prerequisites: BOT 102 and BOT 109, or consent of instructor.

## BOT 203. Office Equipment and Procedures I

## 3 Credits (2+2P)

Office organization, telephone techniques, equipment and supplies, handling meetings, human relations, mail procedures, and travel. **Prerequisites:** BOT 213 or C S 110G or consent of instructor.

## **BOT 205. Microcomputer Accounting I**

#### 3 Credits (2+2P)

Introduction to automated accounting systems on microcomputers. **Prerequisite:** working knowledge of computers and accounting or consent of instructor.

## BOT 206. Microcomputer Accounting II

**3 Credits (2+2P)**Microcomputer accounting applications, integrating spreadsheets, word processing, graphics, and database. May be repeated up to 3 credits.

Restricted to Community Colleges campuses only.

## Prerequisite(s): BOT 121 or BOT 215. BOT 207. Machine Transcription

## 3 Credits (2+2P)

Creating office documents using transcribing equipment and microcomputer software. Emphasis on proofreading, editing and grammar.

**Prerequisites:** minimum keyboarding of 45 wpm and C or better in BOT 105 or BOT 109 or equivalent and BOT 211 or BOT 213.

## **BOT 208. Medical Office Procedures**

#### 3 Credits (2+2P)

Current computerized and traditional administrative medical office procedures will be introduced. Practical knowledge on managing required record keeping in a medical office environment will be emphasized. Restricted to Community Colleges campuses only.

**Prerequisite(s):** BOT 109 or ENGL 111G, HIT 150 or AHS 120, and computer keyboarding ability or consent of instructor.

#### **BOT 209. Business and Technical Communications**

#### 3 Credits

Effective written communication skills and techniques for career success in the work place. Composition of letters, memos, short reports, forms, and proposals, and technical descriptions and directions.

**Prerequisites:** ENGL 111G and computer keyboarding ability or consent of instructor.

## **BOT 211. Information Processing I**

#### 3 Credits (2+2P)

Defining and applying fundamental information processing concepts and techniques using the current version of leading software. Restricted to Community Colleges only.

Prerequisite(s): BOT 101 or consent of instructor.

#### **BOT 213. Word Processing I**

#### 3 Credits (2+2P)

Operation and function of a word processor. Specific equipment to be announced in the Schedule of Classes.

Prerequisite: BOT 101 or keyboarding proficiency.

## **BOT 214. Word Processing II**

#### 3 Credits (2+2P)

Advanced operation and functions of a word processor. Specific equipment to be announced in the Schedule of Classes.

Prerequisite: BOT 213 or consent of instructor.

## **BOT 215. Spreadsheet Applications**

#### 1-3 Credits

Use of spreadsheets to include graphics and business applications. Same as OECS 215. May be repeated under different subtitles listed in the Schedule of Classes.

## **BOT 217. Powerpoint Presentation**

#### 3 Credits

Comprehensive, hands-on approach to learning and applying basic and advanced features of PowerPoint. These include text enhancements, objects, fills, colors, animation, charts, sound, video, and hyperlinks. Students demonstrate appropriate audience and communication tools to deliver presentations.

**Prerequisites:** BOT 211 or ability to demonstrate keyboarding and Windows proficiency.

### **BOT 218. Information Processing II**

## 3 Credits (2+2P)

Advanced information processing techniques using current version of leading software. May be repeated for a maximum of 6 credits.

Prerequisite: BOT 211 or consent of instructor.

## BOT 220. Internship in Business Office Technology

## 2 Credits

Experience in a supervised office position. Student must work at least eight hours per week. May be repeated for a maximum of 4 credits. **Prerequisites:** sophomore standing and consent of instructor.

#### BOT 221. Internship I

## 1-3 Credits

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: BOT & HIT majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

### BOT 222. Internship II

#### 1-3 Credits

Continuation of BOT 221. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: BOT & HIT majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 221 and consent of instructor.

#### **BOT 223. Medical Transcription I**

#### 3 Credits (2+2P)

Concepts in medical transcription are introduced on how to produce a variety of reports required in a medical office or facility utilizing accurate medical terminology, spelling, grammar, and document formatting. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): HIT 150 or AHS 120 and HIT 158 and BOT 209.

## BOT 228. Medical Insurance Billing 3 Credits (2+2P)

Comprehensive overview of the insurance concepts and applications required for successfully and accurately completing and submitting insurance claims and reimbursement processes for various insurance carriers, both private and government, will be emphasized. Restricted to Community Colleges campuses only.

Prerequisite(s): HIT 150 or AHS 120 and BOT 208.

## BOT 233. Advanced Medical Transcription 3 Credits (2+2P)

Builds upon the concepts introduced in Medical Transcription I providing greater understanding of how to produce advanced reports dictated by physicians with increasing speed and accuracy. Emphasis will be on proofreading and editing of operative reports, patient history and physicals, office notes, labor and delivery reports, consultation reports, discharge summaries, and other medical reports. May be repeated up to 3 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 223 and HIT 130.

## BOT 239. Personal Development

## 3 Credits

Development of a marketable, employable office systems person, to include interview, voice, manners, and apparel.

## **BOT 240. Introduction to Individual Taxation**

#### 3 Credits

Overview of Individual Federal Taxation; awareness of tax problems pitfalls and planning opportunities; focus on individual personal financial concerns and tax planning. One semester of accounting principles/procedures is recommended.

## BOT 241. Auditing and Business Issues

#### 3 Credits

Introduction to basic auditing concepts, the purpose for the auditing process, and requirements of persons assisting with the audit process. The course will also deal with issues of business law including contracts, sales, torts, strict liability, and business ethics. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 120 or ACCT 221.

## **BOT 244. Tax Preparation**

## 3 Credits

Introduces basic federal and state tax codes for preparing individual income tax returns. Emphasis on use of tax software.

Prerequisite: keyboarding proficiency.

## **BOT 250. Electronic Office Systems**

## 3 Credits (2+2P)

Management of the electronic office. Office use of computers, printers, fax machines, copiers, and scanner concepts will be covered.

Prerequisite: BOT 211.

## **BOT 255. Special Topics**

#### 1-4 Credits

Specific subjects to be announced in the Schedule of Classes.

## BOT 260. Bookkeeping Simulation Capstone 3 Credits (2+2P)

Refines the professional and technical skills students have learned while completing the BOT-Bookkeeping Assistant Option curriculum by demonstrating how coursework ties together. Designed as a bookkeeping assistant capstone course.

Prerequisite(s): BOT 121 or ACCT 221, BOT 140, BOT 205, and BOT 244, or consent of instructor.

## BOT 270. Business Office Technology Capstone 3 Credits (2+2P)

Refines professional skills learned in the BOT program and ties all BOT coursework together. Restricted to: Community Colleges only.

Prerequisite(s): BOT 102; and BOT 120; and BOT 209 or ENGL 203G or ENGL 218G; and BOT 211 or OECS 211.

Name: Diane Prince, Department Chair

Office Location: DAEM 100B

Phone: (575) 527-7579

Website: https://dacc.nmsu.edu/bot/

# Office Administration Technology - Associate of Applied Science (61-64 credits)

#### Core/General Education Requirements (16 credits)

Core/General Educ	ation Requirements (16 credits)	
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
BOT 106	Business Mathematics	3
or MATH 120	Intermediate Algebra	
BOT 209	Business and Technical Communications	3
or ENGL 203G	Business and Professional Communication	
or ENGL 218G	Technical and Scientific Communication	
ECON 201G	Introduction to Economics	3
or ECON 251G	Principles of Macroeconomics	
or ECON 252G	Principles of Microeconomics	
BMGT 140	Principles of Supervision I	3
or BMGT 240	Human Relations	
Related/Profession	nal Requirements (25-27 credits)	
BOT 102	Keyboarding: Document Formatting	3
BOT 105	Business English I	3
BOT 109	Business English II	3
BOT 110	Records Management <sup>2</sup>	3
or HIT 110	Electronic Health Records	
BOT 120	Accounting Procedures I	3
or ACCT 221	Principles of Accounting I (Financial)	
BOT 211	Information Processing I	3

BOT/HIT 221	Internship I <sup>3</sup>	1-3
or BOT 222	Internship II	
BOT 239	Personal Development	3
or BMGT 201	Work Readiness and Preparation	
BOT 260	Bookkeeping Simulation Capstone	3
or BOT 270	Business Office Technology Capstone	
Technical/Major R		
Choose one of the following three options:		21
Bookkeeping Assistant		
Administrative Assistant		
Medical Office	Assistant	
Total Credits		62-64

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

- HIT 110 Electronic Health Records should be taken only by those who plan to pursue the Medical Office Assistant option.
- BOT 221 Internship I/BOT 222 Internship II/HIT 221 Internship I are restricted to majors. A maximum of 6 credits of BOT 221 Internship I/BOT 222 Internship II and HIT 221 Internship I may be applied toward a degree.

## **Bookkeeping Assistant Option**

BOT 121	Accounting Procedures II	3
BOT 140	Payroll Accounting	3
BOT 203	Office Equipment and Procedures I	3
or BOT 250	Electronic Office Systems	
BOT 205	Microcomputer Accounting I	3
BOT 206	Microcomputer Accounting II	3
or BOT 215	Spreadsheet Applications	
BOT 241	Auditing and Business Issues	3
or BMGT 231	Legal Issues in Business	
BOT 244	Tax Preparation	3
Total Credits		21

## **Administrative Assistant Option**

BOT 202	Keyboarding Document Production	3
BOT 203	Office Equipment and Procedures I	3
BOT 207	Machine Transcription	3
BOT 215	Spreadsheet Applications	3
BOT 217	Powerpoint Presentation (or Approved BOT elective)	3
BOT 218	Information Processing II	3
BOT 250	Electronic Office Systems	3
or BOT 191	<b>Taking Minutes &amp; Proofreading</b>	
Total Credits		21

## **Medical Office Assistant Option**

Introduction to Medical Terminology	3
Medical Terminology	
Advanced Medical Terminology	3
Keyboarding Document Production	3
Medical Office Procedures	3
Information Processing II	3
	Medical Terminology Advanced Medical Terminology Keyboarding Document Production Medical Office Procedures

BOT 223	Medical Transcription I	3
BOT 228	Medical Insurance Billing	3
Total Credits		21

## Office Administration Technology - Certificate

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (31 credits)

**NOTE:** Students who lack prior general office experience may need to take course-related prerequisites.

## **Technical Requirements (31 credits)**

•	, ,	
BOT 102	Keyboarding: Document Formatting	3
BOT 106	Business Mathematics	3
BOT 109	Business English II 1	3
BOT 110	Records Management <sup>2</sup>	3
or HIT 110	Electronic Health Records	
BOT 120	Accounting Procedures I	3
or ACCT 221	Principles of Accounting I (Financial)	
BOT 211	Information Processing I	3
BMGT 140	Principles of Supervision I	3
or BMGT 240	Human Relations	
Choose one of the f	ollowing two options: (10 credits)	
Bilingual Office Spe	cialist or General Office Assistant Options	10
Total Credits		31

## **Bilingual Office Specialist Option**

BOT 170	Office Communications in Spanish I	3
BOT 171	Office Communications in Spanish II	3
BOT/HIT 221	Internship I	1
BOT 239	Personal Development	3
or BMGT 201	Work Readiness and Preparation	
Total Credits		10

## **General Office Assistant Option**

BOT 215	Spreadsheet Applications	3
BOT/HIT 221	Internship I	1
BOT 239	Personal Development	3
or BMGT 201	Work Readiness and Preparation	
Select one from th	e following:	3
BOT 203	Office Equipment and Procedures I	
BOT 250	Electronic Office Systems	
HIT 150	Introduction to Medical Terminology <sup>3</sup>	
AHS 120	Medical Terminology <sup>3</sup>	
Total Credite		10

Business English placement test will determine whether BOT 105 Business English I is required before taking BOT 109 Business English II.

- <sup>2</sup> HIT 110 Electronic Health Records should be taken only by those who plan to pursue the Medical Office Assistant Option.
- HIT 150 Introduction to Medical Terminology or AHS 120 Medical Terminology should be taken only by those who plan to pursue the OAT associate of applied science degree with the Medical Office Assistant option and/or Medical Transcription or Medical Billing certificate(s).

## Office Administration Technology - Medical Billing Certificate

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (18 credits)

**NOTE:** Students who lack prior health and/or general office experience may need to take course-related prerequisites.

#### **Technical Requirements (18 credits)**

HIT 150	Introduction to Medical Terminology	3
or AHS 120	Medical Terminology	
HIT 158	Advanced Medical Terminology	3
BOT 208	Medical Office Procedures	3
BOT 228	Medical Insurance Billing	3
HIT 248	Medical Coding I	3
HIT 258	Medical Coding II	3
Total Credits		18

## Office Administration Technology - Medical Transcription Certificate

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (18 credits)

**NOTE:** Students who lack prior health and/or general office experience may need to take course-related prerequisites.

## **Technical Requirements (18 credits)**

HIT 150	Introduction to Medical Terminology	3
or AHS 120	Medical Terminology	
HIT 158	Advanced Medical Terminology	3
BOT 207	Machine Transcription	3
BOT 208	Medical Office Procedures	3
BOT 223	Medical Transcription I	3
BOT 233	Advanced Medical Transcription	3
Total Credits		18

## **Paralegal Studies**

\*\*NOTICE\*\*: On March 6, 2018, the NMSU Board of Regents approved the proposal to close the DACC Paralegal Studies program. Students who currently have a declared major in AAS degree in Paralegal Studies will be offered a reasonable opportunity (approximately 24 months) to complete their program of study. No new students will be admitted into the Paralegal Studies program.

**Associate of Applied Science Degree** 

If you have an interest in the law and how it affects individuals and society as a whole, then a career as a paralegal could be an excellent choice for you. Paralegals enjoy the intellectual challenge of assisting attorneys in finding legal solutions for their clients' problems.

A precise description of the paralegal's role is found in the New Mexico Supreme Court's definition in the Rules Governing Paralegal Services (Rule 20-102A), which states that a paralegal is one who:

- contracts with or is employed by an attorney, law firm, corporation, governmental agency or other entity;
- performs substantive legal work under the supervision of a licensed attorney who assumes professional responsibility for the final work product; and
- 3. meets one or more of the education, training or work experience qualifications set forth in Rule 20-115 NMRA of these rules

In these same Rules, the Court's examples of substantive legal work include, "case planning, development and management; legal research and analysis; interviewing clients; fact gathering and retrieving information; drafting legal documents; collecting, compiling, and utilizing technical information to make an independent decision and recommendation to the supervising attorney; and representing clients before a state or federal administrative agency if that representation is authorized by law" (Rule 20-102B NMRA).

The DACC Paralegal Studies program focuses on developing skills necessary to perform substantive legal work. Examples of courses leading to that end include Litigation, Legal Research and Writing, Legal Terminology, Virtual Law Office, Legal Ethics, and Torts. Through classroom instruction (including practical exercises and assignments), computer lab practice, and an internship, students gain essential skills, as well as a broad background in many different areas of law.

Graduates of the Paralegal Studies program are eligible to apply to take the national certification examination offered by the National Association of Legal Assistants (NALA). Those who successfully complete this two-day exam are designated Certified Legal Assistants (CLA).

The employment outlook for paralegals is good. Program graduates are employed with private firms, various courts, community legal services, state and federal governmental agencies (e.g., Human Services Departments, public defenders, and district attorneys), as well as a variety of businesses.

Paralegal Studies - Associate of Applied Science (p. 181)

### PL S 160. Legal System for the Paralegal

#### 3 Credits

Introduction to the court system, administrative agencies, functions of law offices, and professional conduct and legal ethics. Restricted to: Community Colleges only.

**Prerequisite(s):** ACT standard score in English of 16 or higher or a Compass score 76 or higher; for those scoring 13-15 in English on ACT or 35-75 on Compass, successful complete of CCDE 105N or CCDE 110N; for those scoring 12 or below on the ACT standard score in English or 34 or below on the Compass, successful completion of CCDE 105N & CCDE 110N.

### PL S 161. Legal Terminology

#### 3 Credits

Survey of the language of the law that will serve either as an introductory course or as a review course to prepare students for the certification test.

#### PL S 162. The Virtual Law Office

#### 3 Credits

The Virtual Law Office class is a 'hands-on', project oriented course designated to provide the student with the basic law office skills needed to function successfully in a law office setting. The student will gain a practical, working knowledge of the procedures necessary to work in a law office. The skills learned in the class will directly translate to real life situations. Restricted to: Community Colleges only.

Prerequisite(s): PL S 160.

# PL S 180. Constitutional Law for the Paralegal 3 Credits

Case standing of the law of the Constitution and Bill of Rights with regard to day-to-day applications in the law practice. Documents dealing with constitutional problems in both civil and criminal areas of law will be drafted and discussed.

Prerequisite: PL S 160.

### PL S 190. Criminal Law for the Paralegal

### 3 Credits

Introduction to federal and state criminal law; criminal proceedings, prosecution and defense, sentencing and appeal.

Prerequisite: PL S 160.

### PL S 200. Legal Ethics for the Paralegal

### 3 Credits

Introduction to ethical dilemmas faced in the workforce and the rules of ethics developed by the American Bar Association, various national paralegal organizations, and the Supreme Court of New Mexico.

Restricted to: Community Colleges only.

Prerequisite(s): PL S 160.

### PL S 203. Immigration Law

#### 3 Credits

Survey of the basics of immigration law including the rights and obligations of citizenship and the naturalization process.

Prerequisite: PL S 160.
PL S 221. Internship I

### 2-4 Credits

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships can be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. Restricted to Community Colleges campuses only.

Prerequisite(s): PL S 274.

### PL S 222. Internship II

#### 1-3 Credits

Continuation of PL S 221. Each credit requires specified number of hours of on-the-job work experience. Restricted to Community Colleges campuses only.

Prerequisite(s): PL S 221.

### PL S 231. The Law of Commerce for the Paralegal

#### 3 Credits

Law of contracts, negotiable instruments, bank transfers, secured transactions, debtor-creditor relations, agency, and business types and their formation. Students will study the relevant statutes as well as draft documents associated with these types of legal practice. Restricted to: Community Colleges only.

Prerequisite(s): PL S 160.

### PL S 272. Bankruptcy Law for the Paralegal

#### 3 Credits

Individual and corporate bankruptcy; the basic principles and processes of bankruptcy law as a system of debtor relief and debt collection.

Prerequisite: PLS 160.

# PL S 274. Legal Research and Writing for the Paralegal I 3 Credits

Legal memoranda, briefs, and pleadings will be prepared and written based on the student s original research. Research materials and techniques will be identified and studied; introduction of computer usage in legal research.

Prerequisite: PL S 160 and ENGL 111G.

## PL S 275. Tort and Insurance for the Paralegal 3 Credits

Primary legal principles of tort and insurance law and means of establishing insurance plans, types of torts and insurance, as well as use of specific forms and procedures relating to these areas.

Prerequisite: PL S 160.

# PL S 276. Wills, Trusts, and Probate for the Paralegal 3 Credits

Cases and statutes dealing with wills, trusts, and probate. Emphasis on preparation and drafting of documents and the application of the law and documents to the client s problems.

Prerequisite: PL S 160.

### PL S 277. Family Law for the Paralegal

#### 3 Credits

Methods of conducting client interviews and drafting of pleadings and research relative to families. Laws relating to marriage, divorce, custody, support, adoption, name change, guardianship, and paternity.

Prerequisite: PL S 160.

### PL S 278. Litigation for the Paralegal

### 3 Credits

The law of procedure and evidence will be considered through rules and cases. Case situations will be used to identify and solve problems.

Prerequisite: PL S 160.

# PL S 279. Legal Research and Writing for the Paralegal II 3 Credits

Continuation of PL S 274. Advanced training in legal research problems with a focus on analysis, writing, and preparation of sophisticated legal memoranda and documents.

Prerequisite: PL S 274.

## PL S 280. Interviewing and Investigation for the Paralegal 3 Credits

Techniques of legal interviewing and investigation with emphasis on development of human relations and communication skills.

Prerequisite: PL S 160.

### PL S 298. Independent Study

### 1-3 Credits (1-3)

Individual studies directed by consenting faculty with prior approval by department head. Restricted to Community Colleges campuses only. **Prerequisite(s):** PL S 160.

Name: Mark Nunley, Public Services Department Chair

Office Location: DASR 220I Phone: (575) 527-7746

Website: https://dacc.nmsu.edu/pls/

### Paralegal Studies - Associate of Applied Science

\*\*NOTICE\*\*: On March 6, 2018, the NMSU Board of Regents approved the proposal to close the DACC Paralegal Studies program. Students who currently have a declared major in AAS degree in Paralegal Studies will be offered a reasonable opportunity (approximately 24 months) to complete their program of study. No new students will be admitted into the Paralegal Studies program.

### (69-73 credits)

or ACCT 221

or BOT 120

or BOT 213

**BMGT 201** 

BOT 211

**GOVT 100G** 

NOTE: Students must pass ENGL 111G Rhetoric and Composition, ENGL 203G Business and Professional Communication, and all PL S courses with a minimum grade of *C*.

### **Core/General Education Requirements**

	•	
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 203G	Business and Professional Communication <sup>1</sup>	3
or ENGL 218G	Technical and Scientific Communication	
or BOT 209	Business and Technical Communications	
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
MATH 120	Intermediate Algebra <sup>1</sup>	3
or MATH 121G	College Algebra	
or BOT 106	Business Mathematics	
PHIL 201G	Introduction to Philosophy 1	3
or PHIL 211G	Informal Logic	
PSY 201G	Introduction to Psychology <sup>1</sup>	3
or SOC 101G	Introductory Sociology	
or BMGT 240	Human Relations	
Related/Profession	al Requirements	
ACCT 200	A Survey of Accounting <sup>1</sup>	3

Principles of Accounting I (Financial)

Work Readiness and Preparation

American National Government 1

Accounting Procedures I

Information Processing I

Word Processing I

Technica	l/Major	Require	ments
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recillical/iviajor ne	quirements	
PLS 160	Legal System for the Paralegal	3
PLS 190	Criminal Law for the Paralegal	3
PL S 200	Legal Ethics for the Paralegal	3
PL S 231	The Law of Commerce for the Paralegal	3
PL S 274	Legal Research and Writing for the Paralegal I	3
PL S 275	Tort and Insurance for the Paralegal	3
or PL S 276	Wills, Trusts, and Probate for the Paralegal	
PL S 278	Litigation for the Paralegal	3
PL S 279	Legal Research and Writing for the Paralegal II	3
Select 2-6 credits from	om the following:	2-6
PL S 221 & PL S 222	Internship I and Internship II <sup>2</sup>	
Electives		
Select 12 credits fro	m the following:	12
PLS 161	Legal Terminology	
PL S 162	The Virtual Law Office	
PL S 203	Immigration Law	
PL S 272	Bankruptcy Law for the Paralegal	
PL S 277	Family Law for the Paralegal	
PL S 298	Independent Study	
Total Credits		69-73

- Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.
- PL S 221 Internship I and PL S 222 Internship II are restricted to PL S majors. A maximum of 6 credits of PL S 221 Internship I and PL S 222 Internship II may be applied toward a degree.

### **Patient Care Technician**

**Certificates of Completion** - Important information about the educational debt, earnings, and completion rates of students who attend these certificate programs can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

- · Patient Care Technician
- Nursing Assistant

### **Course-Completion Certificates**

- · Alzheimer's/Dementia Care
- · Disabilities Support Services
- · Electrocardiogram Technician
- Phlebotomist Basic

3

3

3

The versatile Patient Care Technician certification program has been designed to allow graduates to take advantage of expanding career opportunities available throughout the healthcare system. The program consists of courses which can be taken separately for individual certifications, or together as part of a complete program, such as the Nursing Assistant or the Patient Care Technician program. Individual courses are

- · Alzheimer's/Dementia Care,
- · Disabilities Support Services,

- · Electrocardiogram Technician,
- · Phlebotomist Basic.

Clinical course registration is contingent upon results from the N.M. Department of Health Caregiver Criminal History Screening Program (CCHSP) and drug screen.

### **Categories of Essential Functions**

In order to participate in the Patient Care Technician certificate program, the student must be capable of performing the following:

#### Observation.

- Visually discriminate incremental readings on various medical equipment;
- 2. Visually discriminate between different colored objects;
- 3. Discriminate between various auditory stimuli.

#### Communication.

- Communicate effectively in English, using verbal, nonverbal, and written formats;
- 2. Read and interpret the English language without assistance.

#### Motor.

- 1. Stand for long periods of time;
- 2. Lift/carry 35 pounds;
- 3. Perform patient-care procedures with finger and manual dexterity.

#### Intellectual.

1. Collect, interpret, and integrate information.

# Special Pre-Registration Requirements ("The Clinical Packet")

Prior to registering for any courses that include a clinical practicum (NA 105 Nursing Assistant Clinicals, NA 109 Phlebotomist Basic, NA 110 Electrocardiogram Technician Basic, and NA 205 Patient Care Technicians Practicum), students must submit documentation of the following on-line to Castlebranch at https://www.castlebranch.com/online\_submission/package\_code.php:

- PHYSICAL to confirm can perform essential functions of the Program. (listed above)
- · TETANUS, DIPTHERIA, PERTUSSIS (Tdap)
  - · Routine booster within 10 years
  - Adult Tdap required once

### · MMR (Measles, Mumps, Rubella)

- · Proof of vaccination (2 doses) OR
- Proof of immunity by titers (Rubeola, Mumps and Rubella). <u>Must include copy of lab report</u>

#### · VARICELLA (Chicken Pox)

- Proof of vaccination (2 doses) OR
- · Proof of immunity by titer. Must include copy of lab report
- · History of Disease is NOT acceptable.

#### · HEPATITIS B

· Proof of immunity by vaccination (3 doses) OR

· Proof of immunity by titer. Must include copy of lab report

#### · TUBERCULIN STATUS

 Annual Tuberculous (TB) status is required. Depending on your past status and testing there are different options.

### · Option 1: Initial Two-Step Skin Test

- This entails (1) receive the test, (2) return 48-72 hours later for reading, (3) wait 1-3 weeks, (4) repeat steps 1 & 2.
- If no history or more than 12 months since last Tb Skin Test # 2 step Tb Skin Test required

#### · Option 2: Annual Skin Test

 If negative TB Test within 12 months # one step Tb Skin Test (for a total of 2 within 12 months)

### · Option 3: QuantiFeron Gold (QFT) Blood Test

 Annual QFT is acceptable in lieu of Tb Skin Test. Like Tb Test, must be within 12 months and be negative

### Option 4: History of Positive Tb Skin Test or QuantiFeron Gold (QFT) Blood Test

- · If History of Positive Tb Skin Test, submit the following:
  - Date of Positive Tb with induration (mm)
  - Proof of chest x-ray
  - Complete Symptom Check Sheet (contact Health Services for form)
- If new positive TB # Follow-up by healthcare provider. Must complete treatment as recommended
- If history of BCG vaccine # TST Skin Testing or QFT as above.
   If negative # OK; If positive # follow up as above.
- American Heart Association Health Care Provider BLS-CPR card (cannot expire while taking courses);
- 7-10 panel Drug Screen done by a certified laboratory. A positive screening result may prevent the student from gaining employment, obtaining state and national certifications, and continuing in the following courses:

NA 105	Nursing Assistant Clinicals	4
NA 109	Phlebotomist Basic	4
NA 110	Electrocardiogram Technician Basic	4
NA 205	Patient Care Technicians Practicum	4
NA 214	Medical Assistant Practicum	6

Additional information regarding specific requirements is available from the program office in DAHL Room 190 and on the program web-page. (https://dacc.nmsu.edu/hca)

### **Criminal History Screening**

Prospective students are required to complete digital fingerprints and receive a clearance letter from the N.M. Department of Health Caregiver Criminal History Screening Program. Past criminal violations may prevent a student from obtaining state and national certification, or from gaining employment in the field, and enrolling in the following courses:

NA 105	Nursing Assistant Clinicals	4
NA 109	Phlebotomist Basic	4
NA 110	Electrocardiogram Technician Basic	4
NA 205	Patient Care Technicians Practicum	4

NA 214

Medical Assistant Practicum

### **Certificates of Completion**

Patient Care Technician (33-37 credits)

Graduates of the Patient Care Technician certificate program may work in a variety of settings, including long-term and acute-care facilities, private homes, clinics, and home care agencies. In most cases, the work involves providing personal care for patients and support services such as drawing blood, operating specialized equipment, and furnishing the results of diagnostic procedures.

Employment opportunities are numerous in Doña Ana County and the surrounding areas. Salaries for those who have completed diverse competencies within the program average well above minimum wage. Once employed, many graduates will find opportunities for on-the-job training and advancement.

Students may use the program as an introduction to other healthcare programs, such as nursing, respiratory therapy, diagnostic medical sonography, and radiologic technology. The program includes classroom theory, laboratory experience, and applied learning in hands-on situations. Because some of the learning takes place off campus, students will need to arrange for their own transportation.

State and/or national certifications are available in certain areas upon successful completion of the courses:

- New Mexico Department of Health—Division of Health Improvement state certification to become a certified nursing assistant
- · National Healthcareer Association EKG technician certification
- National Healthcareer Association phlebotomy technician certification
- National Healthcareer Association Patient Care Technician certification

### **Important Facts About This Certificate Program**

For information concerning the total cost, financing, time to completion, and job placement rates associated with this program, visit the following web page: https://dacc.nmsu.edu/vd/GEI/DA-OHCA-CT/Gedt.html

### **Mandatory Attendance**

Students must attend all class meetings and lab sessions to be eligible for state or national certification testing.

### Nursing Assistant - Certificate of Completion

Nursing Assistant (16 credit hours)

Nursing assistants perform basic nursing functions involving patient care, working under the supervision of a registered nurse, licensed practical nurse, or physician. In general, nursing assistants attend to matters related to personal hygiene, safety, nutrition, exercise, and elimination. Maintaining patient comfort is a priority. Upon successfully completing the course, the student is eligible to take the state nursing assistant exam to become certified as a nursing assistant. Course fee: \$150.

### **Important Facts About This Certificate Program**

For information concerning the total cost, financing, time to completion, and job placement rates associated with this program, visit the following web page: https://dacc.nmsu.edu/vd/GEI/DA-NA-CT/Gedt.html

### **Mandatory Attendance**

Students must attend all class meetings and lab sessions to be eligible for state or national certification testing.

### **Course Completion Certificates**

Alzheimer's/Dementia -(one semester - 3 credit hours)

This course is for specialized nursing assistants that provide personal care for clients with Alzheimer's or dementia in the home or in a long-term care facility. It helps to provide a basic understanding of the changes in memory, communication, function, and behavior that occur as a result of Alzheimer's disease and the appropriate intervention strategies to enhance the client's care.

### Disabilities Support Services (one semester - 4 credit hours)

Disabilities Support Staff provide direct care and support for persons with a wide range of disabilities, including developmental and age-related disabilities. This course helps those already employed in the field of support services to develop skills for job enhancement. Upon completion of this course, graduates are prepared for employment in residential, day habilitation, or vocational program of a community based provider agency.

#### Electrocardiogram Technician (one semester – 4 credit hours)

ECG technician students are trained with 12 lead ECG's, which are tracings of the electrical impulses transmitted by the heart. The technician attaches electrodes to the patient and then operates the ECG machine to obtain a reading. The ECG is printed out for interpretation by the physician. Upon successfully completing this course, students are eligible to take the NHA national exam to become certified electrocardiogram technicians.

### Phlebotomist Basic (one semester – 4 credit hours)

A phlebotomist is a Healthcare Professional that specializes in extracting blood for analysis from patients. Phlebotomists work hand in hand with other Laboratory clinicians in assisting physicians in the diagnosing of diseases and/or disorders. Students are required to complete 30 clinical hours and 50 successful venipunctures. Clinical hours are scheduled individually and separately from class time at laboratory sites. Upon successfully completing the course, the student is eligible to take the NHA national exam to become certified as a phlebotomy technician.

Alzheimers/Dementia Care - Course-Completion Certificate (p. 185)

Disabilities Support Services - Course-Completion Certificate (p. 186)

Electrocardiogram Technician - Course-Completion Certificate (p. 186)

Nursing Assistant - Certificate of Completion (16 credit hours) (p. 186)

Patient Care Technician - Certificate of Completion (38-42 credit hours) (p. 186)

Phlebotomist Basic - Course-Completion Certificate (p. 187)

# NA 101. Nursing Assistant Theory and Lab 6 Credits (5+3P)

Nurse aide skills with emphasis on a bio-psychosocial-cultural approach to client care. Practice of these skills is provided in the laboratory as well as at a clinical site. Successful completion of the course prepares and qualifies the student to take the NACES certification examination. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

**Prerequisite(s)**: (CCDR 110N with C or better OR appropriate placement score) and (CCDE 110N with C or better OR appropriate placement score) and (CCDM 103N with C or better OR appropriate placement score).

## NA 104. Nursing Assistant Fundamentals 3 Credits

This course prepares students for employment as a Nursing Assistant in a Long Term Care Facility. Theory and basic nursing care skills will be taught with an emphasis being placed on the psychosocial-cultural approach to client care. Students will learn communication skills, basic anatomy and physiology, growth and development, infection control, body mechanics, basic nutrition, client/resident elimination needs, the client/resident unit, vital signs, range of motion exercises, bed making, rehabilitation and restorative care, client admission and discharge, common health problems, dealing with death and dying, and basic medical terminology. NA 104 and NA 104L (laboratory) must be successfully completed with a C- or better in order to continue to NA 105 Nursing Assistant Clinical. NA 105 must also be successfully completed with a C- or better to be eligible to take the state certification competency examination. Attendance is required to meet the federal requirements for training hours and content prior to direct contact with a patient/resident and the state competency examination. Restricted to Community Colleges campuses only.

**Prerequisite(s):** Test out of all CCDE and CCDR courses and eligible to take ENGL 111G.

Corequisite(s): NA 104 L.

### NA 104 L. Nursing Assistant Fundamentals Lab 1 Credit

This course prepares students for employment as a Nursing Assistant in a Long Term Care Facility. Students will learn and demonstrate personal care skills including bathing, grooming, dressing, toileting, assisting with eating and hydration, skin care, transfers and positioning. Students will also learn and demonstrate the use of assistive devices, and how to maintain resident safety, dignity and privacy. NA 104 & NA 104L must be successfully completed with a C- or greater in order to continue to NA 105 Clinical. NA 105 must be successfully completed with a C- or greater to be eligible to take the state certification competency examination.

Prerequisite(s)/Corequisite(s): NA 104. Prerequisite(s): English COMPASS score of 35 or greater or CODE 110N, and reading COMPASS score of 55.

score of 35 or greater or CCDE 110N, and reading COMPASS score of 55 or greater or CCDR 105N. Restricted to Community Colleges campuses only.

### NA 105. Nursing Assistant Clinicals 4 Credits (3+3P)

Extension of basic fundamentals of personal care, including theory, skills and clinical experience leading to the certified Nursing Assistant Examination at the conclusion of the semester. Continuation of NA 104. Requires a C or better to pass. Restricted to: Community Colleges only. **Prerequisite(s):** C or better in NA 104 or consent of instructor.

# NA 108. Disabilities Support Services 4 Credits (3+2P)

Beginning level preservice preparation for providing in-home care for individuals with disabilities. Crosslisted with: AHS 108. Restricted to: Community Colleges only.

Prerequisite(s): NA 101 or NA 104 or Consent of Instructor.

### NA 109. Phlebotomist Basic 4 Credits (2+4P)

This course provides the latest information, techniques, skills, and equipment for blood and specimen collection based on the standards of the Clinical and Laboratory Standards Institute, Needlestick Prevention Act, Joint Commission 2008 National Patient Safety Goals, OSHA and CDC. An advanced skills lab is included in the course to provide a "hands-on" practice experience and a 30 hour practicum in a supervised work environment collecting blood and specimens on actual patients for laboratory tests. Attendance is mandatory. Prepares students for employment as a phlebotomist in health care settings. Requires a "C" or better to pass. Upon successful completion of the course, student has the opportunity to test for National Healthcareer Certification. Consent of Instructor required.

**Prerequisite(s)/Corequisite(s):** BIOL 154 or BIOL 226. Restricted to Community Colleges campuses only.

# NA 110. Electrocardiogram Technician Basic 4 Credits (3+3P)

Prepares students for employment as an Electrocardiogram Technician. Includes basic theory of the cardiovascular system, cardiac rhythm interpretation, 12 lead ECG lead placement, and ECG equipment trouble shooting. The course includes an advanced skills laboratory for "handson" practice and 16 hours of supervised clinical in the work environment assisting with ECG testing. Attendance is mandatory. Course requires a grade of "C" or better to pass. Upon successful completion of course, student has the opportunity to test for National Healthcareer Certification. Restricted to Community Colleges campuses only.

Prerequisite(s): BIOL 154 OR BIOL 225 & BIOL 226.

### NA 111. Alzheimer/Dementia Care Focus 3 Credits

Students will learn respectful care of Alzheimer/Dementia persons while ensuring their dignity, maximizing safe independence focusing on strengths and abilities. Pre/

Prerequisite(s)/Corequisite(s): NA 104 or NA 101. Restricted to: Community Colleges only.

### NA 112. Patient Care Assistant 4 Credits (2+4P)

This course prepares students to become patient care assistants (certified nursing assistant [CNA]). The course prepares students in the areas of critical thinking, collaboration with healthcare team members and performance of Certified Nursing Assistant skills within acute care units including: out-patient care unit (pre-operative), medical-surgical unit, orthopedic unit, mother-baby (obstetrics) and the mental health inpatient unit. Lab and clinical time will include learning skills in a practice setting with mannequins and in a hopsital for acute care skill learning and application. Must pass course with a C- or better.

**Prerequisite(s):** NA-101 or current State of New Mexico Certified Nursing Assistant (CNA) certificate (CNA certification must remain current through end of course).

**Corequisite(s):** Current Basic Life Support (BLS) for the Health Care Provider (American Heart Association) (BLS certification must remain current through end of course).

# NA 115. Phlebotomist Technician 6 Credits (3+6P)

Basic theory and skills of phlebotomy following OSHA and Center for Disease Control guidelines. Prepares students for the requirements of testing for the ASCP certification exam and employment in a healthcare organization as a phlebotomist in licensed settings. Laboratory hours include infection control skills & practice, patient assessment & teaching, and practice in venipuncture. Clinical time includes clinical laboratory processes and operations, patient assessment, venipuncture, and exposure to clinical policies and procedures. Upon successful completion students are workforce ready.

**Prerequisite(s)/Corequisite(s):** OEEM 101. Restricted to Community Colleges campuses only.

# NA 204. Patient Care Technician 4 Credits (3+3P)

This course will prepare Certified Nursing Assistants (CNAs) to work in the acute care setting through an expansion of their existing basic skill set. Students will acquire expanded acute care skills, critical thinking skills, and knowledge in caring for patients of all ages. Currently CNA certified. Restricted to Community Colleges campuses only.

Prerequisite(s): (NA 104, NA 105, NA 109, NA 110, AHS 120, and

(BIOL 154 or (BIOL 225 & BIOL 226)).

Corequisite(s): NA 205.

# NA 205. Patient Care Technicians Practicum 4 Credits (1+9P)

This course will prepare Certified Nursing Assistants (CNAs) to work in the acute care setting through an expansion of their existing basic skill set. Students will acquire expanded acute care skills, critical thinking skills, and knowledge in caring for patients of all ages. Students will go to acute care settings to practice newly acquired skills. Must have a "C" or better to pass. Restricted to Community Colleges campuses only.

Prerequisite(s): (NA 104, NA 105, NA 109, NA 110, AHS 120, & (BIOL 154 or (BIOL 225 & BIOL 226))) Currently CNA Certified.

Corequisite(s): NA 204.

# NA 212. Medical Assistant Capstone Course 5 Credits (4+3P)

This course provides the student with entry-level theory and limited "hands-on" training in basic and routine clinical office tasks. The course will equip the Medical Assistant (MA) student with the competencies required to perform in a medical office under the direct supervision of a physician. The graduate will be able to assist the physician with physical exams, ECGs, phlebotomy, and minor surgical procedures. May be repeated up to 5 credits. CNA Certification within the last 5 years. **Prerequisite(s):** NA 105, NA 110, NA 109, AHS 120, BIOL 154, HIT 110, BOT 208, HIT 228, HIT 248, HIT 258.

# NA 214. Medical Assistant Practicum 6 Credits (1+6P)

This course is the practicum for NA 212 Medical Assistant Fundamentals Capstone Course. Students will prepare for a career as a medical assistant in medical offices and clinics. During practicum students will observe and participate in 180 hours in a supervised work environment using knowledge and skills learned in NA 212. This course includes weekly post-practicum conferences with the instructor. The student will be evaluated by both the employer and the instructor. Requires a "C" or better to pass. Upon successful completion the student may be eligible to test for National Certification. May be repeated up to 6 credits. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): NA 212. Prerequisite(s): NA 105, NA 110, NA 109, AHS 120, BIOL 154, HIT 110, BOT 208, HIT 228, HIT 248, HIT 258. CNA Certified within the last 5 years. Restricted to Community Colleges campuses only.

Name: Sheila Fetherlin, Program Director

Office Location: DAHL 191U

Phone: (575) 527-7674

Name: Laura Jarry, Clinical Coordinator

Office Location: DAHL 191V

Phone: (575) 528-7271

Website: https://dacc.nmsu.edu/hca/

## Alzheimer's/Dementia Care - Course-Completion Certificate

### (one semester – 3 credit hours)

This course is for specialized nursing assistants that provide personal care for clients with Alzheimer's or dementia in the home or in a long-term care facility. It helps to provide a basic understanding of the changes in memory, communication, function, and behavior that occur as a result of Alzheimer's disease and the appropriate intervention strategies to enhance the client's care.

### **Program Content**

NA 111	Alzheimer/Dementia Care Focus	3
Total Credits		3

# Disabilities Support Services - Course-Completion Certificate

(one semester – 4 credit hours)

Disabilities Support Staff provide direct care and support for persons with a wide range of disabilities, including developmental and age-related disabilities. This course helps those already employed in the field of support services to develop skills for job enhancement. Upon completion of this course, graduates are prepared for employment in residential, day habilitation, or vocational program of a community based provider agency.

NA 108 Disabilities Support Services 4
Total Credits 4

# Electrocardiogram Technician - Course-Completion Certificate (one semester – 4 credit hours)

ECG technician students are trained with 12 lead ECG's, which are tracings of the electrical impulses transmitted by the heart. The technician attaches electrodes to the patient and then operates the ECG machine to obtain a reading. The ECG is printed out for interpretation by the physician. Upon successfully completing this course, students are eligible to take the NHA national exam to become certified electrocardiogram technicians.

NA 110 Electrocardiogram Technician Basic 4
Total Credits 4

# Nursing Assistant - Certificate of Completion (16 credit hours)

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

Nursing assistants perform basic nursing functions involving patient care, working under the supervision of a registered nurse, licensed practical nurse, or physician. In general, nursing assistants attend to matters related to personal hygiene, safety, nutrition, exercise, and elimination. Maintaining patient comfort is a priority. Upon successfully completing the course, the student is eligible to take the state nursing assistant exam to become certified as a nursing assistant. Course fee: \$150.

### (16 credit hours)

#### **Program Content**

3		
AHS 120	Medical Terminology	3
BIOL 154	Introductory Anatomy and Physiology	4
NA 104	Nursing Assistant Fundamentals	3
NA 104 L	Nursing Assistant Fundamentals Lab	1
NA 105	Nursing Assistant Clinicals	4
OEEM 101	CPR for the Health Care Professional	1
Total Credits		16

# Patient Care Technician - Certificate of Completion (38-42 credit hours)

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### **Certificate of Completion**

Graduates of the Patient Care Technician certificate program may work in a variety of settings, including long-term and acute-care facilities, private homes, clinics, and home care agencies. In most cases, the work involves providing personal care for patients and support services such as drawing blood, operating specialized equipment, and furnishing the results of diagnostic procedures.

Employment opportunities are numerous in Doña Ana County and the surrounding areas. Salaries for those who have completed diverse competencies within the program average well above minimum wage. Once employed, many graduates will find opportunities for on-the-job training and advancement.

Students may use the program as an introduction to other healthcare programs, such as nursing, respiratory therapy, diagnostic medical sonography, and radiologic technology. The program includes classroom theory, laboratory experience, and applied learning in hands-on situations. Because some of the learning takes place off campus, students will need to arrange for their own transportation.

State and/or national certifications are available in certain areas upon successful completion of the courses:

National Healthcareer Association Patient Care Technician certification

### **Important Facts About This Certificate Program**

For information concerning the total cost, financing, time to completion, and job placement rates associated with this program, visit the following web page: https://dacc.nmsu.edu/vd/GEI/DA-OHCA-CT/Gedt.html

### **Mandatory Attendance**

Students must attend all class meetings and lab sessions to be eligible for state or national certification testing.

### **Patient Care Technician (38-42 credits)**

### Core Requirements (7 credits)

ENGL 111G	Rhetoric and Composition <sup>1, 2</sup>	4
MATH 120	Intermediate Algebra <sup>1, 2</sup>	3
or AHS 116	Math for Health Occupations	
<b>Related Requirem</b>	ents (7-11 credits)	
AHS 120	Medical Terminology	3
Choose from the	following:	4-8
BIOL 154	Introductory Anatomy and Physiology <sup>1</sup>	
BIOL 225 & BIOL 226	Human Anatomy and Physiology I and Human Anatomy and Physiology II <sup>1,</sup> <sup>2</sup>	

### Technical Requirements (24 credits)

(= : : : : : : : : : : : : : : : : : : :		
NA 104	Nursing Assistant Fundamentals <sup>2</sup>	3
NA 104 L	Nursing Assistant Fundamentals Lab <sup>2</sup>	1

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NA 105	Nursing Assistant Clinicals <sup>2</sup>	4
NA 109	Phlebotomist Basic <sup>2</sup>	4
NA 110	Electrocardiogram Technician Basic <sup>2</sup>	4
NA 204	Patient Care Technician <sup>2</sup>	4
NA 205	Patient Care Technicians Practicum <sup>2</sup>	4
Total Credits		38-42

- Courses identical to those offered at New Mexico State University (main) Campus.
- Course has a prerequisite. Please consult DACC catalog for more information

# Phlebotomist Basic - Course-Completion Certificate

### (one semester – 4 credit hours)

A phlebotomist is a Healthcare Professional that specializes in extracting blood for analysis from patients. Phlebotomists work hand in hand with other Laboratory clinicians in assisting physicians in the diagnosing of diseases and/or disorders. Students are required to complete 30 clinical hours and 50 successful venipunctures. Clinical hours are scheduled individually and separately from class time at laboratory sites. Upon successfully completing the course, the student is eligible to take the NHA national exam to become certified as a phlebotomy technician.

NA 109	Phlebotomist Basic	4
Total Credits		4

### **Pre-Business**

**Associate Degree: Pre-Business** 

**NOTE**: The DACC Pre-Business program is also described in the *NMSU Undergraduate Catalog*.

The associate of pre-business degree is roughly equivalent to the first 60 credit hours of any bachelor's degree program offered through the College of Business Administration and Economics at NMSU. The DACC associate-degree program includes the general education requirements and lower-division business core.

Students seeking an Accounting degree through the NMSU College of Business Administration and Economics may start with the DACC Pre-Business Degree and transfer to NMSU after completing the Associate Degree.

Pre-Business - Associate Degree (p. 187)

Name: Kim Seifert, Department Chair

Office Location: DAEM 100G

Phone: (575) 527-7560

Website: https://dacc.nmsu.edu/pbiz/

## **Pre-Business - Associate Degree**

### (60 credits)

This program is administered by NMSU College of Business. All courses listed may be applied toward a degree at NMSU.

### **Core Requirements**

	•		
	Area I: Communicati	ons	
	ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
	ENGL 203G	Business and Professional Communication <sup>1</sup>	3
	COMM 253G	Public Speaking <sup>1</sup>	3
	or COMM 265G	Principles of Human Communication	
	Area II: Mathematics		
	MATH 120	Intermediate Algebra <sup>1</sup>	3
	MATH 121G	College Algebra <sup>1</sup>	3
	MATH 142G	Calculus for the Biological and Management Sciences <sup>1,2</sup>	3
	A ST 251G	Statistics for Business and the Behavioral Sciences <sup>2</sup>	3
	or STAT 251G	Statistics for Business and the Behavioral Science	s

Area III: Laboratory Sciences

S	elect two from two	different departments from the following:	8
	ASTR 105G	The Planets	
	or ASTR 110G	Introduction to Astronomy	
	BIOL 101G & 101GL	Human Biology and Human Biology Laboratory	
	BIOL 111G & 111GL	Natural History of Life and Natural History of Life Laboratory	
	C S 171G	Introduction to Computer Science	
	CHEM 110G	Principles and Applications of Chemistry	
	or CHEM 111G	General Chemistry I	
	GEOG 111G	Geography of the Natural Environment	
	or GEOL 111G	Introductory Geology	
	PHYS 110G	The Great Ideas of Physics	
	PHYS 211G & 211GL	General Physics I and General Physics I Laboratory	

Area IV & V: Social/Behavioral Sciences and Humanities/Fine Arts <sup>3</sup>

Select a total of 15 combined credits from Areas IV and V,	
with at least 9 credits in one of the two areas:	
Area IV: Social/Behavioral Sciences: 3	

Select 6-9 credits from the following:

ECON 251G Principles of Macroeconomics <sup>2,4</sup>

ECON 252G Principles of Microeconomics <sup>2,4</sup>

PSY 201G Introduction to Psychology

Approved Social/Behavioral Science Course

Approved Social, Beriavioral Science C

Area V: Humanitie	es and Fine Arts: °		
Select 6-9 credits from the following:			
ART 101G	Orientation in Art		
ART 110G	Visual Concepts		
ENGL 244G	Literature and Culture		
HIST 101G	Roots of Modern Europe		
HIST 102G	Modern Europe		

HIST 201G Introduction to Early American History
HIST 202G Introduction to Recent American History

MUS 101G	An Introduction to Music	
MUS 201G	History of Jazz in Popular Music: A Blending of Cultures	
PHIL 101G	The Art of Wondering	
PHIL 136G	The Quest for God	
PHIL 211G	Informal Logic	
PHIL 223G	Ethics	
THTR 101G	The World of Theatre	
<b>Business Core, Low</b>	er Division	
ACCT 221	Principles of Accounting I (Financial)	3
ACCT 222	Principles of Accounting II (Managerial)	3
BCIS 110	Fundamentals of Information Literacy and Systems	3
or C S 110	Computer Literacy	
BUSA 111	Introduction to Business	3
<b>Approved Electives</b>	5	
Select sufficient ele	ctives to complete a total of 60 credits.	3
Recommended Elect	ives	
MKTG 203	Introduction to Marketing	
MGT 201	Introduction to Management	
FIN 206	Introduction to Finance	
BMGT 231	Legal Issues in Business	
Total Credits		60

- Grade of C or better required.
- Majors in economics must have a final grade of *C* or better in ECON 251G Principles of Macroeconomics, ECON 252G Principles of Microeconomics, and A ST 251G Statistics for Business and the Behavioral Sciences or STAT 251G Statistics for Business and the Behavioral Sciences or equivalent, and MATH 142G Calculus for the Biological and Management Sciences.
- Courses listed are taught at DACC. See these categories listed under "New Mexico Common Core (p. 60)" in the section titled, "Transfer Among New Mexico Institutions of Higher Education (p. 60)," for a comprehensive list.
- Should not be taken until sophomore year.
- Electives chosen in consultation with advisor or satellite center director. In most cases, a maximum of eight applied credits (i.e., credit for technical courses) may be counted toward this degree.

### **Public Health**

**Associate of Public Health Degree** 

The Associate of Public Health (APH) teaches the first four responsibility areas of health education: assessment, planning, implementation, and evaluation of public health programs, to improve the health of our communities.

The associate of public health provides the initial coursework to prepare students for a career in public health. Public health is an exciting area of practice which takes a population-based focus to health. Individuals in this field interpret community data to determine health needs and intervention priorities. In addition to needs assessment, they work with community leaders to plan, implement, and evaluate community health education interventions such as smoking cessation, chronic and infectious disease awareness campaigns, vaccination programs, and family planning and prenatal care initiatives. This program is ideal

for those who like to work with the public, yet who also like to take the broader view of how to promote the health of communities and groups of citizens.

The associate degree program fully articulates with the bachelor of public health program offered at NMSU-Las Cruces campus in the Department of Public Health Science (https://publichealth.nmsu.edu), which also offers the master of public health at the graduate level. The courses in this associate of public health curriculum at DACC will meet the majority of NMSU's General Education degree requirements and are designed to give students a full overview of public health and community health education. There are no special admissions criteria for this program, but prospective majors should arrange an initial degree advising session with a public health faculty member in the Arts, Humanities and Social Sciences Division. The faculty member will also be able to advise students regarding choices for elective courses.

Community Health Worker Certificate - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

The sixteen-credit Community Health Worker (CHW) certificate is embedded within the DACC Associate of  $\,$ 

Public Health. The Community Health Worker certificate will train students to have a basic understanding of key public health issues like maternal and child health, chronic disease and environmental health. The program includes competencies such as: effective communication, interpersonal skills, health coaching, service coordination, capacity building, advocacy, community health outreach, and community knowledge and assessment.

**NOTE:** The Associate Degree in Public Health and the Community Health Worker Certificate may be obtained entirely online.

Visit the public health program website here. (https://dacc.nmsu.edu/hlth)

Public Health - Associate Degree (p. 189)

Community Health Worker - Certificate (p. 190)

## CHSS 101. Overview of Health and Community Services 3 Credits

Health and community service professions with emphasis on public health, community health education, and environmental/occupational health.

# CHSS 299. Service Learning Experience in Human and Community Services

### 3 Credits

Exploration of contemporary social, civic, economic and ethical problems that require student participation in collaborative efforts within the community. Requires 30 clock hours of community based service for each credit. Graded: S/U. Contact instructor for approval.

**Prerequisite(s):** CHSS 101, HL S 150 and HL S 275 or consent of instructor.

Corequisite(s): HL S 295 or CHSS 216.

### PHLS 150G. Personal Health and Wellness

### 3 Credits

A holistic and multi-disciplinary approach towards promoting positive lifestyles. Special emphasis is placed on major problems that have greatest significance to personal and community health. Topics to include nutrition, stress management, fitness, aging, sexuality, drug education, and others.

### PHLS 275. Foundations of Health Education 3 Credits

Role and responsibility of the health educator with emphasis on small group dynamics, oral and written communication skills, building community coalitions and an introduction to grant writing. Taught with PHLS 375. Cannot receive credit for both PHLS 275 and PHLS 375. May be repeated up to 3 credits.

Prerequisite(s): PHLS 150G, or consent of instructor.

### PHLS 295. Essentials of Public Health

#### 3 Credits

The course will focus on principles and major areas if public health, including ecological and total personal concept of health care system, epidemiological approaches to disease prevention and control . Consent of Instructor required.

Name: Becky Corran, Department Chair

Office Location: DACC East Mesa Campus, DAAR 100D

Phone: (575) 528-7033

Website: https://dacc.nmsu.edu/hlth/

Name: Amy Collins, Professor

Office Location: DACC Espina Campus, DASH 99

Phone: (575) 528-7068

Website: https://dacc.nmsu.edu/hlth/

# **Public Health - Associate of Public Health**

### (60 credits)

### **Core Requirements**

Area I: Communications		
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
ENGL 203G	Business and Professional Communication <sup>1</sup>	3
or ENGL 211G	Writing in the Humanities and Social Sciences	
or ENGL 218G	Technical and Scientific Communication	
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
Area II: Mathematics	3	
MATH 120	Intermediate Algebra <sup>1,2,3</sup>	3
or MATH 121G	College Algebra	
or MATH 142G	Calculus for the Biological and Management Sciences	
or STAT 251G	Statistics for Business and the Behavioral Science	es
Area III: Laboratory S	Sciences	
Select two from two	o different departments from the following:	8

ASTR 105G	The Planets <sup>1</sup>	
or ASTR 110G	Introduction to Astronomy	
BIOL 101G	Human Biology	
& 101GL	and Human Biology Laboratory <sup>1</sup>	
	Natural History of Life	
& 111GL	and Natural History of Life Laboratory	
	Cellular and Organismal Biology	
& 211GL C S 171G	and Cellular and Organismal Biology Laboratory Introduction to Computer Science <sup>1</sup>	
CHEM 110G	Principles and Applications of Chemistry	
CHLWTTOG	1	
or CHEM 111G	General Chemistry I	
GEOG 111G	Geography of the Natural Environment <sup>1</sup>	
GEOL 111G	Introductory Geology <sup>1</sup>	
or GEOL 212G	The Dynamic Earth	
PHYS 110G	The Great Ideas of Physics <sup>1</sup>	
or PHYS 211G	General Physics I	
& 211GL	and General Physics I Laboratory	
Areas IV & V: Social/E Fine Arts <sup>6</sup>	Behavioral Sciences and Humanities and	
PHLS 150G	Personal Health and Wellness <sup>1</sup>	3
Select a total of 12 a	additional credits from Areas IV and V:	12
Area IV: Social/Be	ehavioral Sciences - Select 3-6 credits	
from the following	•	
AG E 210G	Survey of Food and Agricultural Issues 1	
ANTH 120G	Human Ancestors <sup>1</sup>	
ANTH 125G	Introduction to World Cultures	
ANTH 201G	Introduction to Anthropology	
ANTH 202G	World Archaeology	
ANTH 203G	Introduction to Language and Cultural Anthropology <sup>1</sup>	
C EP 110G	Human Growth and Behavior <sup>1</sup>	
C J 101G	Introduction to Criminal Justice <sup>1</sup>	
ECON 201G	Introduction to Economics <sup>1</sup>	
ECON 251G	Principles of Macroeconomics <sup>1</sup>	
ECON 252G	Principles of Microeconomics <sup>1</sup>	
GEOG 112G	World Regional Geography <sup>1</sup>	
GEOG 120G	Culture and Environment <sup>1</sup>	
GOVT 100G	American National Government <sup>1</sup>	
GOVT 110G	Introduction to Political Science 1	
GOVT 150G	American Political Issues <sup>1</sup>	
GOVT 160G	International Political Issues 1	
JOUR 105G	Media and Society <sup>1</sup>	
LING 200G	Introduction to Language 1	
PSY 201G	Introduction to Psychology I	
SOC 101G	Introductory Sociology 1	
SOC 201G	Contemporary Social Problems 1	
S WK 221G	Introduction to Social Welfare 1	
W S 201G	Introduction to Women s Studies 1	
W S 202G	Representing Women Across Cultures <sup>1</sup>	
Area V: Humanitie the following:	es and Fine Arts - Select 6-9 credits from	
ART 101G	Orientation in Art 1	
ART 110G	Visual Concepts <sup>1</sup>	

DANC 101G	Dance Appreciation <sup>1</sup>	
ENGL 116G	Perspectives on Film 1	
ENGL 244G	Literature and Culture <sup>1</sup>	
HIST 101G	Roots of Modern Europe 1	
HIST 102G	Modern Europe <sup>1</sup>	
HIST 201G	Introduction to Early American History <sup>1</sup>	
HIST 202G	Introduction to Recent American History	
MUS 101G	An Introduction to Music <sup>1</sup>	
MUS 201G	History of Jazz in Popular Music: A Blending of Cultures <sup>1</sup>	
PHIL 101G	The Art of Wondering <sup>1</sup>	
PHIL 136G	The Quest for God <sup>1</sup>	
PHIL 201G	Introduction to Philosophy <sup>1</sup>	
PHIL 211G	Informal Logic <sup>1</sup>	
PHIL 223G	Ethics <sup>1</sup>	
THTR 101G	The World of Theatre <sup>1</sup>	
<b>Related Requireme</b>	nts	
Select 12 credits of	electives from the following:	12
AHS 120	Medical Terminology	
AHS 202	Legal and Ethical Issues in Health Care	
ANTH 120G	Human Ancestors <sup>1</sup>	
BIOL 154	Introductory Anatomy and Physiology <sup>1</sup>	
BIOL 221	Introductory Microbiology <sup>1</sup>	
BIOL 225	Human Anatomy and Physiology I <sup>1</sup>	
BIOL 226	Human Anatomy and Physiology II <sup>1</sup>	
CAST 201	Introduction to Child Advocacy	
C EP 110G	Human Growth and Behavior <sup>1</sup>	
C EP 210	Educational Psychology <sup>1</sup>	
COLL 101	College/Life Success	
DHYG 225	Dental Public Health Education	
ENGL 203G	Business and Professional Communication <sup>1</sup>	
FCS 181	Interpersonal Skills in Intimate Relationships	
HNDS 251	Human Nutrition <sup>1</sup>	
JOUR 105G	Media and Society <sup>1</sup>	
SOC 201G	Contemporary Social Problems <sup>1</sup>	
S WK 221G	Introduction to Social Welfare <sup>1</sup>	
STAT 251G	Statistics for Business and the Behavioral Sciences <sup>1,3</sup>	
Technical Requiren	nents <sup>4</sup>	
CHSS 101	Overview of Health and Community Services <sup>1</sup>	3
CHSS 299	Service Learning Experience in Human and Community Services <sup>1</sup>	3
PHLS 275	Foundations of Health Education <sup>1,5</sup>	3
PHLS 295	Essentials of Public Health <sup>1</sup>	3

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

**Total Credits** 

- While MATH 120 Intermediate Algebra meets this program's core requirements, it does not satisfy the New Mexico General Education Common Core.
- Students transferring to the BPH degree program are required to take STAT 251G Statistics for Business and the Behavioral Sciences and receive a minimum grade of B.
- A grade of C- or better is required in all courses listed under Technical Requirements. The CHSS and PHLS courses listed here may be applied toward the bachelor's degree program in Public Health at NMSTI
- <sup>5</sup> PHLS 275 Foundations of Health Education is a prerequisite for this
- Student must have at least nine credits in either Area IV or Area V

# Community Health Worker - Certificate

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

Note: The Community Health Worker Certificate may be obtained entirely online.

# Community Health Worker Certificate (16 credits)

NOTE: All of the acquired coursework is accepted for full credit towards Associate of Public Health at DACC.

CHSS 101	Overview of Health and Community Services <sup>1</sup>	3
CHSS 299	Service Learning Experience in Human and Community Services <sup>1</sup>	3
NOTE: CHSS 299 Effective Spring 2	Will be a Variable Credit Hour Course (1-4) 018	1
PHLS 275	Foundations of Health Education <sup>1</sup>	3
PHLS 150G	Personal Health and Wellness <sup>1</sup>	3
COMM 265G	Principles of Human Communication <sup>1</sup>	3
Total Credits		16

All courses are available online or on-campus

# Radiologic Technology

**Associate Degree: Radiologic Technology** 

**Certificate of Completion: Computed Tomography** - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

Radiologic Technologists are an important part of the medical team. They produce medical images (radiographs), carry out diagnostic procedures, determine safe radiation exposure limits, and collect technical data necessary to assess client (patient) status. Job prospects in the Las Cruces/El Paso area are occasionally limited, but nationwide there is faster-than-average job growth with many opportunities for persons seeking entry-level positions.

Students in the Radiologic Technology program receive training both in the classroom and in clinical settings, where they work alongside nurses, physicians, and other health-care professionals. In the classroom, students learn about the anatomy and function of the human body, radiographic physics and equipment, and radiographic procedures. Students acquire skills in radiation protection for the patient and for the health professional. Laboratory activities teach the proper positioning of an injured or ill patient. Clinical work offers students training in diagnostic radiology and introduces the student to various other imaging modalities. The clinical work is offered in Las Cruces, Alamogordo, Artesia, Carlsbad, Deming, Ruidoso, Silver City, and El Paso.

Graduates of the program are eligible to take (and must pass) the American Registry of Radiologic Technologists (ARRT) national certification exam in order to obtain employment in this field. It should be noted that felony or misdemeanor convictions may make a student ineligible to take the ARRT exam. Many states also require a license to practice as a radiographer in that state. Continuing education is required with both the ARRT and state licenses to retain current certification status. Recertification is required every ten (10) years in order to maintain ARRT national certification.

The DACC Radiologic Technology program is fully accredited by the Joint Review Committee on Education in Radiologic Technology.

### **Special Admissions Criteria**

Radiologic Technology is a limited-entry program. Prior to applying to the program, students will have taken all program Core and Related Requirements. The following items are among the criteria considered in the selection of program applicants:

- Minimum overall college GPA depends on TEAS assessment (3.0 with > 60% of TEAS or 3.25 with < 60% on TEAS)</li>
- TEAS assessment test
- GPA in Core and Related Requirements courses
- · County of residence
- · Completion of advanced science or math courses
- · Second or third application with a 3.45 GPA
- Students must pass background check, FBI fingerprint and drug screen
- Successful completion of interview process

A complete list is included in the application packet, available at the Health and Public Services Office in room DAHL-190 (575) 527-7630.

### **Required Skills and Abilities**

Students should be able to demonstrate good oral expression (speech clarity), written comprehension, near vision, critical thinking skills, and physical stamina (e.g., the ability to stand for long periods of time, manipulate radiographic equipment, and move/lift patients).

### **DACC Radiologic Technology Mission**

The mission of the DACC Radiologic Technology Program is to provide the student with the academic knowledge and clinical skills necessary to attain eligibility for certification and meaningful employment in the diagnostic imaging profession.

**NOTE:** Students in the Radiologic Technology program are required to complete and pass a security background check, FBI fingerprinting, and drug screening in order to participate in clinical education classes. Past

criminal violations may prevent a student from completing the degree and gaining employment in the field.

# Certificate Program in Computed Tomography

Computed Tomography (CT) is a branch of radiology that employs specialized radiography equipment to produce sectional images of the human anatomy. The CT technologist performs various diagnostic procedures under the supervision of a licensed radiologist or in most cases, a licensed technologist. In order to produce quality images, the CT technologist must be able to work effectively with patients and health professionals, operate sophisticated computer equipment, and observe radiation protection measures. Job prospects in the Las Cruces/El Paso area are occasionally limited, but nationwide there is faster-than-average job growth with many opportunities for persons seeking entry-level positions.

Graduates of the program are eligible to take the American Registry of Radiologic Technologists (ARRT) National Computed Tomography Certification Exam. It should be noted that felony or misdemeanor convictions may make a student ineligible to take the ARRT exam. Many states also require a license to practice as a radiographer in that state. Continuing education is required with both the ARRT and state licenses to retain current certification status.

### **Special Admission Requirements**

In order for students to be admitted to the CT program they must be certified by the American Registry of Radiologic Technologists (ARRT) in Radiologic Technology, Radiation Therapy, or Nuclear Medicine. Nuclear medicine technologists may also be certified by the ARRT or by the Nuclear Medicine Technologist Certification Board (NMTCB). The program is offered online in order to allow students from all over New Mexico and other parts of the country to enroll. Each cohort of students admits up to 22 students per new class offering. The student must have a minimum overall college GPA of a 3.0.

**NOTE:** Students in the Computed Tomography program are required to complete and pass a security background check, FBI fingerprinting, and drug screening in order to participate in clinical education classes. Past criminal violations may prevent a student from completing the degree and gaining employment in the field.

### Required Skills and Abilities

The student will acquire and develop the education and skills necessary to perform as an entry-level computed tomography technologist.

The student will develop learning habits that will demonstrate a commitment to professional and personal growth by participating in professional activities and continuing education.

The student will understand and apply methods for effective problem solving, critical thinking, and communication skills.

### **Important Facts About This Certificate Program**

For information concerning the total cost, financing, time to completion, and job placement rates associated with this program, visit the following web page: https://dacc.nmsu.edu/vd/GEI/DA-CTOM-CT/Gedt.html

Radiologic Technology - Associate Degree (p. 193)

Computed Tomography - Certificate of Completion (p. 193)

### RADT 100. Introduction to Radiologic Technology and Patient Care 2 Credits

Overview of the profession, including ethics, terminology, and basic radiation protection. Addresses basic and specialized procedures and topics related to the care of the patient. Restricted to: Community Colleges only. Restricted to Majors.

### RADT 101. Radiographic Positioning I 4 Credits (2+6P)

Covers radiographic procedure and positioning concepts, techniques, terminology, and mechanics related to the thorax, abdomen, extremities, spine and pelvis. Includes positioning lab and clinical observation.

### RADT 102. Radiographic Positioning II 4 Credits (2+6P)

Continuation of RADT 101. Includes skull, gastrointestinal, urinary, reproductive, biliary systems, and more advanced skeletal positions. Includes positioning lab and clinical observation. Restricted to: Community Colleges only. Restricted to Majors.

Prerequisite: RADT 101.

### RADT 103. Introduction to Radiographic Imaging 3 Credits (2+2P)

Provides the student with an in-depth knowledge of radiographic exposure technique and the factors affecting radiographic film quality. Includes lab experiments. Restricted to majors.

### **RADT 104. Special Radiologic Modalities** 2 Credits

Discussion of various special procedures used in medical imaging such as, angiography, ultrasound, computerized tomography, magnetic resonance imaging, digital imaging, nuclear medicine, radiation therapy, etc. Includes guest lectures and field trips.

Prerequisite: RADT 103.

### RADT 105. Radiographic Physics and Equipment 3 Credits

Fundamentals of rad physics. Includes electromagnetism, x-ray production and interactions, x-ray circuitry, tubes, grids, screens, AES, fluoroscopic and portable units, beam restricting devices, calibration and quality assurance/control. Overview of mammography, US, CT, MRI, and digital radiography. Restricted to: Community Colleges only. Restricted to

Prerequisite: RADT 103 or consent of instructor.

### RADT 110. Radiographic Pathology

Overview of pathology demonstrated by radiographic procedures. Restricted to majors.

Prerequisite: RADT 154.

### **RADT 154. Radiographic Anatomy and Physiology** 3 Credits

Basic A&P for radiographic application. Includes a systems approach to body structures and organs as they relate to anatomical projections, radiographic identification, and various imaging modalities. Restricted to: RADT majors. Restricted to: Community Colleges only.

Prerequisite(s): AHS 153 or AHS 140 or BIOL 225 or BIOL 154, or consent of instructor.

### **RADT 156. Independent Study**

Individual studies/research on topics related to the radiological sciences. May be repeated for a maximum of 6 credits. Restricted to: Community Colleges only.

### **RADT 190. CT Equipment and Methodology**

#### 3 Credits

Skill development in the operation of computed tomographic equipment, focusing on routine protocols, image quality, and quality assurance and radiation protection. May be repeated up to 3 credits. Restricted to: CTOM or RADT majors. Restricted to Community Colleges campuses only.

### **RADT 200. Radiation Biology and Protection**

#### 2 Credits

Biological effects of ionizing radiation on cells and tissues. Includes radiation measurements, policies and protection measures for self, patients, and others. Restricted to majors. Restricted to: Community Colleges only.

Prerequisite(s): RADT 103.

### **RADT 201. Clinical Education I**

#### 9 Credits

Supervised practice in a radiology department under direct supervision of a registered technician. Includes film critiques. Community Colleges Only. Restricted to: RADT, OERT majors. Restricted to Community Colleges campuses only.

Prerequisite(s): RADT 105.

### **RADT 202. Clinical Education II**

#### 12 Credits

Continuation of RADT 201. Student will work under indirect supervision of registered personnel. Restricted to: RADT, OERT majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OERT 201.

### **RADT 203. Clinical Education III**

### 11 Credits

Continuation of RADT 202. May be repeated up to 11 credits. Restricted to: RADT, OERT majors. Restricted to Community Colleges campuses only. Prerequisite(s): RADT 202.

### RADT 205. Radiographic Image Critique

#### 1 Credit

Review of radiographs produced in clinical settings to evaluate anatomy and technical issues. Restricted to majors.

Prerequisite: RADT 201.

### **RADT 206. Applied Radiographic Procedures**

#### 2 Credits (1+3P)

Advanced course which integrates the principles and techniques of radiologic technology. Restricted to majors.

Prerequisite: RADT 202.

### RADT 207. Cross Sectional Anatomy for Medical Imaging 3 Credits

Anatomic relationships that are present under various sectional orientations as depicted by computed tomography or magnetic resonance imaging. May be repeated up to 3 credits. Restricted to: CTOM or RADT majors. Restricted to Community Colleges campuses only.

### RADT 208. Clinical I (Computed Tomography)

### 3 Credits

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinic professional. May be repeated up to 3 credits. Restricted to: RADT or CTOM majors. Restricted to Community Colleges campuses only.

## RADT 209. Clinical II (Computed Tomography) 3 Credits

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinic professional. (Capstone Course). May be repeated up to 3 credits. Restricted to: CTOM or RADT majors. Restricted to Community Colleges campuses only.

Name: Annja Cox, MA, RT (R) Radiologic Technology Program Director

Office Location: DAHL 190E

Phone: (575) 527-7581 Email: acox@nmsu.edu ()

Website: https://dacc.nmsu.edu/radt/

# **Computed Tomography - Certificate of Completion**

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (18 credits)

NOTE: Computed Tomography majors must obtain a *C* or better in all required courses to graduate.

### **Related Requirements**

**BIOL 225** 

	, , ,	
RADT 100	Introduction to Radiologic Technology and Patient Care	2
<b>Technical Require</b>	ments	
RADT 190	CT Equipment and Methodology	3
RADT 207	Cross Sectional Anatomy for Medical Imaging	3
RADT 208	Clinical I (Computed Tomography)	3
RADT 209	Clinical II (Computed Tomography)	3
Total Credits		18

Human Anatomy and Physiology I

### Radiologic Technology - Associate Degree

### (77 credits)

**NOTE**: To graduate, Radiologic Technology majors must earn a *C* or better in all RADT courses; however, the students most likely to be competitive in the admissions process will have earned a *B* or better in their prerequisites.

### **Core Requirements**

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
MATH 120	Intermediate Algebra <sup>1</sup>	3
PSY 201G	Introduction to Psychology <sup>1</sup>	3
or SOC 101G	Introductory Sociology	
Related Requirements		
CHEM 110G	Principles and Applications of Chemistry	4

BIOL 225	Human Anatomy and Physiology I <sup>1</sup>	4
<b>Technical Requir</b>	rements <sup>2</sup>	
RADT 100	Introduction to Radiologic Technology and Patient Care	2
RADT 101	Radiographic Positioning I	4
RADT 102	Radiographic Positioning II	4
RADT 103	Introduction to Radiographic Imaging	3
RADT 104	Special Radiologic Modalities	2
RADT 105	Radiographic Physics and Equipment	3
RADT 110	Radiographic Pathology	1
RADT 154	Radiographic Anatomy and Physiology	3
RADT 200	Radiation Biology and Protection	2
RADT 201	Clinical Education I	9
RADT 202	Clinical Education II	12
RADT 203	Clinical Education III	11
RADT 205	Radiographic Image Critique	1
RADT 206	Applied Radiographic Procedures	2
RADT 156	Independent Study (optional)	
Total Credits		77

- Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.
- All RADT classes are restricted to students who have completed the Core and Related Requirements and have been accepted into the Radiologic Technology Program.

### **Respiratory Therapy**

### **Associate of Applied Science Degree**

Respiratory Therapy is an allied health specialty encompassing the diagnosis, treatment, management and prevention of problems affecting the respiratory and cardiovascular system.

Respiratory Therapy practitioners work side-by-side with physicians, and other healthcare professionals in the hospital setting. They set up oxygen, perform pulmonary function testing, set up and maintain ventilators, administer respiratory drugs, and evaluate patient health status.

Respiratory therapy is a rapidly growing, people-oriented profession. The demand for practitioners is increasing in New Mexico and throughout the United States. While most graduates continue to find employment in hospitals, opportunities are opening up with medical equipment suppliers and agencies providing home health care to pulmonary patients.

The Respiratory Therapy program at Doña Ana Community College is a full-time program that leads to an associate of applied science degree. Through classroom instruction and laboratory practice, students develop the knowledge needed to care for patients. They acquire additional hands-on experience in the clinical setting at surrounding hospitals.

The curriculum and clinical hour content is based on the National Standard Curriculum from the American Association of Respiratory Therapy (AARC) and the national accrediting body, the Commission on Accreditation for Respiratory Care.

Commission on Accreditation for Respiratory Care (CoARC) 1228 Harwood Rd. Bedford, TX 76021

Phone: (817) 283-2835

www.coarc.com (http://www.coarc.com)

The Respiratory Therapy Program is also accredited by the Commission on Accreditation for Respiratory Care. The program is designed to prepare students to have mastered competency in assessment, diagnosis and treatment of the cardiopulmonary patient. Upon completion of the program graduates are eligible to sit for their national licensure certification and registry examinations.

### **Required Skills and Abilities**

Students should be able to demonstrate good oral expression (speech clarity) and written comprehension, critical thinking skills, the ability to hear through a stethoscope or augmented listening device, and physical stamina (e.g., the ability to stand for long periods of time, manipulate respiratory therapy equipment, and move/lift patients and equipment up to 50 pounds, unassisted).

### **Program Admissions Criteria**

Respiratory Therapy is a limited-entry program. The following items are among the criteria are used in the selection of successful program applicants:

- · Health Occupations Basic Entrance Test scores care curriculum
- · Cumulative GPA of 3.0 or better
- · Science GPA of 2.7 or better
- · Completion of the following courses:

ENGL IIIG	Rnetoric and Composition	4
CHEM 110G	Principles and Applications of Chemistry <sup>1</sup>	4
MATH 120	Intermediate Algebra <sup>1</sup>	3
AHS 120	Medical Terminology	3
BIOL 221 & 221 L	Introductory Microbiology and Introductory Microbiology Laboratory <sup>1</sup>	4
BIOL 225	Human Anatomy and Physiology I <sup>1</sup>	4
BIOL 226	Human Anatomy and Physiology II <sup>1</sup>	4

Photoric and Composition 1

A complete list is included in the application packet, available at the Respiratory Therapy program office in room DAHL-191; Phone: (575) 527-7607.

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

# Requirements to Participate in Clinical Practice

Clinical coursework is required for completion of this program. Upon admittance and throughout the program, students will be required to meet requirements of each clinical site in order to complete the required coursework. Requirements include but are not limited to the following:

- Background check and fingerprinting through the designated college affiliate (adverse findings may disqualify a student from continuing in the program)
- 2. Current CPR certification
- 3. Current TB test
- 4. Record of current tuberculin, rubella, tetanus, varicella, and Hepatitis B immunizations, or titers.

### 5. Drug screening

**NOTE:** There are two established cut scores for the Therapist Multiple-Choice Examination. If a candidate achieves the lower cut score, (s)he will earn the CRT credential. If a candidate achieves the higher cut score, (s)he will earn the CRT credential **and** become eligible for the Clinical Simulation Examination (provided that those eligibility requirements are met and the candidate is eligible to earn the RRT credential). The CRT and/or RRT credentials are used as the basis for the licensure.

### Course Fees

In addition to tuition, a fee of \$120 is charged for each of the following courses:

RESP 110 L	Respiratory Therapy I Lab	2
RESP 120 L	Respiratory Therapy II Lab	2
RESP 230 L	Respiratory Therapy V Lab	2
RESP 240 L	Respiratory Therapy VI Lab	2

Respiratory Therapy - Associate of Applied Science (p. 195)

### RESP 110. Respiratory Therapy I

#### 3 Credits

Introduction to basic respiratory care techniques. Includes history, professional organizations, medical gas administration, oxygen therapy, cardiopulmonary AP, patient assessments, and medical terminology. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

# RESP 110 L. Respiratory Therapy I Lab 2 Credits

Laboratory practice of basic respiratory care procedures. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

# RESP 115. Respiratory Therapy Pharmacology 3 Credits

Concepts of physics as they apply to the physiology of the lungs. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

# RESP 120. Respiratory Therapy II 4 Credits

Advanced respiratory care techniques. Emphasis on airway management, aerosol treatment, chest physiotherapy, pharmacology, posture pressure breathing, and pulmonary rehabilitation. Requires a C or better to remain in program. May be repeated up to 4 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): Admission to program and RESP 110. Corequisite(s): RESP 120 L.

# RESP 120 L. Respiratory Therapy II Lab 2 Credits

Continuation of lab practices and procedures learned in RESP 120, Respiratory Care II, using equipment and simulations. Requires a C or better to remain in program. Corequisite(s):RESP 120. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, RESP 110, RESP 110L and RESP 112

### **RESP 124. Respiratory Therapy II Clinical**

#### 3 Credits

Supervised practice and application in a hospital setting. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

**Prerequisite(s):** Admission to program, RESP 110, RESP 110L and RESP 112.

Corequisite(s): RESP 120 and RESP 120L.

### **RESP 155. Respiratory Therapy Special Topics**

#### 1-4 Credits

Topics to be announced in the Schedule of Classes. May be repeated for a maximum of 10 credits. Consent of instructor required. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program.

### **RESP 210. Respiratory Therapy III**

#### 2 Credits

Introduction to adult, mechanical, neonatal ventilator theory and concepts of critical care medicine. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

**Prerequisite(s):** Admission to program, and RESP 115, RESP 120, RESP 120L, and RESP 124.

Corequisite(s): RESP 210L.

### RESP 210 L. Respiratory Therapy III Lab

#### 2 Credits

Advanced practice procedures using mechanical ventilation devices. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, and RESP 115, RESP 120,

RESP 120 L, and RESP 124. **Corequisite(s):** RESP 210.

### **RESP 224. Respiratory Therapy IV Clinical**

### 3 Credits

Continuation of RESP 124. Emphasis on mechanical ventilators. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, and RESP 115, RESP 120,

RESP 120 L, and RESP 124.

### RESP 230. Respiratory Therapy V

### 3 Credits

Continuation of RESP 215. Emphasis on special modalities. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

### RESP 230 L. Respiratory Therapy V Lab

#### 2 Credits

Advanced practice and procedures of respiratory care. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

### RESP 233. Respiratory Therapy Cardiopulmonary

#### 2 Credits

Concepts of physics as they apply to the physiology of the lung. Emphasis on laws pertaining to gas flow, humidity, and the mechanics of the breathing process. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

### RESP 234. Respiratory Therapy V Clinical

#### 3 Credits

Continuation of RESP 214. Emphasis on special modalities. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

### **RESP 240. Respiratory Therapy VI**

#### 3 Credits

Advanced theory of hemodynamics, neonate, pediatric, and new specialties that apply to respiratory care. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, and RESP 230, RESP 230L,

RESP 233 and RESP 234. **Corequisite(s):** RESP 240L.

### RESP 240 L. Respiratory Therapy VI Lab

#### 2 Credits

Advanced laboratory practice and procedures. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, and RESP 230, RESP 230L,

RESP 233 and RESP 234. **Corequisite(s):** RESP 240.

### RESP 242. Pediatric Advanced Life Support (PALS)

#### 1 Credit

Etiology, diagnosis, clinical manifestations, and management of cardiopulmonary disorders related to respiratory care. Restricted to majors.

Corequisite: RESP 230.

### RESP 243. Respiratory Therapy Neonatal Resuscitation

### 1 Credit

Advanced practice of the neonatal resuscitation and certification. Restricted to: Community Colleges only. Restricted to RESP majors. **Prerequisite(s)**: Admission to program and RESP 230, RESP 230L,

RESP 233, and RESP 234.

Corequisite(s): RESP 240 and RESP 244.

### **RESP 244. Respiratory Therapy VI Clinical**

### 3 Credits

Clinical experience on special modalities. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, and RESP 230, RESP 230L,

RESP 233 and RESP 234. **Corequisite(s):** RESP 240.

### **RESP 255. Respiratory Therapy Special Topics**

#### 1-4 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 4 credits. Consent of instructor required. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program.

Name: Virginia Durant, Program Director

Office Location: DAHL 191H

Phone: (575) 527-7607

Website: https://dacc.nmsu.edu/resp/

# **Respiratory Therapy - Associate of Applied Science**

### (79 credits)

ENGL 111G

NOTE: Respiratory Therapy majors must earn a  $\mathcal C$  or better in all Respiratory Therapy and related courses in order to remain in the program. In addition to the requirements listed here, certain Special Topics and Independent Study courses may be recommended by the advisor.

**Rhetoric and Composition** 

### **General Education Requirements**

ENGL IIIG	Rifetoric and Composition	4
Select one from th	ne following:	3
BMGT 240	Human Relations	
COMM 265G	Principles of Human Communication <sup>1</sup>	
PSY 201G	Introduction to Psychology <sup>1</sup>	
SOC 101G	Introductory Sociology 1	
<b>Related Requirem</b>	ents	
AHS 120	Medical Terminology	3
BIOL 221 & 221 L	Introductory Microbiology and Introductory Microbiology Laboratory <sup>1</sup>	4
BIOL 225	Human Anatomy and Physiology I	4
BIOL 226	Human Anatomy and Physiology II	4
C S 110	Computer Literacy <sup>1</sup>	3
or OECS 105	Introduction to Information Technology	
CHEM 110G	Principles and Applications of Chemistry	4
MATH 120	Intermediate Algebra <sup>1</sup>	3
<b>Technical Require</b>	ments <sup>2</sup>	
Select one from th	ne following:	3
BIOL 227	Pathophysiology <sup>1</sup>	
HIT 140	Health Information Introduction to Pathophysiology	
OEEM 201	Human Pathophysiology	
RESP 110	Respiratory Therapy I	3
RESP 110 L	Respiratory Therapy I Lab	2
RESP 115	Respiratory Therapy Pharmacology	3
RESP 120	Respiratory Therapy II	4
RESP 120 L	Respiratory Therapy II Lab	2
RESP 124	Respiratory Therapy II Clinical	3
RESP 210	Respiratory Therapy III	2
RESP 210 L	Respiratory Therapy III Lab	2
RESP 224	Respiratory Therapy IV Clinical	3
RESP 230	Respiratory Therapy V	3
RESP 230 L	Respiratory Therapy V Lab	2
RESP 233	Respiratory Therapy Cardiopulmonary	2
RESP 234	Respiratory Therapy V Clinical	3
RESP 240	Respiratory Therapy VI	3
RESP 240 L	Respiratory Therapy VI Lab	2
RESP 242	Pediatric Advanced Life Support (PALS)	1
RESP 243	Respiratory Therapy Neonatal Resuscitation	1
RESP 244	Respiratory Therapy VI Clinical	3
Total Credits		79

- Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.
- All RESP classes are restricted to students who have been accepted into the Respiratory Therapy program.

# Water Technology EPA State Environmental Training

Associate of Water Technology Degree

**Program** 

**Certificate of Completion** - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

The Water Technology program is an award-winning, up-to-date technical training opportunity that will open doors to a career anywhere in the United States. Graduates of this program have found work in New Mexico, Colorado, Texas, Arizona, California, Vermont, New Hampshire, Iraq, and Puerto Rico. More than 400 graduates have begun careers in the water field, working in such diverse areas as the semiconductor industry, the food processing industry, aerospace industry, electrical power industry, city water and wastewater departments, municipal or contract analytical laboratories, water reuse or recycling plants, metal plating companies, engineering consulting firms, and state planning offices.

While jobs are widely available, training programs like this one are rare. As the treatment of water becomes more technical, municipalities and industries rely on training programs to fill their needs. Students in this program learn how to clean water to make it safe for drinking and how to purify water to a high quality for use in computer chip manufacturing, food processing, or steam generation. They will also learn how to treat wastewater so it can be safely returned to the environment or reclaimed for beneficial use. Instruction also includes maintaining equipment such as pumps, motors, valves, and chemical feeders; laboratory testing and analysis; water chemistry and microbiology; and some basics of supervising and managing a water utility, including budgets, preventive maintenance schemes, and billing. Various course assignments requiring laboratory data sheets, simple process control spreadsheets, and term papers enable students to sharpen their computer and writing skills. General studies in basic algebra, applied math, water chemistry and microbiology, speech, and technical writing round out the curriculum.

Whether taking classes or working on a job site, students enrolled in this program will be required to perform the same job duties and be able to meet the same physical requirements that they will as graduates in the field. Depending where they find employment, graduates may be required to

- · work in inclement weather,
- · lift up to 50 pounds from the ground,
- work safely around hazardous chemicals using appropriate safety equipment such as a self-contained breathing apparatus,
- · work safely in confined spaces,
- · ascend and descend stairs and ladders to reach equipment,
- · work safely around heavy equipment,
- · work safely and effectively on uneven surfaces, and
- stand for long periods of time on concrete floors.

Some positions in the field require certification and the licensing agency may not provide special testing accommodations.

Opportunities for students to gain new knowledge and skills in operations, maintenance, and laboratory areas are provided through classroom training, hands-on laboratories, field trips, guest lectures, and training on the program's own water and wastewater plants.

Before graduating, students will spend a minimum of 180 hours at a cooperative education site with a municipality or industry. Students have found co-ops at water and wastewater plants in Albuquerque, El Paso, Las Cruces, Socorro, Hobbs, Silver City, Mesilla, and Glorieta, and with industries such as Intel and Kurita America.

Financial aid beyond loans, grants, work-study monies, and DACC scholarships include seven private scholarships specifically for Water Technology students:

- Max Summerlot Memorial Scholarship, given to a water technology student in his or her second year in the program;
- 2. Cynthia Hiers-Robinson Current-Use Scholarship;
- 3. Jake Hands Memorial Scholarship;
- 4. two scholarships presented by the New Mexico Water and Wastewater Association; and
- two scholarships presented by the Southwest Section of the New Mexico Water and Wastewater Association.

### **Additional Graduation Requirements**

To receive either an associate degree or a certificate of completion, students are required to obtain a Career Readiness Certificate in the areas of Applied Math, Reading for Information, and Locating Information at the appropriate level for their respective degree option. To facilitate success in obtaining their Career Readiness Certificate students will be required to take 1 credit of OETS 102 Career Readiness Certification Preparation. A program advisor can provide additional information.

**NOTE:** Students must achieve a cumulative grade-point average of 2.0 with a final grade of *C* or better in ENGL 111G Rhetoric and Composition and all required WATR courses. The remaining courses are applicable toward the bachelor of applied studies degree offered by the NMSU College of Extended Learning. At least 36 hours of the technical requirements are applicable toward the bachelor's degree in agricultural and extension education offered by the College of Agricultural, Consumer and Environmental Sciences at New Mexico State University.

Water Technology - Associate of Water Technology (p. 198)

Water Technology - Certificate of Completion (p. 199)

# WATR 120. Introduction to Water Systems 3 Credits

Introduction to and theory of groundwater sources, production, treatment, and distribution.

# WATR 130. Wastewater Collection and Basic Treatment Systems 3 Credits

Introduction to wastewater characteristics, collection, and basic treatment operations.

### WATR 140. Applied Water and Wastewater Math I

#### 3 Credits

Introduction to basic water and wastewater mathematics, flows through distribution networks and collection systems, and fundamentals of flow measurement.

Prerequisite: CCDM 114 N or equivalent.

### WATR 160. Systems Maintenance

### 4 Credits (2+4P)

Basic tools, equipment, maintenance schedules, chlorinator troubleshooting, and chlorine safety. Hands-on training with valves, pumps, meters and chlorination equipment.

### WATR 175. Programmable Logic Controllers

#### 2 Credits

This course will introduce students to electrical safety, theory, and the function, operations, programming and troubleshooting of the PLC controlling common electrical components utilized in control circuits associated with the water and wastewater industry. Restricted to: Community Colleges only.

### WATR 180. Water Chemistry

#### 3 Credits

Basic chemistry with applications to water and wastewater analysis. **Prerequisite:** CCDM 114 N or consent of instructor.

### WATR 182. Water Chemistry Analysis

### 1 Credit

Beginning water and wastewater laboratory analysis including gravimetric, volumetric, and quality control techniques.

Prerequisite: CCDM 114 N or equivalent or consent of instructor.

### WATR 190. Water and Wastewater Microbiology 3 Credits

Overview of microorganisms associated with water and wastewater. Growth and reproduction, energy production, and methods of counting. **Prerequisite:** WATR 130, WATR 180, or consent of instructor.

# WATR 192. Water and Wastewater Microbiological Analysis 1 Credit

Introduction to water and wastewater treatment operational tests such as BODs, solids testing, activated sludge control tests, use of microscope, and bacteriological techniques.

Prerequisites: WATR 130 and WATR 182, or consent of instructor.

### WATR 200. Internship

### 3-5 Credits

On-the-job training/work experience with municipalities or industries, working in water or wastewater treatment plants, high purity water plants, industrial waste plants, distribution systems, or wastewater collection systems. May be repeated up to 5 credits. Consent of Instructor required. Restricted to: Water Technology majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

### WATR 220. Water Treatment Systems

#### 3 Credits

Theory of water systems operation including surface water treatment, fluoridation, sodium zeolite softening, corrosion control, iron removal, various filtration methods, and overview of SDWA.

Prerequisites: WATR 180 and WATR 182 or consent of instructor.

### WATR 222. Water Systems Operation

### 1 Credit

Operations of various water treatment systems including surface water treatment, sodium zeolite softeners, and various filtration methods. **Prerequisite:** WATR 220 or consent of instructor.

### WATR 230. Advanced Wastewater Treatment

#### 4 Credits

Calculations and operations involved in wastewater and water reclamation plants.

Prerequisites: WATR 140, WATR 190, and WATR 192, or consent of

instructor.

### WATR 232. Wastewater Systems Operations

#### 1 Credit

Operation of pretreatment, primary, and biological treatment units.

Prerequisite: WATR 230 or consent of instructor.

### WATR 240. Advanced Water and Wastewater Math II

#### 3 Credits (2+2P)

Advanced water and wastewater mathematics. Flow measurement.

Systems head and pump curves.

Prerequisites: WATR 140.

### WATR 250. Municipal Systems Management

### 4 Credits

Management of water utility systems including laws, finance, records, and safety.

Prerequisites: WATR 120, WATR 130.

### WATR 255. Special Individualized Problems in Water Technology

#### 1-4 Credits

Individual studies in areas directly related to water technology.

Prerequisite: consent of instructor.

#### WATR 270. Special Topics

#### 1-4 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

#### WATR 275. Certification Review

Review of water and wastewater plant operations and laws in preparation for state certification exams. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): WATR 120, WATR 130, WATR 140, WATR 160.

### WATR 285. High Purity Water Treatment Systems 3 Credits

Principles of high purity water production including microfiltration, ultrafiltration, reverse osmosis, and deionization.

Prerequisite: WATR 220.

### WATR 287. Advanced Water Chemistry Analysis

#### 3 Credits

Sampling techniques, analysis, and evaluation of potable water contaminants using gravimetric, volumetric, spectrophotometric, and other instrumentation methods. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): Consent of instructor or WATR 285.

Restricted to Community Colleges campuses only.

### WATR 290. Advanced Wastewater Microbiology and Chemistry 3 Credits

Covers NPDES permits and DMR calculations and reporting; 503 sludge regs, including pathogen and vector attraction reduction and pollutants; wetlands, composting, and wastewater treatment ponds microbiology; activated sludge bulking and foaming microbiology and treatment; and use of selector to remove nutrients and prevent the growth of filamentous bacteria.

Prerequisite: WATR 190, WATR 192.

### WATR 292. Advanced Wastewater Analysis

#### 3 Credits

Covers sampling techniques, analysis, and evaluation of wastewater contaminants using gravimetric, volumetric, spectrophotometric, and other instrumentation methods.

Prerequisite: WATR 190 and WATR 192.

Name: Terry Mount, Department Chair

Office Location: DATS 155A

Phone: (575) 527-7584

Website: https://dacc.nmsu.edu/watr/

# Water Technology - Associate of **Water Technology**

### (68-70 credits)

### **Core Requirements**

ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
Select one from the following:		3
BOT 209	Business and Technical Communications	
ENGL 203G	Business and Professional Communication <sup>1</sup>	
ENGL 218G	Technical and Scientific Communication	
COMM 265G	Principles of Human Communication <sup>1</sup>	3
PSY 201G	Introduction to Psychology <sup>1</sup>	3
or SOC 101G	Introductory Sociology	
Deleted Peguireme	nto	

### Related Requirements

**WATR 232** 

**WATR 240** 

**WATR 250** 

**WATR 275** 

Select one from the following:

BMGT 140	Principles of Supervision I	3
OETS 102	Career Readiness Certification	1
	Preparation	

#### Preparation **Technical Requirements WATR 120** 3 Introduction to Water Systems **WATR 130** Wastewater Collection and Basic 3 **Treatment Systems WATR 140** Applied Water and Wastewater Math I 3 **WATR 160** Systems Maintenance 4 **WATR 175 Programmable Logic Controllers** 2 3 **WATR 180** Water Chemistry **WATR 182** Water Chemistry Analysis 1 **WATR 190** Water and Wastewater Microbiology 3 **WATR 192** Water and Wastewater Microbiological 1 **Analysis WATR 200** Internship 3-5 **WATR 220** Water Treatment Systems 3 1 **WATR 222** Water Systems Operation **WATR 230 Advanced Wastewater Treatment** 4

Wastewater Systems Operations

**Municipal Systems Management** 

Certification Review

Advanced Water and Wastewater Math II

1

3

4

3 6

WATR 285 & WATR 287 WATR 290	High Purity Water Treatment Systems and Advanced Water Chemistry Analysis Advanced Wastewater Microbiology and
& WATR 292	Chemistry and Advanced Wastewater Analysis

Total Credits 68-70

# Water Technology - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

### (31-34 credits)

Graduates of the one-year program have the capability to work in a municipal water or wastewater treatment plant.

**NOTE:** Students must achieve a cumulative grade-point average of 2.0 with a final grade of *C* or better in all required WATR courses.

### **Related Requirements**

Select 3-4 credits	from the following:	3-4
BOT 101	Keyboarding Basics	
BOT 105	Business English I	
ENGL 111G	Rhetoric and Composition <sup>1</sup>	
BMGT 140	Principles of Supervision I	3
OETS 102	Career Readiness Certification Preparation	1
Technical Require	ements	
WATR 120	Introduction to Water Systems	3
WATR 130	Wastewater Collection and Basic Treatment Systems	3
WATR 140	Applied Water and Wastewater Math I	3
WATR 160	Systems Maintenance	4
WATR 180	Water Chemistry	3
WATR 182	Water Chemistry Analysis	1
WATR 190	Water and Wastewater Microbiology	3
WATR 192	Water and Wastewater Microbiological Analysis	1
WATR 200	Internship	3-5
Total Credits		31-34

Course(s) are identical to those offered at New Mexico State University Las Cruces (main) Campus.

# Welding Technology AWS S.E.N.S.E. Advanced Welder AWS Accredited Test Facility #13114

**Associate of Applied Science Degree** 

**Certificate of Completion** - Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

Welders are in greater demand today than at any time during the past 30 years, and the job outlook is expected to remain excellent throughout the foreseeable future. They are needed in energy exploration and production and are required in virtually every field or industry that uses parts made of metal.

Simply stated, welders are people who join metals such as steel, stainless steel, aluminum, titanium, brass, bronze, copper, and nickel. Welding processes vary depending on the application. Extremely delicate and precise items, such as aerospace components and jewelry, may be welded using electron beams, lasers, and plasma, while huge structures for buildings and bridges are typically welded using submerged arc and flux core. Welding may take place in almost any setting: in a laboratory, out-of-doors, or even underwater, as in the case of offshore, oil-and-gas platform construction.

According to the US Department of Labor, job prospects for welders are excellent, with projected job growth in New Mexico estimated at 25.5 percent over the next six years, and 5 percent nationally through 2014, translating to 264,000 additional jobs. Increases in welder wages have kept pace with or exceeded those of other occupations since 2002.

The DACC Welding Technology program is nationally accredited by the American Welding Society (AWS), and is taught by nationally qualified instructors. Together, DACC welding instructors have more than 125 years of welding experience (nuclear, pressure vessels, aerospace, etc.), over 125 welding certifications (SMAW, GTAW, GMAW, FCAW, SAW), and over 80 years combined experience teaching welding technology. Six DACC welding instructors are AWS Certified Welding Educators (CWE-with over 44 years combined experience), and five DACC welding instructors are AWS Certified Welding Inspectors (CWI-with over 51 years combined experience). Five DACC welding instructors have Associate of Welding Technology degrees, and one instructor has a B.S. in Welding Engineering Technology.

The DACC Welding Technology program is an AWS Accredited Test Facility and performs hundreds of welder performance qualification tests every year. DACC welding instructors hold AWS national endorsements for six welding/fabrication codes.

The program is competency and performance based, consisting of lectures and hands-on laboratory exercises. Students learn to weld steels, stainless steels, and aluminum alloy plate and pipe with five welding processes. They also learn basic fabrication skills, oxy-fuel cutting, plasma cutting, and air-carbon arc cutting. The DACC Welding Technology Program is one of a handful of programs, nationwide, that has an orbital TIG unit that allows students to join tubing as small as one-quarter inch in diameter. Students are also exposed to heat treating of steel and its effects with a heat-treating oven.

Students are eligible to join SkillsUSA, an organization for high school and postsecondary students that promotes leadership and sponsors skills and leadership competitions at the state and national levels. In addition, students may become members of the American Welding Society (AWS) and participate in the activities of the new AWS El Paso Section, of which two DACC welding instructors are founding members and three have served as officers.

All students who complete the certificate or associate degree will graduate as certified welders in one or more welding processes on steel,

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

stainless steel, and/or aluminum. (It is important to note that, although some local welding jobs may not currently require certification, nearly all welding jobs nationwide do require it.) DACC welding instructors are well known nationally and have many job contacts in the United States.

Since the technical requirements for the certificate are the same as those for the associate degree, a student may complete the certificate program first and then later apply all the credits earned in the certificate program toward the associate degree. This associate degree then may be applied in its entirety toward the bachelor of applied studies degree offered by NMSU. Alternatively, those planning to teach at the secondary level may apply up to 36 credits earned in the Welding Technology associate degree program toward a bachelor of science degree in Agricultural and Extension Education.

To enter the Welding Technology program, a high school diploma or GED is required, along with good overall health, eyesight, and handeye coordination. Students must purchase tools and personal safety equipment, usually costing about \$1000.

Whether taking classes or working on a job site, students enrolled in this program will be required to perform the same job duties and meet the same physical requirements that they will as a graduate in the field. These requirements include the ability to achieve performance qualifications using a variety or processes while welding materials in different positions. Depending where they find employment, graduates may be required to work in extreme temperatures, to lift and safely move 50 pounds, to have good eye-hand coordination, to work safely around compressed gasses and electrical equipment, to ascend and descend ladders, to work safely in confined spaces and awkward welding positions, and to tolerate a noisy working environment.

### **Additional Graduation Requirements**

To receive either an associate degree or a certificate of completion, students are required to obtain a Career Readiness Certificate in the areas of Applied Math, Reading for Information, and Locating Information at the appropriate level for their respective degree option. To facilitate success in obtaining their Career Readiness Certificate students will be required to take 1 credit of OETS 102 Career Readiness Certification Preparation A program advisor can provide additional information.

Welding Technology - Associate of Applied Science (p. 201)

Welding Technology - Certificate of Completion (p. 202)

# WELD 100. Structural Welding I 6 Credits (3+6P)

Development of basic skills in SMAW, OFC, and OFW in accordance with the AWS entry-level welder program.

# WELD 102. Welding Fundamentals 3 Credits (2+2P)

Survey of welding and cutting processes for nonmajors. Classroom instruction and laboratory work with OFC/OFW, SMAW, GMAW, FCAW, and plasma arc cutting.

### WELD 110. Blueprint Reading (Welding)

3 Credits

Interpretation of prints related to welding. Emphasis on AWS standard symbols for welding, brazing, and nondestructive examination.

## WELD 112. Professional Development and Leadership 1 Credit

As members and/or officers of various student professional organizations, students gain experience in leadership, team building, and community service. Students competing or participating in Skills USA are required to register for the course. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: WELD majors. S/U Grading (S/U, Audit). Restricted to: Community Colleges only.

#### WELD 120. Basic Metallurgy

#### 3 Credits

Properties of ferrous and nonferrous materials. Service conditions and heat treatment of metals related to welding trade.

Prerequisites: WELD 100 or consent of instructor.

### WELD 125. Introduction to Pipe Welding

#### 3 Credits (2+2P)

Pipe fit-up and welding techniques for pipe fitting and pipe weld joint using SMAW, GMAW, GTAW, and FCAW, 2G welding of pipe. Restricted to: Community Colleges only.

Prerequisite(s): WELD 100, WELD 130, and WELD 140, or consent of instructor.

### WELD 130. Introduction to GMAW MIG)

### 3 Credits (2+2P)

Development of basic skills with gas metal arc welding (MIG) in accordance with AWS entry-level welder objectives. Wire electrodes, shielding/purge gases, and modes of metal transfer.

### WELD 140. Introduction to GTAW TIG)

### 3 Credits (2+2P)

Development for basic skills with gas tungsten arc welding (TIG) in accordance with AWS entry/advanced welder objectives. Welding mild steel, tungsten electrode preparation, filler wire selection, and equipment set-up.

### WELD 150. Pipe Welding II

#### 3 Credits (2+2P)

Continuation of WELD 125; with fillet and groove welded joints in a horizontal fixed and 45-degree fixed positions (5-F, 5-G, 6-F, 6-G).

Prerequisite: WELD 125.

### WELD 160. Introduction to SAW and FCAW

#### 3 Credits (2+2P)

Submerged arc and flux-cored arc welding. Demonstrations and practice with machine travel submerged arc welding (SAW), flux-cored arc welding (FCAW-G, FCAW-S) on mild steel plate and pipe. Restricted to: Community Colleges only.

### WELD 170. Welded Fabrication

### 3 Credits (1+4P)

Development of fabrication skills including basic layout, measuring, and utilization of various welding processes including out-of-position welding. Use of common shop tools.

**Prerequisites:** WELD 100, WELD 110, WELD 130, and OETS 104 or OETS 118.

### WELD 180. GTAW II

### 3 Credits (2+2P)

Continuation of WELD 140. Development of more advanced GTAW skills. Emphasis on pipe welding with mild steel, stainless steel, and aluminum.

Prerequisite: WELD 140 or consent of instructor.

### WELD 190. Welded Art

### 3 Credits (1+4P)

Students explore the possibilities of welded art in the form of sculpture, jewelry, furniture and as a framework to support other art media. Offered as an elective for students who wish to create art using welding.

Prerequisite: WELD 102 or consent of instructor.

# WELD 205. Welding Equipment Maintenance 3 Credits (2+2P)

Hands-on experience in the maintenance and repair of welding equipment, including welding machines and associate shop equipment, as well as the development of preventative maintenance programs. Basic safety, including MSDS and Right-to-Know will be introduced. Restricted to: Community Colleges only.

Prerequisite(s): WELD 100, WELD 130, WELD 140, WELD 160.

# WELD 211. Welder Qualification 6 Credits (3+6P)

Laboratory and classroom instruction on AWS and ASME Welder Performance Qualification Tests. All position plate and pipe techniques and tests for SMAW, GMAW, GTAW, FCAW, and SAW. Nondestructive and destructive examination methods. Basics of welding codes. Restricted to majors.

**Prerequisites:** OETS 104 or OETS 118; and WELD 100, WELD 110, WELD 120, WELD 130, WELD 140, WELD 160 and WELD 180 or consent of instructor.

### WELD 221. Cooperative Experience I

### 1-6 Credits

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U. Restricted to majors.

Prerequisites: WELD 100 or WELD 101 and consent of instructor.

### WELD 230. Weld Testing

### 3 Credits (2+2P)

Covers destructive and nondestructive examination methods used to test welds. Tensile, compression, bend, hardness, impact, visual, dyepenetrant, magnetic particle, ultrasound, and radiographic methods of testing/examination. Restricted to: Community Colleges only.

Prerequisite(s): WELD 100, WELD 130, WELD 140, WELD 211, and OETS 104, or consent of instructor.

### WELD 255. Special Problems in Welding Technology 1-6 Credits

Individual studies in areas of welding technology. May be repeated for a maximum of 12 credits.

Prerequisite: consent of instructor.

### WELD 295. Special Topics

### 1-4 Credits

Topics to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

Name: Terry Mount, Department Chair

Office Location: DATS 155A

Phone: (575) 527-7593, 528-7018 or 527-7597

Website: https://dacc.nmsu.edu/weld/

## Welding Technology - Associate of Applied Science

### (66-70 credits)

Students must receive a final grade of *C* or better in ENGL 111G Rhetoric and Composition and all required WELD courses and achieve a cumulative GPA of 2.0.

### Core Requirements

Core Requirements	1	
ENGL 111G	Rhetoric and Composition <sup>1</sup>	4
Select one from the	e following:	3
BOT 209	Business and Technical Communications	
ENGL 203G	Business and Professional Communication <sup>1</sup>	
ENGL 218G	Technical and Scientific Communication	
COMM 253G	Public Speaking <sup>1</sup>	3
or COMM 265G	Principles of Human Communication	
Select one from the	e following:	3
BMGT 240	Human Relations	
PSY 201G	Introduction to Psychology <sup>1</sup>	
SOC 101G	Introductory Sociology <sup>1</sup>	
Related Requireme	nts	
Select one from the	e following:	3
C S 110	Computer Literacy <sup>1</sup>	
OECS 105	Introduction to Information Technology	
OECS 227	Computer Applications for Technicians	
Select 2-4 credits fi	rom the following:	2-4
BCT 101 & BCT 102	Introduction to Construction I and Introduction to Construction II	
Approved BMGT	course	
Select 3-4 credits fi	rom the following:	3-4
DRFT 109	Computer Drafting Fundamentals	
DRFT 115	General Construction Safety	
ELT 105	Basic Electricity and Electronics	
OEET 110	Basic Electricity and Electronics	
0ETS 102	Career Readiness Certification Preparation	1
OETS 118	Mathematics for Technicians	3
Select 0-3 credits fi	rom the following:	0-3
WELD 205	Welding Equipment Maintenance (approved technical elective)	
Approved techni	cal elective (0-3)	
Technical Requiren		
WELD 100	Structural Welding I	6
WFI D 110	Blueprint Reading (Welding)	3

Technical Requirements			
WELD 100	Structural Welding I	6	
WELD 110	Blueprint Reading (Welding)	3	
WELD 120	Basic Metallurgy	3	
WELD 125	Introduction to Pipe Welding	3	
WELD 130	Introduction to GMAW MIG)	3	
WELD 140	Introduction to GTAW TIG)	3	
WELD 150	Pipe Welding II	3	
WELD 160	Introduction to SAW and FCAW	3	
WELD 170	Welded Fabrication	3	
WELD 180	GTAW II	3	
WELD 211	Welder Qualification	6	
Total Credits		64-70	

Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

# Welding Technology - Certificate of Completion

Important information about the educational debt, earnings, and completion rates of students who attend this program can be found on the following https://dacc.nmsu.edu/gainfulemployment/.

## (47-48 credits)

Students must receive a C or better in all required WELD courses.

### **Related Requirements**

Related Requireme	ents	
OETS 102	Career Readiness Certification Preparation	1
OETS 103	Technical Career Skills	4
OETS 104	Basic Mathematics for Technicians	3-4
or OETS 118	Mathematics for Technicians	
Technical Requiren	nents	
WELD 100	Structural Welding I	6
WELD 110	Blueprint Reading (Welding)	3
WELD 120	Basic Metallurgy	3
WELD 125	Introduction to Pipe Welding	3
WELD 130	Introduction to GMAW MIG)	3
WELD 140	Introduction to GTAW TIG)	3
WELD 150	Pipe Welding II	3
WELD 160	Introduction to SAW and FCAW	3
WELD 170	Welded Fabrication	3
WELD 180	GTAW II	3
WELD 211	Welder Qualification	6
Total Credits		47-48

### **NONCREDIT PROGRAMS**

DACC offers noncredit programs focusing on building the skills of the local workforce.

- Adult Education imparts the basic skills and general knowledge needed to undertake job-related training.
- The **Small Business Development Center** assists owners of existing businesses and start-ups.
- Workforce Development and Career Readiness offers opportunities for short, non-credit training, professional skill development, lifelong learning, and career exploration.

More information about any of these programs can be accessed from the menu to the left.

### **Adult Education**

The Adult Education (AE) Division offers adults the opportunity to begin and/or complete a basic education through the twelfth grade. AE also provides a variety of educational programs and student support services that can help individuals achieve their goals and transition to college. A complete education improves one's opportunities for obtaining or retaining employment and going to college and can provide a person with a sense of accomplishment.

AE instructional programs and classes include basic literacy, English as a second language (at various levels), EL/Civics, high school equivalency, college preparation, U.S. citizenship, computer literacy, and work readiness. Practical living skills, employment and training, and student success principles are also emphasized throughout the AE curriculum. Student-support services include basic skills assessments, student orientations, self-paced studies, advising and referral services, student success skills, tutoring on an individual and small-group basis, and assistance with college transition.

AE does not charge for classes, services, or textbooks.

### **Free, Noncredit Instructional Programs**

High School Equivalency. Those 16 years of age or older who do not have a high school diploma may attend classes or study at any adult learning center in preparation to successfully pass the mathematics, reading, writing, social studies, and science high school equivalency tests. AE offers high school equivalency instruction in either English or Spanish. Students who attend Spanish high school equivalency classes are required to concurrently enroll in and attend ESL classes. For additional study, students may receive free tutoring at any DACC adult learning center. Sixteen-year-old students are accepted into the high school equivalency program with an official withdrawal notice from the public schools.

Every May, AE invites high school equivalency graduates to participate in a DACC commencement ceremony and can assist graduates transitioning to college.

ESL—English as a Second Language. This program helps improve English language skills for non-native speakers. Students will be pre-tested and placed at the appropriate level. Students acquire academic English skills (reading, writing, and grammar), build their vocabulary, and increase conversation, listening comprehension and life skills. Small group instruction is available at each center to support learning. Advanced

ESL students who are ready to exit the program and have an interest in transitioning to college are assisted with the process to help them experience success.

U.S. Citizenship Preparation. Those eligible to become U.S. citizens can receive assistance in preparing to take the citizenship test. Knowledgeable instructors teach U.S. history, government, citizens' rights, duties and responsibilities, requirements for U.S. citizenship, civic participation, basic reading, writing, and conversational English. Instructors also provide practice with testing and the interview process. At the learning centers, AE provides citizenship workbooks, sample questions, and information about U.S. citizenship, as well as occasional citizenship application workshops. Classes also are taught in Spanish for those who qualify to interview in Spanish. Students in the citizenship classes who meet specific criteria may apply for a scholarship to help with the cost of filing for U.S. Citizenship. Scholarships are awarded each January and July.

Computer Literacy Classes. AE students are able to participate in various online computer literacy programs. These programs are self-paced and tutoring is provided as needed..

### **Reading Improvement Program for Adults**

It is estimated that 30 percent of the adult residents of Doña Ana County have less than a twelfth-grade education. Literacy Volunteers of Doña Ana County, in alliance with AE and the New Mexico Coalition for Literacy, is a program that provides adults an opportunity to learn basic reading, writing, and numeracy through the sixth-grade level. Trained volunteers are matched with students most in need of one-to-one or small-group tutoring. The program also offers opportunities for free tutoring and/or tutor training at other locations.

Those interested in volunteering to teach, or in referring someone for help with reading, are encouraged to call (575) 527-7641 or to log on to read-write-now.org (http://www.read-write-now.org). Literacy volunteer tutors generally are available at all learning center locations.

### **Student Records**

All student information and records are held strictly confidential.

### **Enrolling in Classes**

Each fall, spring and summer session, AE offers classes in English as a Second Language, high school equivalency classes in English and Spanish, and U.S. Citizenship. Both intensive and regular classes meet at Doña Ana Community College and at several other locations throughout Doña Ana County. New or inactive students must be pre-tested and complete the new student orientation at the nearest learning center in order to be placed in classes according to learning level and need. AE offers classes at its four learning centers (Las Cruces, Chaparral, Gadsden, and Sunland Park), and in outlying communities throughout Doña Ana County.

We strongly encourage students to pre-register two to three weeks prior to the beginning of each semester. Students in outlying communities can also register in the classroom during the first three weeks of class, on a first-come, first served basis. New or inactive students must complete pre-assessment and orientation at any learning center prior to enrolling in a class.

### **Tutoring Services**

Doña Ana Community College has four adult learning centers offering individualized tutoring, small group instruction, and computer-assisted and self-paced instruction to supplement classroom instruction, or as an alternative to the AE classroom program.

Trained tutors provide personal assistance and small-group instruction in reading and writing, mathematics, grammar, ESL, and other basic skills. AE staff understand that learning takes time and make an extra effort to be helpful and patient. For the purpose of placing students accurately, tutors are trained to administer the Test of Adult Basic Education (TABE) and the ESL TABE-ClasE assessment.

After pretesting is completed, students are advised regarding their level, learning needs, educational goal(s) and plan, strengths, and learning progress. After completing a post test, students are advised to assess learning progress. Centers have a comprehensive inventory of textbooks and excellent, multi-media educational software to provide a variety of approaches to individualized learning. All of the services are free of charge. Students are encouraged to call the nearest learning center to sign up for the required pretest and new student orientation! Se habla español.

### **Support Services for Student Success**

At the adult learning centers, many of the following types of student support can be found: pretesting, academic advising, new student orientations, guidance with goal-setting and college transition, student follow-up, information and referral, and career guidance.

### Study Skills/Learning Styles

For learners having difficulty with their education as the result of ineffective study habits, AE has a solution. The learning centers throughout the county have resources, information, and staff that can help improve time management, listening, note taking, and test-taking skills. Students are encouraged to find out about their learning styles and develop study techniques that can help them become more successful.

### **Computer-assisted Instruction**

Students can take advantage of multi-media computer tutorials covering a wide range of academic subject matter at various levels. The tutorials, available in the computer labs at the adult learning centers, help improve skills in reading, math (through basic algebra and geometry), and grammar. There are also tutorials focusing on science, ESL, and social studies.

### **College Transition Advising**

College Transition Advising, offered through AE, assists students in preparing for a successful experience in college. The advising is available for students at each of the learning centers and guides students in making a successful transition from AE to college. Students will become familiar with the admissions process, financial aid and scholarship opportunities, and DACC and NMSU career options and pathways. Call (575) 528-7038 for an appointment.

### **Scholarships and Financial Aid**

AE offers the Application for U.S. Citizenship. Many AE students interested in transitioning to college are also eligible to apply for and receive the New Mexico Legislative Lottery Scholarship and other DACC tuition scholarships. Many college transition students also may qualify for federal financial aid.

# **Contract Services and Community Partnerships**

Contract services or agency partnerships can be arranged with schools, community-based groups, social-services providers, and/or employers who are interested in providing or negotiating related basic educational services for employees who fall under the following categories:

- · Displaced workers
- Welfare (TANF) participants (work readiness)
- · Adult clients of public and social service agencies
- · Students enrolled in high school equivalency programs (HEP)
- Workplace literacy (integrated with basic skills and/or English as a second language) participants
- · Participants in federal and international education programs
- · Family literacy participants
- · WIOA adult training program participants

For more information, please call (575) 527-7741.

### **Ability to Benefit**

AE provides services based on the adult learner's ability to demonstrate academic learning advancement and attain AE educational goals, such as attaining a high school equivalency credential or transitioning to college and/or to employment. Referrals to outside agencies will be addressed at the proper professional and administrative levels, based on intake, pretesting, and student progress.

### **Locations**

NOTE: Day and evening classes also are available in the fall, spring and summer semesters. Since schedules vary and change, please call for current information. In addition to the learning centers listed in this section, AE classes also are offered at various sites throughout Doña Ana County, including the Mesquite Center located in the DACC Workforce Center (2345 Nevada Ave., Las Cruces, NM, (575) 528-7479). Class locations are listed in the current AE Class Schedule.

### **Las Cruces**

Quintana Adult Learning Center Doña Ana Community College, room DALR-160 3400 South Espina St. Las Cruces, NM 88003 Phone: (575) 527-7540, 527-7740

Toll Free: 1 (800) 903-7503 Fax: (575) 528-7065 Hours: Mon.-Fri., 8 a.m.-5 p.m.

### **Anthony Area**

Gadsden Adult Learning Center Located in the DACC Gadsden Center 1700 E. O'Hara Rd. Anthony, NM 88021 Phone: (575) 882-6813

Hours: Mon. – Fri., 8 a.m. – 5 p.m.

### Chaparral

Chaparral Adult Learning Center 755 Prescott Anthony Dr. Chaparral, NM 88081 Phone: (575) 824-2010 Hours: Mon.-Fri., 8 a.m.-5 p.m.

### **Sunland Park**

Sunland Park Adult Learning Center Located in the DACC Sunland Park Center 3365 McNutt Road & Santo Domingo Road Sunland Park, NM 88063

Phone: (575) 874-7790 Hours: Mon.-Fri., 8 a.m.-5 p.m.

### **Small Business Development Center**

**Assistance for the Entrepreneur** 

Workforce Center 2345 E. Nevada Ave., Suite 101 Phone: (575) 527-7676 Fax: (575) 528-7432

Serving the residents of Doña Ana and Sierra counties, the Small Business Development Center (SBDC) at NMSU Doña Ana Community College can help you achieve your dreams! We offer no-cost, confidential, quality counseling and guidance for business owners, prospective owners, and managers. Whether you have been in business for some time already or are just starting out, the SBDC can help you in addressing a multitude of issues.

Imagine having a team of experienced, professional business consultants at your disposal, and at no cost to you! That's exactly what you'll get when you come to the Small Business Development Center. Our team can help you—

- Develop a business plan to start a new business or make an established business more efficient
- Learn effective record-keeping, management, accounting, and inventory control
- · Create alternatives for solving business marketing issues
- · Find financial resources and apply for business loan packages
- Improve your business and management skills through seminars and workshops
- · Explore business ownership opportunities
- · Develop an exit or succession plan

### **Specialized Consulting**

Specialized one-on-one, confidential consulting can help you develop an individualized plan, create alternatives for solving marketing problems, including record keeping, accounting, and inventory control.

### **Business Education**

The SBDC staff offer individualized tutoring in various aspects of business management, which can help you avoid serious and costly mistakes. If needed, special arrangements can be made for an SBDC consultant to come to your business site to discuss strategies.

The SBDC offers business consulting on a range of subjects, including business start-up, effective marketing strategies, writing a business plan, business financials, and other areas of concern you may have identified.

### **Center for Resource Information**

Use our professional business publications, industry reports, and financial tools to gain a competitive advantage.

### **Interested in Government Contracts?**

The Las Cruces Procurement Technical Assistance Program (PTAP) can help you become "contract ready" and more. Our services are confidential and available at no or low cost to you. Call us at (575) 528-7431.

Let the SBDC be a partner you can count on. To make an appointment to discuss your needs, call (575) 527-7676, or visit us at:

Workforce Center 2345 E. Nevada Ave., Suite 101 Las Cruces, N.M.

# **Workforce Development and Career Readiness**

DACC Workforce Development and Career Readiness (WDCR) offers opportunities for short, non-credit training programs, online and classroom-based professional skill development, lifelong learning, and career exploration and development to the community of Las Cruces and Doña Ana County. Community organizations, governmental offices, and local businesses and industries use the training services to provide customized education opportunities for their employees.

Workforce Center 2345 E. Nevada Ave. Las Cruces, NM Phone: (575) 527-7776

and licenses.

Email: ctp@nmsu.edu ( ctp@nmsu.edu)

### **Customized Training Program (CTP)**

The goal of CTP is to work with businesses, government, and non-profit agencies in Doña Ana County and southern New Mexico to provide professional and technical training for the workforce. We work with employers to provide custom training programs that consider the unique needs of their workforce and the workforce of Doña Ana County. We identify specific training needs and goals and develop a custom training to address those needs. We follow up with assessments to evaluate the effectiveness of the training. Custom trainings can assist local employers in increasing employee satisfaction, reducing turnover, improving efficiency, and reducing costs. Please call 575-528-7440 to discuss training for your employees or for more information.

### **Professional and Workforce Development Courses**

Employees who continuously strive to enhance their skills and abilities are more likely to earn promotions and better opportunities. WDCR offers several certificates and courses where professionals can gain new skills or develop the ones they have. WDCR offers non-credit training programs in the health, business, computer, and trades and manufacturing sectors. These training programs prepare participants for national certifications

# Lifelong Learning and Continuing Education Units (CFUs)

Lifelong learning is the continuous act of learning throughout a lifetime. WDCR, in partnership with Doña Ana Community College, offers a variety of professional and personal development courses. In addition,

Continuing Education Units opportunities are offered in partnership with DACC faculty and online education providers. Contact the department if your office or clinic requires assistance with continuing education units.

### **Youth Programs**

Spring Break and summer programs are available through the Kids College and Career Camps. The programs focus on early career exploration and STEAM (Science, Technology, Engineering, Art, and Math) topics.

### **Academy for Learning in Retirement**

The Academy for Learning in Retirement provides educational opportunities for seniors. The program is offered in the spring and fall semesters and consists of monthly lecture series on current issues and topics. The fee for each presentation is \$4 for members and \$5 for non-members. The annual fee for membership is \$5. Please visit dacc.nmsu.edu/alr (http://dacc.nmsu.edu/alr) for more information or email nmsu.alr@gmail.com ( nmsu.alr@gmail.com).

### **Career Services**

The mission of career services at DACC is to assist students in reaching their personal and professional career goals. Services include career exploration and planning, job skills trainings, internships and other work-based learning opportunities, assistance with job searches and application documents, and connection to social services. These resources are available at no charge to credit and non-credit students. For more information about Career Services, please contact 575-527-7776.

### **CDL Skills Exams and Truck Driving**

WDCR administers the skills exam for the Class A, Class B, and Class C commercial licenses. Drivers must provide their own properly insured and licensed vehicle for the exam, and they must have a current regular driver's license (D), current learner's permit, and current medical card.

The exams can usually be scheduled about a week from the time you register. The exam costs \$150, and can be paid by check, money order, or credit card. Please call 575-528-7092 to schedule your skills test or for more information.

Please visit our website, dacc.nmsu.edu/ctp (http://dacc.nmsu.edu/ctp) or call the office 575-527-7776 for updates and additional information about truck driving training.

### COURSE DESCRIPTIONS

Courses are titled in the following style:

ASTR 105G The Planets 4 cr. (3+2P)

- Suffix (G) following the course number indicates that the course satisfies a New Mexico Common Core requirement.
- Suffix (N) following the course number indicates the credits do not apply toward graduation.
- Credit (cr.) The unit of university credit is the semester hour, which equates to 50 minutes of lecture/recitation per week for one full semester, which is fifteen weeks in length.
- Hours followed by the letter "P" number of hours spent each week
  in practical applications (labs, clinicals, etc.). Each hour of practice
  (P) is valued at no more than one-half semester hour of credit. It takes
  at least two 50-minute hours (50 + 50 = 100 minutes) of practice/lab
  per week to equal one semester hour.

NOTE: Not all courses listed are offered at Doña Ana Community College.

### A

- · A E-AEROSPACE ENGINEERING (A E) (p. 208)
- · A S-ARTS AND SCIENCES (A S) (p. 209)
- · A ST- APPLIED STATISTICS (A ST) (p. 209)
- ACCT-ACCOUNTING (ACCT) (p. 209)
- · ACES-AGRI, CONSUMER & ENV SCIE (ACES) (p. 209)
- AERO-AEROSPACE STUDIES (AERO) (p. 210)
- · AERT-AEROSPACE TECHNOLOGY (AERT) (p. 210)
- · AG E-AGRICULTURAL ECONOMICS (AG E) (p. 211)
- AGRO-AGRONOMY (AGRO) (p. 211)
- AHS-ALLIED HEALTH SCIENCE (AHS) (p. 211)
- · ANSC-ANIMAL SCIENCE (ANSC) (p. 212)
- ANTH-ANTHROPOLOGY (ANTH) (p. 213)
- ARCT-ARCHITECTURE (ARCT) (p. 214)
- ART-ART (ART) (p. 216)
- ASTR-ASTRONOMY (ASTR) (p. 217)
- · AUTO-AUTOMOTIVE TECHNOLOGY (AUTO) (p. 218)
- · AXED-AGRICULTURAL EXTN EDUC (AXED) (p. 220)

### В

- B A-BUSINESS ADMINISTRATION (B A) (p. 221)
- BCHE-BIOCHEMISTRY (BCHE) (p. 221)
- BCIS-BUSINESS COMPUTER SYSTEMS (BCIS) (p. 221)
- BCT-BUILDING CONSTRUCTION TECH (BCT) (p. 221)
- · BIOL-BIOLOGY (BIOL) (p. 223)
- BLAW-BUSINESS LAW (BLAW) (p. 224)
- BMGT-BUSINESS MANAGEMENT (BMGT) (p. 224)
- BOT-BUSINESS OFFICE TECHNOLOGY (BOT) (p. 227)
- BUSA-BUSINESS ADMINISTRATION (BUSA) (p. 229)

### C

- · C D-COMMUNICATION DISORDERS (C D) (p. 229)
- C E-CIVIL ENGINEERING (C E) (p. 229)
- C EP-COUNSELING & EDUC PSY (C EP) (p. 230)

- C J-CRIMINAL JUSTICE (C J) (p. 230)
- · C S-COMPUTER SCIENCE (C S) (p. 231)
- · CCDE-DEVELOPMENTAL ENGLISH (CCDE) (p. 232)
- CCDL-DEVELOPMENTAL ESL (CCDL) (p. 232)
- CCDM-DEVELOPMENTAL MATHEMATICS (CCDM) (p. 232)
- · CCDR-DEVELOPMENTAL READING (CCDR) (p. 233)
- CCDS-DEVELOPMENTAL SKILLS (CCDS) (p. 233)
- CHEF-CULINARY ARTS (CHEF) (p. 233)
- · CHEM-CHEMISTRY (CHEM) (p. 235)
- · CHIN-CHINESE (CHIN) (p. 236)
- CHME-CHEMICAL & MATERIALS ENGR (CHME) (p. 236)
- · CHSS COMM HEALTH/SOC SRVCS (CHSS) (p. 236)
- · CMI CINEMA & FILM/VIDEO PROD (CMI) (p. 237)
- CMT-CREATIVE MEDIA TECHNOLOGY (CMT) (p. 238)
- · COLL-COLLEGE (COLL) (p. 242)
- COMM-COMMUNICATION (COMM) (p. 242)
- · CSEC-CYBERSECURITY (CSEC) (p. 242)
- CTFM-CLTHNG/TXTLS/FSHN MRCHDSG (CTFM) (p. 243)

### D

- DANC-DANCE (DANC) (p. 243)
- · DAS-DENTAL ASSISTING (DAS) (p. 245)
- DHYG-DENTAL HYGIENE/HYGIENIST (DHYG) (p. 246)
- DMS-DIAGNOSTIC MED SONOGRAPHY (DMS) (p. 248)
- DRFT-DRAFTING (DRFT) (p. 250)

### E

- E E-ELECTRICAL ENGINEERING (E E) (p. 253)
- E S-ENVIRONMENTAL SCIENCE (E S) (p. 253)
- E T-ENGINEERING TECHNOLOGY (E T) (p. 254)
- ECED-EARLY CHILDHOOD EDUCATION (ECED) (p. 256)
- ECON-ECONOMICS (ECON) (p. 257)
- EDUC-EDUCATION (EDUC) (p. 257)
- ELA EDUC LEADERSHIP & ADMIN (ELA) (p. 258)
- ELT ELECTRONICS TECHNOLOGY (ELT) (p. 258)
- ENGL-ENGLISH (ENGL) (p. 260)
- ENGR-ENGINEERING (ENGR) (p. 261)
- EPWS-ETMLGY/PLNT PTHLGY/WD SCI (EPWS) (p. 261)

### F

- FCS-FAMILY AND CHILD SCIENCE (FCS) (p. 261)
- FCSE-FAMILY & CONSUMER SCI EDU (FCSE) (p. 262)
- FIN-FINANCE (FIN) (p. 262)
- FIRE-FIRE INVESTIGATION (FIRE) (p. 262)
- FREN-FRENCH (FREN) (p. 264)
- FSTE-FOOD SCIENCE & TECHNOLOGY (FSTE) (p. 264)
- FWCE-FISH, WILDLF, CONSERV ECOL (FWCE) (p. 264)

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### A E-AEROSPACE ENGINEERING (A E)

## A E 102. Introduction to Aerospace Engineering 1 Credit

A survey course of aeronautical, aerospace, and astronautical engineering, with an emphasis on basic aerospace concepts and major aerospace principles without going into detailed math and analysis. Students are given the opportunity to listen to guest speakers and participate in projects utilizing the NMSU Ultralight and NMSU wind tunnel. Restricted to: Main campus only.

### A S-ARTS AND SCIENCES (A S)

## A S 100. Insights: University Experience for Future Careers 1 Credit

Research and investigation of college majors and career opportunities.

#### A S 101. Success Seminar

### 1 Credit

Academic and personal strategies and campus resources to enhance scholastic achievement. May be repeated up to 1 credits.

#### A S 103. Quantitative Foundations

#### 3 Credits

Course is designed to prepare students for College level mathematics. Initial assessments generate individualized paths to mastery of fundamental skills. Course also covers strategies and campus resources to enhance scholastic achievement. Traditional Grading with RR. May be repeated up to 6 credits. Traditional Grading with RR. Restricted to Las Cruces campus only.

### A S 200. Interdisciplinary Topics

#### 1-4 Credits

An interdisciplinary approach to subject matter cutting across departmental fields. Specific subjects to be announced in the Schedule of Classes.

### A ST- APPLIED STATISTICS (A ST)

# A ST 251G. Statistics for Business and the Behavioral Sciences 3 Credits

Techniques for describing and analyzing data; estimation, hypothesis testing, regression and correlation; basic concepts of statistical inference. Same as STAT 251G.

Prerequisite: C- or better in MATH 120.

### **ACCT-ACCOUNTING (ACCT)**

# ACCT 101. Supplemental Instruction to ACCT 221 1 Credit

Collaborative workshop for students in ACCT 221 – Financial Accounting. Course does not count toward departmental degree requirements. May be repeated up to 2 credits. Restricted to Las Cruces campus only. **Corequisite(s):** ACCT 221.

### **ACCT 200. A Survey of Accounting**

### 3 Credits

Emphasis on financial statement interpretation and development of accounting information for management. For engineering, computer science, and other non business majors. Community Colleges only. **Prerequisite:** one C S course or consent of instructor.

### ACCT 221. Principles of Accounting I (Financial) 3 Credits

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 222. Principles of Accounting II (Managerial) 3 Credits

An introduction to the use of accounting information in the management decision making processes of planning, implementing, and controlling business activities. In addition, the course will discuss the accumulation and classification of costs as well as demonstrate the difference between costing systems.

Prerequisite(s): ACCT 221.

# ACES-AGRI, CONSUMER & ENV SCIE (ACES)

# ACES 101. Agricultural Leadership Development 1-3 Credits (1-3)

This course will introduce the student to skill sets necessary to engage in the process of leadership through an applied project. A broad spectrum of principles and applications associated with the College of Agricultural, Consumer and Environmental Sciences will be employed. The development of a specific project through a collaborative process will be required. Students will be engaged in hands-on, real-time experiences applicable to agriculture. Course may be repeated once. Student must have a 3.5 GPA and above. Consent of Instructor required.

### **ACES 111. Freshman Orientation**

#### 1 Credit

Orientation to University life, including the understanding and utilization of resources that promote University success. Designed to promote success in achieving a career objective and perseverance for degree completion. Promotes a recognition of changes required in moving from high school to the University. Eight weeks in length, required for all freshmen in the College of Agricultural, Consumer and Environmental Science.

## ACES 121. Financial Fitness for College Students 1 Credit

An introduction to personal financial practices in post high school and/ or college lives. Emphasis is placed on budgeting, savings, investment, college debt, student loans, credit cards, scams and consumer protection.

### ACES 199. Academic Excellence

### 1-3 Credits (1-3)

Academic curriculum of excellence that includes the development of collaborative learning and student success environment, learning diverse learning styles and multiple intelligences, and developing multicontextual academic communication styles. Restricted to: Open to all ACES majors. Restricted to Las Cruces campus only.

# ACES 201. Agricultural Leadership Development 1-3 Credits (1-3)

This course will introduce the student to skill sets necessary to engage in the process of leadership through an applied project. A broad spectrum of principles and applications associated with the College of Agricultural, Consumer and Environmental Sciences will be employed. The development of a specific project through a collaborative process will be required. Students will be engaged in hands-on, real-time experiences applicable to agriculture. Course may be repeated once. Student must have a 3.5 GPA and above. Consent of Instructor required.

### **AERO-AEROSPACE STUDIES (AERO)**

### AERO 121. The Air Force Today I

#### 2 Credits (1.25+2P)

Survey course on the USAF and AFROTC. Includes mission and organization of the Air Force, officer ship and professionalism, military customs and courtesies, as well as basic communication skills. Leadership Lab practicum, AERO 000 is included.

### AERO 122. The Air Force Today II

### 2 Credits (1.25+2P)

Continuation of AERO 121, with emphasis on Air Force officer opportunities, group leadership problems, and further development of communication skills (oral and written). Includes Leadership Lab practicum, AERO 000.

### AERO 221. The Air Force Way I

### 2 Credits (1.25+2P)

Topics include: Air Force heritage, Air Force leaders, an introduction to ethics and values, and an application of communication skills. Facilitates the transition from Air Force ROTC cadet to Air Force ROTC candidate. Includes Leadership Lab practicum, AERO CIOD.

### AERO 222. The Air Force Way II

#### 2 Credits (1.25+2P)

Continuation of AERO 221, including an introduction to leadership, quality Air Force, and continued application of communication skills. Includes Leadership Lab practicum, AERO 000.

### **AERO 223. Air Force Leadership Development**

#### 1 Credit

This course prepares cadets to excel in field training. Cadets are prepared in all facets of field training, including: leadership competency evaluations, the Cadet's Guide to Field Training, individual drill evaluations, attention to detail, dining hall procedures, maintenance of living areas, and the group problem solving process. Restricted to: Main campus only.

### **AERT-AEROSPACE TECHNOLOGY** (AERT)

### **AERT 105. Aerospace Engineering PLTW** 4 Credits (2+4P)

Introduce the student to Aerospace Engineering (AE) concepts and history. Studied topics include History of Flight, Aerodynamics, Rocket Science, Orbital Physics, Systems Engineering and Life Support/ Environmental Systems. Restricted to: Community Colleges only.

### **AERT 111. Basic Electricity and Electronics**

### 3 Credits (2+2P)

Fundamentals of electricity and electronics, basic circuit devices, meters, transistors, integrated fiber optics, and industrial application topics. Minimum math proficiency of CCDM 103 or CCDM 104 required or math placement into CCDM 114 or higher. Restricted to: Community Colleges only. Crosslisted with: ELT 105

### **AERT 121. Introduction to the Aerospace Workplace** 4 Credits (2+4P)

The course covers space history, regulations, controls, aerospace industry terminology and acronyms as well as hands-on activities related to tools, procedures, and standard practices. Restricted to: Community Colleges only.

### **AERT 122. Aerospace Safety and Quality**

### 3 Credits (2+2P)

Covers identification of hazards, personal protective equipment, safe practices, and protection of personnel, property, and equipment in the aerospace environment. Basic principles of quality assurance engineering and quality control relating to work processes will be discussed. Restricted to: Community Colleges only.

### **AERT 211. Electromechanical Devices**

### 4 Credits (2+4P)

Theory and application of electromechanical devices and digital control circuits. Includes AD and DA converters, pneumatics, hydraulics, programmable logic controllers, DC, AC and stepper motors, and servomechanisms. Crosslisted with: MAT 240.

Prerequisite(s): ELT 160.

### AERT 212. Materials and Processes (Basic Metallurgy) 3 Credits (2+2P)

Basic Metallurgy: Aluminum and its alloys (Alclad), hardening, tempering, annealing, anodizing, magnetism, titanium, copper, stainless steel, surgical steel, safety wire, iron rust. Metallurgical Processes: Welding and soldering. Inspection Fundamentals: Eddy currents, magnetic particles (ferrous and non-ferrous metals), ultrasonic, x-ray, visual, corrosion and corrosion control, and vacuum bagging. Restricted to: Community Colleges only.

### **AERT 213. Aerospace Fluid Systems**

#### 3 Credits (2+2P)

This course includes a familiarization of fluid system components, characteristics, and applications. Cryogenic and hypergolic materials and high pressure systems are also covered. Restricted to: Community Colleges only.

### **AERT 214. Aerospace Systems**

### 3 Credits (2+2P)

This course provides an introduction to expendable and reusable spacecraft systems including hydraulic, pneumatic, electrical, propulsion, mechanical, HVAC, and ECLSS (Environmental Control and Life Support System). How systems interact with computer and data acquisition systems is also covered. Restricted to: Community Colleges only.

### **AERT 221. Inspection Requirements and Planning Metrology** 3 Credits (2+2P)

Course teaches the benefits of inspection, quality control, material conditions. Also covers measurements, including temperature, ultrasonic, vibration and more. Restricted to: Community Colleges only.

### **AERT 222. Electromechanical Systems**

### 3 Credits (2+2P)

Principles and applications of preventive and corrective maintenance procedures on industrial production machines using systems technical and maintenance manuals to develop troubleshooting procedures using systems block and schematic diagrams. Pre/ Crosslisted with: MAT 245. Prerequisite(s)/Corequisite(s): AERT 221 or MAT 240. Prerequisite(s): ELT 160.

### **AERT 224. Aerospace Tests and Measurements** 3 Credits (2+2P)

This course covers electrical and mechanical testing procedures (primarily non-destructive testing), equipment, measurements, and instrumentation involved in aerospace systems. Verification of tool and equipment calibration is also covered. Pre/ Restricted to: Community Colleges only.

Corequisite(s): AERT 221.

### **AERT 225. Cooperative Experience**

#### 1-3 Credits (1-3)

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. Consent of instructor required. Graded: S/U. Restricted to: Community Colleges only.

### **AERT 255. Special Topics**

### 1-4 Credits (1-4)

Specific topics to be announced in the Schedule of Classes. Restricted to: Community Colleges only.

### **AERT 290. Independent Study**

#### 1-3 Credits (1-3)

Individual studies in areas directly related to aerospace. Consent of instructor required. Restricted to: Community Colleges only.

# AG E-AGRICULTURAL ECONOMICS (AG E)

## AG E 100. Introductory to Food and Agribusiness Management 3 Credits

Orientation to agricultural supply businesses, farm and ranch production, food markets, food processing and distribution, and food consumption. Microeconomic principles for managers. May be repeated up to 3 credits.

### AG E 101. Careers in Food and Agribusiness 1 Credit

Orientation to agribusiness management. Students will learn about agricultural production and marketing in New Mexico, the United States, and the world. Students will be introduced to faculty and staff within the department, learn about career opportunities available to AEAB graduates, and develop a greater appreciation of agricultural management issues. May be repeated up to 1 credits. Restricted to Las Cruces campus only.

Prerequisite(s): Freshman status only or obtain consent of instructor.

### AG E 200. Special Topics

#### 1-4 Credits

Specific subjects and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester. No more than 9 credits toward a degree. Consent of instructor required.

# AG E 210G. Survey of Food and Agricultural Issues 3 Credits

Survey of food and agricultural issues, including: geography of food production and consumption; human-agricultural-natural resource relations; agriculture in the United States and abroad; modern agribusiness; food safety; food, agriculture, and natural resources policy; ethical questions; role and impact of technology. Crosslisted with: FSTE 210G.

## AG E 236. Principles of Food and Agribusiness Management 3 Credits

Description and application of management and financial principles, market planning, and organization theory in small business situations. May be repeated up to 3 credits.

# AG E 250. Technology and Communication for Business Management 3 Credits (2+2P)

Understanding and improving skills for data analysis, information management and communication is the focus of this course. Drawing examples from a variety of management, business, technological and research situations, students discover the versatility and variety of uses of computer applications such as spreadsheet, database, presentation and document software. Emphasizing a 'hands-on' approach students learn the foundations of these tools and their use.

## AG E 260. Introduction to Food and Agribusiness Accounting 3 Credits

Purpose and methods of keeping and analyzing farm and ranch records. Net worth and income statements, efficiency measures, analysis of the business, and tax computations. May be repeated up to 3 credits.

## **AGRO-AGRONOMY (AGRO)**

# AGRO 100G. Introductory Plant Science 4 Credits (3+2P)

Introduction to the physical, biological, and chemical principles underlying plant growth and development in managed ecosystems. In the laboratory portion of the class, students perform experiments demonstrating the principles covered in lecture. The course uses economic plants and agriculturally relevant ecosystems to demonstrate basic principles. Appropriate for nonscience majors. Same as HORT 100G.

### **AGRO 200. Special Topics**

### 1-4 Credits (1-4)

Specific subjects and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester. No more than 9 credits toward a degree. May be repeated up to 9 credits. Consent of Instructor required.

### AGRO 250. Plant Propagation

### 3 Credits (2+2P)

Practical methods of propagating horticultural plants by seed, cuttings, layering, grafting, division and tissue culture. Examination of relevant physiological processes involved with successful plant propagation techniques. Crosslisted with HORT 250.

### **AHS-ALLIED HEALTH SCIENCE (AHS)**

### AHS 102. Careers in the Health Fields

### 1-3 Credits (1-3)

This course will provide students with a broad understanding of health careers as well as emerging issues in health. This will also include the study of the functional roles of practice, education, administration, and research in health fields. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

## AHS 115. Dietary Guidelines & Meal Planning 4 Credits

A combination of the science of nutrition and the current Dietary Guidelines for Americans with practical application to meal planning and preparation. Strategies and techniques used to plan and prepare healthful and appetizing meals are explored. Evidenced-based dietary guidelines are provided to meet the needs of individuals and groups with chronic diseases. Menu development, modification and analysis are reviewed. Restricted to Community Colleges campuses only.

### AHS 116. Math for Health Occupations

#### 3 Credits

Principles of math and pharmacology necessary for administration of medications. Restricted to: Community Colleges only.

Prerequisite(s): CCDM 114N or equivalent.

### AHS 120. Medical Terminology

#### 3 Credits

The study and understanding of medical terminology as it relates to diseases, their causes and effects, and the terminology used in various medical specialties. Emphasis will be placed on learning the basic construction of medical words, appropriate spelling, use of medical terms, and use of medical abbreviations. Same as HIT 150. May be repeated up to 3 credits. Crosslisted with: NURS 150 and BOT 150. Restricted to Community Colleges campuses only.

# AHS 140. Essentials of Anatomy and Physiology 4 Credits (3+3P)

Essentials of anatomy and physiology for those considering a career in health as well as those interested in understanding their own body and the basics of health.

### AHS 153. Introduction to Anatomy and Physiology I 4 Credits (3+3P)

Survey of human anatomy and physiology.

**Prerequisite:** high school biology or high school chemistry, or CHEM 110G, or consent of instructor.

### AHS 155. Special Topics

#### 1-6 Credits

Topics to be announced in the Schedule of Classes. May be repeated for a maximum of 6 credits.

# AHS 165. Foundations to Allied Health Science 3 Credits (1+4P)

A foundational course which will cover a mulitdisciplinary focus on success in the Allied Health care environment. Topics included, but not limited to: the health care system, personal and professional qualities of a health care worker, legal and ethical responsibilities, cultural diversity, nutrition and diets, medical math, infection control, preparing for the world of work, core measures and quality assurance, the prospective payment system, customer service, current trends in health care and communication, and promotion of safety. Laboratory time will cover library and library resource use, promotion of safety, vital sign, CPR & AED use, job interviewing practice, and 16 hours of job shadowing participation located in a healthcare facility. Open to all students seeking to pursue an Allied Health or Healthcare career pathway. Restricted to Community Colleges campuses only.

### AHS 190. Clinical Skills & Concepts for Medical Assisting I 6 Credits (3+6P)

A core course designed to provide an introduction to the theory, concepts, and skills needed for entry-level medical assisting positions. Content includes basic theory and concepts designed to support safe and effective practice as a medical assistant in ambulatory care settings. Includes a skills laboratory for hands-on practice and 96 hours of supervised clinical in the work environment. Restricted to Community Colleges campuses only.

Prerequisite(s): (BIOL 225 and 226) or (AHS 153 and 154).

# AHS 202. Legal and Ethical Issues in Health Care 3 Credits

Consideration of legal and ethical issues in modern health care delivery.

# AHS 250. SPANISH FOR HEALTH PROFESSIONALS 3 Credits

Spanish for Health Professionals is a 3 credit course geared toward individuals working or majoring in health related areas. The course focus is on conversation and vocabulary needed for the workplace and task based practical skills. Restricted to: Community Colleges only.

# AHS 280. Medical Office Administration & Management 4 Credits (2+4P)

A core course designed to provide the theory, concepts, and skills needed in preparation for entry-level medical assisting positions. Content includes theory and concepts related to medical office administration. The course includes skills, hands-on practice, and 40 hours of supervised clinical in the work environment in ambulatory care settings.

Prerequisite(s)/Corequisite(s): AHS 190. Restricted to Community Colleges campuses only.

## AHS 290. Clincial Skills & Concepts for Medical Assisting II 6 Credits (3+6P)

A core course designed to provide the theory, concepts, and skills needed in preparation for entry-level medical assisting positions. Content includes theory and concepts related to specialty areas of healthcare practice, as well as consideration for conditions affecting persons throughout the life span. The course includes a skills laboratory for hands-on practice and 96 hours of supervised clinical in the work environment with specialized populations and procedures in both ambulatory and acute care settings. Restricted to Community Colleges campuses only.

Prerequisite(s): AHS 190.

### AHS 295. Introduction to Allied Health

#### 1 Credit

An introductory course that covers a multidisciplinary focus needed for success in the allied health care environment. Topics include health care delivery systems and allied health careers, history of health care, law and ethics pertaining to health care, personal qualities of health care workers, confidentiality and reportable incidents. This course will also cover an orientation into safety and infection control, core measures and quality assurance, perspective payment system, customer service, current trends in health care and communication, skills to be a patient/client educator and a member of the Health Care team. Open to all students wanting to explore the allied health care industry. Restricted to Community Colleges campuses only.

### **ANSC-ANIMAL SCIENCE (ANSC)**

### **ANSC 100. Introductory Animal Science**

### 3 Credits

Orientation and survey of livestock industry in the United States; introduction to feeding, breeding, and management practices for producing farm animals and select companion animals.

## ANSC 100 H. Introductory Animal Science 3 Credits

Orientation and survey of livestock industry in the United States; introduction to feeding, breeding and management practices for producing farm animals and select companion animals. Additional course work will be required. Restricted to Las Cruces campus only.

Prerequisite(s): Eligibility for membership in honors college.

### ANSC 100 L. Introductory Animal Science Laboratory 1 Credit

Students will observe and participate in activities related to farm animal management and will include areas of livestock selection, nutrition, reproductive physiology, animal ID and animal health. This lab is required for animal science majors. Pre/

Corequisite(s): ANSC 100.

# ANSC 103. Introductory Horse Science 3 Credits (2+2P)

The light horse industry; breeds; introduction to feeding, breeding, marketing and management; handling and selecting horses for breeding and performance.

### ANSC 112. Companion Animals in Society

#### 3 Credits

Examination of the historical, current, and potential future roles of companion animals in human society. Topics include animal domestication, breeds, exotic companion animals, the companion animal industry, and competitions and sports involving companion animals. Emphasis is on canine and feline species. May be repeated up to 3 credits. Restricted to Las Cruces campus only.

### ANSC 190. Western Equitation I

#### 2 Credits

Basic principles of Western riding, including care and management of the riding horse, equitation equipment, and development of riding skills.

# ANSC 200. Introduction to Meat Animal Production 3 Credits (2+2P)

Production and utilization of beef cattle, sheep and swine; emphasis on feeding, breeding, management problems and marketing; selection of animals for breeding and market.

### ANSC 201. Introduction to Genetics for Animal Production 3 Credits

Introduction to genetics and inheritance relative to livestock production. Introduction to procedures for collection and use of performance information in livestock improvement programs.

Prerequisites: BIOL 111G.

### **ANSC 205. Introduction to Dairy Science**

#### 3 Credits

Introduction to the basic aspects of dairy science and how to apply key concepts to the practical feeding and management of dairy cattle and production of dairy products. Students should also obtain an appreciation for the size and diversity of the dairy industry.

**Prerequisite(s)/Corequisite(s):** ANSC 100. Restricted to Las Cruces campus only.

### ANSC 220. Animal Science Career Development 1 Credit

Introduction to scientific disciplines and career options in animalagriculture career-skill development, including resume preparation, networking, importance of internships, and leadership experiences in animal agriculture.

### **ANSC 250. Special Topics**

### 1-4 Credits

Specific subjects and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester. No more than 9 credits toward a degree.

### **ANSC 261. Introduction to Animal Metabolism**

#### 3 Credits

Principles underlying the mechanisms of animal metabolism as they relate to production, maintenance, and health of animals.

Prerequisite: CHEM 111G.

# ANSC 262. Introduction to Meat Science 3 Credits (2+3P)

Fundamental aspects of the red meat industry. Lecture topics and laboratory exercises include the nutrient value of meat, meat preservation, meat safety, muscle structure and contraction, slaughter and processing of beef, lamb, and pork, sausage manufacture, meat curing, meat cookery, and muscle and bone anatomy.

## ANSC 285. Introduction to Companion Animal Science 3 Credits

Introduction to the care of common companion animal species. Species specific housing and nutrition are covered in the context of maximizing animal health and well-being and reducing disease. May be repeated up to 3 credits.

### ANSC 288. Horse Fitting and Selling

#### 3 Credits

Preparation of horses for sale; planning and conduct of auction sale; application of marketing principles relating to selling horses.

Prerequisite: ANSC 103 or consent of instructor.

### ANSC 289. Management of Equine Operations

#### 3 Credits

Introduction and application of business skills necessary to effectively manage the equine operation. Students will learn how to use strategic thinking and sound business management practices to succeed in the demanding equine industry.

Prerequisite(s): ANSC 103 or consent of instructor.

### ANSC 290. Western Equitation II

#### 2 Credits

Intermediate principles of Western riding, including reading horse behavior, limbering-up exercises, and developing riding skills. Introduction to rollbacks, turnarounds and stops.

Prerequisite: consent of instructor.

### ANSC 295. Team Competition in Animal Science

#### 1-2 Credits

Training in team competition in the animal sciences. May be repeated for a maximum of 6 credits. May be repeated up to 6 credits. Consent of Instructor required.

### **ANTH-ANTHROPOLOGY (ANTH)**

### **ANTH 115. Native Peoples of North America**

### 3 Credits

Provides an introduction to the geography, environment, prehistoric cultural origins, sociopolitical organization, language, economics, material culture and technology, religious beliefs and practices, and historic period culture change of Native peoples of North America.

### ANTH 116. Native Peoples of the American Southwest

Introduction to the early history and culture of native people of the Southwest.

### ANTH 118. Introduction to Historic Preservation

#### 3 Credits

Introduction to historic preservation, its history, goals, methods, legal basis, and economic importance. Explores public role in decision-making. Community Colleges only.

### **ANTH 120G. Human Ancestors**

#### 3 Credits

Evolutionary history of the human species from its origin in the primate order, with primary emphasis on the evolution of humankind during the past three million years. Examination of the social lives of apes and consideration of similarities to and differences from them. Biological foundations of human behavior, emphasizing thought, movement, and interaction.

### **ANTH 125G. Introduction to World Cultures**

#### 3 Credits

Examine cross-cultural diversity and human universals through the lens of anthropological inquiry. Explore human thought and behavior in contemporary world cultures covering kinship, economic patterns, power structures, and religious practices and beliefs. The impact of cultural influence on everyday life is emphasized.

# ANTH 130G. Human's Place in Nature: Introduction to Biological Anthropology

### 3 Credits

This course uses scientific methods and principles to examine human evolutionary history and family tree relationships, as well as the biological foundations of human behavior. Through lectures, readings and laboratory assignments students are introduced to the history and development of modern evolutionary biology, molecular and population genetics, the primate and human fossil record and modern human biological diversity. By examining the social lives of apes and other primates, primitive and unique aspects of human behavior are identified and the lives of fossil ancestors are reconstructed.

Corequisite(s): ANTH 130GL.

# ANTH 130GL. Human's Place in Nature Laboratory 1 Credit

This one credit laboratory course uses scientific methods and principles to examine evidence for human evolutionary history and family tree relationships, primate ecology and behavior, and modern human diversity.

# ANTH 201G. Introduction to Anthropology 3 Credits

Exploration of human origins and the development of cultural diversity. Topics include biological and cultural evolution, the structure and functions of social institutions, belief systems, language and culture, human-environmental relationships, methods of prehistoric and contemporary cultural analysis, and theories of culture.

### ANTH 202G. World Archaeology

#### 3 Credits

This course is an exploration of human evolution and cultural development throughout the world. Students will be introduced to basic anthropological methods and theories and will learn how anthropological research has contributed to our understanding of major themes in human prehistory, including human evolution, the origins of culture, migration and colonization, animal and plant domestication, and the rise and fall of civilizations.

## ANTH 203G. Introduction to Language and Cultural Anthropology 3 Credits

Provides an introduction to the methods, theories, and results of two subfields of anthropology: linguistics and cultural anthropology. Linguistics is the study of human language. Cultural anthropology is the study of the organizing principles of human beliefs and practices.

### **ANTH 297. Elementary Special Topics**

#### 1-4 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

### **ARCT-ARCHITECTURE (ARCT)**

# ARCT 101. Introduction to Architecture 3 Credits (2+2P)

This course provides students the tools and vocabulary to analyze, interpret, and discuss the built environment from the social, historical, perceptual, and technical determinants. Lectures and assignments will introduce students to the elements of current and likely future directions of architecture from experiential, aesthetic, structural, functional, and historical perspectives. The course will provide students with knowledge about the people and processes involved with professional issues of architectural practice. Students will be required to participate in individual and group presentations and projects, as well as compile a portfolio of their work completed in the course.

# ARCT 104. Introduction to Architectural Drawing 4 Credits (2+4P)

This course is designed as an introduction to architectural drawing and design for students without prior experience in the fine arts. Students are guided through a series of spatial and analytical exercises that focus attention on not only how architects draw, but also the reasoning and processes embedded within the technique. Direct linkages with the Introduction to Architecture course provide exposure to a wide range of interconnected architectural concepts.

# ARCT 111. Architecture World History I 3 Credits (2+2P)

A survey of the development of world architecture from the ancient era to the advent of the enlightenment in Europe. Major emphasis is on the visual, intellectual, cultural and technological aspects of the ancient and indigenous cultures of the classical and pre-modern world. Community Colleges only. Restricted to Alamogordo, Dona Ana and Grants campuses.

### ARCT 124. Global Issues and Sustainability

This is a 'critical thinking' course. This course introduces students to global environmental issues (historic, present, and future), and the impact on tomorrow's design and construction professions. Issues will include, but shall not be limited to global warming, energy consumption, population, natural resource consumption, air and water quality, waste management, facilities operation management, politics, and facilities design & construction. Through extensive readings, research, dialogue, and debates, students will establish a personal position (opinion) on each of the topics covered. Guest speakers will also be invited. Students will develop reports and presentations on various related issues, as well as develop ideas for solutions to problems related to environmental issues. The impact on the design and construction industry, including 'Green Building' and 'LEED Accreditation and Certification/Criteria' will also be addressed on each issue. Restricted to Community Colleges only.

### ARCT 150. Orientation and Mentoring in Architecture-Construction-Engineering (ACE)

### 1-6 Credits (1-6)

This course is intended for high school dual credit students and college/university students wishing to explore careers in Architecture, Construction, and Engineering(ACE), which includes the specific fields of Architectural, Civil, Mechanical, Structural, Interior, Landscape, Sustainability, Environmental. Course is co-taught by a college instructor in conjunction with mentors who are local professionals in the fields of ACE. Students receive one-on-one mentoring, lectures, demonstrations, and attend field trips to construction sites, offices of Architects, Engineers and Designers, etc. Students also engage in hands-on activities such as Design (Architectural, Civil, Mechanical, Structural, Interior, Landscape, Environmental), analysis, model building, software, and research topics related to the ACE fields, as well as Sustainability, Interior Design, Landscape Design, Construction Materials and Fabrication processes. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

# ARCT 154. Introduction to Architectural Design 3 Credits (2+2P)

This course provides students who possess a basic background in architectural architectural drawing with an introduction to architectural design. Students are guided through a series of spatial and analytical exercises that focus attention on two dimensional, three dimensional, and four dimensional design. This course will build on direct linkages to ARCT 101 and ARCT 104 to further students' exposure to interconnected architectural concepts of process, organizational strategies, and analysis of material methodology while utilizing abstract and practiced graphical architectural conventions. Consent of Instructor required. Restricted to Community Colleges campuses only.

Prerequisite(s): ARCT 101 and ARCT 104.

# ARCT 170. Computers in Architecture 3 Credits (2+2P)

Explore various software and photography techniques widely used in the architectural field. In addition to using industry standard CAD program as primary 2-d drafting tool, focus is to produce digital architectural models and renderings, presentation boards, and animations. Digital images will be produced and enhanced through basic techniques in photography and integration of various software. Both individual and group work will be required.

# ARCT 204. Architectural Design Studio I 5 Credits (1+8P)

Enhancement of general graphic communication skills and introduction to fundamental design including exploration, development and defense of design concepts; structural order; 2D and 3D processes in manual and digital architectural graphic expression; model building; general communication and presentation techniques; and development of course portfolio. Course is Studio/critique-based with considerable amount of work/hours required. This course is designed to be taken during student's last year in the Pre-Architecture program at DACC. Consent of Instructor required. Restricted to Community Colleges only.

Prerequisite(s): Grade of B- or better in both ARCT 101 and ARCT 104.

# ARCT 210. Architectural Delineation I 3 Credits (2+2P)

Introduction to visual literacy, architectural graphic communication, & basic analytical skills. Architectural concepts primarily explored through the application of technical drawing, descriptive geometry, & material manipulation; primarily black & white media.

# ARCT 211. Architectural World History II 3 Credits (2+2P)

A survey of the development of world architecture from the enlightenment in Europe to the present. Community Colleges only. Restricted to Alamogordo, Dona Ana and Grants campuses.

Prerequisite(s): ARCT 111 or consent of instructor.

# ARCT 224. Sustainable Desgin in Architecture 3 Credits

This course provides students with hands-on opportunity to increase their awareness in, and respond to the issues of responsible environmentally friendly building design by engaging in an integrated design process combining 'Traditional Design Process' with 'Sustainable Environmental Design' strategies. Students will expand their awareness of global environmental impacts due to design and construction, and gain knowledge in the industry's leading design 'tool' LEED (Leadership in Energy and Environmental Design) green building design rating system. LEED strategies will be utilized in the design of individual projects apply LEED in practical, individual design development, and develop an integrated building model utilizing the concept of BIM (Building Information Modeling). Such project development will require learning a basic design process and specific sequence including conceptual design, schematic design, design development and BIM (utilizing a BIM software such as REVIT, or AutoCad Architecture). Restricted to Community Colleges only.

Prerequisite(s): DRFT 109 or DRFT 165 or consent of instructor.

# ARCT 250. Construction Documents 3 Credits (2+2P)

Basic use of CAD to produce residential, commercial, and industrial architectural working drawings, including floor plans, sections, foundation plans and details, exterior and interior elevations, framing plans, and site plans. Use and application of building and zoning codes, typical construction methods and materials, and accessibility requirements. Basic 3-D modeling, AIA layering standards, sheet layout, and construction document coordination. Pre/ Restricted to: Community Colleges only.

Corequisite(s): DRFT 109.

# ARCT 254. Architectural Design Studio II 5 Credits (1+8P)

Advanced graphic communication, design, and 3D physical model representation. Focus on site analysis, programming and fundamental design issues of context, environment, program development and space planning, 2D and 3D design and presentation techniques. Course is 'Studio/critique-based' with considerable amount of outside work/hours required. This course is designed to be taken during student's last year in the Pre-Architecture program at DACC. Restricted to Alamogordo, Dona Ana and Grants campuses.

Prerequisite(s): Grade of C- or better in ARCT 204.

# ARCT 260. Architectural Delineation 3 Credits (2+2P)

Continuation of ARCT 210 with an emphasis in color media.

Prerequisites: ARCT 210.

#### **ARCT 274. LEED Accreditation Exam Prep**

#### 3 Credits

This course is intended for anyone in the construction or architectural design fields who is interested in learning more about green building and the LEED (Leadership in Energy and Environmental Design) strategies, and are also interested in learning about how to become LEED accredited. Overview of the LEED rating systems utilized in the design and operation of buildings, the various LEED building certifications, and accreditation requirements for professionals. Highlights include interpretation of the LEED Reference Guides, accepted strategies for meeting LEED certification, sample practice exams, integrated project delivery methods, and a practical approach to problem solving through the use of design problems. Restricted to Community Colleges only.

#### **ARCT 290. Special Topics**

#### 1-6 Credits

Topics subtitled in the Schedule of Classes. May be repeated for a maximum of 12 credits.

Prerequisite: consent of instructor.

#### **ARCT 291. Cooperative Experience**

#### 1-6 Credits

Supervised cooperative work program. Student employed in approved occupation; supervised and evaluated by employer and instructor. Student meets weekly with instructor. Graded S/U.

Prerequisite: consent of instructor.

# ARCT 295. Professional Development and Leadership-AIAS 1-3 Credits

As members and/or officers of student professional organizations, architecture students gain experience through undertaking leadership roles, participating in team building, and becoming involved in service to the community. Students can also gain actual work experience involving skills related to their field of study. Graded S/U.

### **ART-ART (ART)**

#### ART 101G. Orientation in Art

#### 3 Credits (2+3P)

A multicultural examination of the principles and philosophies of the visual arts and the ideas expressed through them.

#### ART 110G. Visual Concepts

#### 3 Credits (2+4P)

Introduction to the philosophies of art, visual thinking, and principles of visual organization. Designed to give students a broad view of aesthetic traditions, ideologies, and techniques basic to the creation and evaluation of art. Principles and concepts are taught in a common lecture and applied in parallel small studio sections. For non-art majors only.

#### ART 150. Drawing I

#### 3 Credits (2+4P)

Introduction to the skill of seeing through exercises that emphasize careful drawing from the still life and utilize a range of drawing materials and techniques. Outside assignments required. Intended for non-art majors on main campus. May be repeated up to 3 credits.

### ART 151. Drawing II

#### 3 Credits (2+4P)

Continued emphasis on drawing from observation by focusing on still life and other subject matter. Covers a range of materials, techniques and concepts. Outside assignments. Restricted to ART and ANVE/DFM majors.

Prerequisite(s): ART 150.

#### ART 155. 2-D Fundamentals

#### 3 Credits

Introduction to two-dimensional space emphasizing visual elements and design principles as they apply to composition. A variety of materials are used in the studio projects and sketchbook exercises. Developing knowledge in vocabulary, color theory and skill in translating ideas into design are encouraged. Restricted to Community Colleges campuses only.

#### ART 156. 3-D Fundamentals

#### 3 Credits

Compositional organization of three-dimensional space explored through a broad range of visual exercises. Resourceful and creative problem solving encouraged. Restricted to Community Colleges campuses only.

#### ART 157. Color Theory

#### 3 Credits (2+4P)

Various color theories as they relate to compositional organization. Required for art education majors.

#### ART 160. Computer-Based Illustration

#### 3 Credits (2+4P)

Introduction to the principles of computerized drawing and design. Using the basic concepts, drawing tools, and vocabulary of Adobe Illustrator. **Prerequisite:** ART 150, ART 155, or consent of instructor.

#### ART 161. Digital Imaging I

#### 3 Credits (2+4P)

Work with basic concepts, tools, and vocabulary of Adobe Photoshop to create effective visual communication. Includes selection tools, cloning, copying and pasting, color correction, image restoration, filters, and special effects. Community Colleges only.

#### **ART 163. Digital Graphics**

#### 3 Credits (2+4P)

Importing and exporting images and text into various desktop publishing formats. Exploring imaging, drawing, and page layout applications. Introduction to typography.

#### Prerequisite: ART 161.

#### ART 165. Web Page Design

#### 3 Credits (2+4P)

Introduction to the creation of well-designed and organized Web sites. Emphasis on building creative but functional user-friendly sites. Introduction to HTML, Flash, Java Script, and Web-authoring software. Community Colleges only. Same as OEPT 165.

#### Prerequisite: ART 161.

#### ART 250. Introduction to Drawing

### 3 Credits (2+4P)

Introduction to drawing with a focus on technical, structural, and methodological skills. Subjects include still life and live figure models.

#### ART 252. Aspects of Drawing

#### 2-3 Credits

Continued work in drawing with emphasis on personal creative endeavor. Community Colleges only.

Prerequisites: ART 150, ART 151, and ART 250.

#### ART 255. Introduction to Graphic Design

#### 3 Credits (2+4P)

Introduction to the principles of visual communication and digital media, letterforms, typography and identity marks. Projects produced using conventional and digital tools.

#### **ART 260. Introduction to Painting**

#### 3 Credits (2+4P)

Introduction to basic skills of painting through various exercises that emphasize working from observation, images and imagination. May be repeated up to 3 credits.

Prerequisite(s): ART 250 or ART 150.

# ART 261. Painting Methods, Techniques and Applications 3 Credits (2+4P)

The investigation of formal aspects of painting, an examination of painting techniques, and an exploration of various methodologies regarding form and content as applied to critical thinking skills through medium of paint.

Prerequisite(s): ART 150, ART 260.

#### ART 262. Aspects of Painting

#### 2-3 Credits

Varied painting media: continued development of painting skills. **Prerequisites:** ART 150, ART 155 (for art majors), ART 260, or consent of instructor.

#### ART 265. Introduction to Sculpture

#### 3 Credits (2+4P)

Beginning sculpture students "explore space" while learning new processes and skills, including mold making, welding and woodworking.

#### ART 267. Art Portfolio Preparation

#### 3 Credits (2+4P)

Refine general marketing strategies, personal portfolio and resumes. Define, target, and penetrate personal target markets. Students develop individual promotional packages.

Prerequisites: ART 163, ART 269, and ART 272, or consent of instructor.

#### ART 269. Advanced Computer-Based Illustration

#### 3 Credits (2+4P)

Design custom graphics and create special effects with filtering, special effects on type, graphing, technical illustrations, and three-dimensional drawing using Adobe Illustrator.

Prerequisites: ART 157, ART 160, and ART 161, or consent of instructor.

#### ART 270. Introduction to Photography

#### 3 Credits (2+4P)

Introduction to the production of digital images within the context of contemporary art. Utilizes digital SLR cameras with an emphasis on basic camera operation, picture composition, image processing and digital workflow. A DSLR camera is required. May be repeated up to 3 credits.

#### ART 272. Digital Imaging II

#### 3 Credits (2+4P)

Refining of individual creative styles and technical skills using Adobe Photoshop. Emphasis on input and output predictability, and working with large file productions. Community colleges only. Restricted to: Community Colleges only.

Prerequisite(s): ART 161.

#### **ART 275. Introduction to Ceramics**

#### 3 Credits (2+4P)

Introduction to the technical processes and conceptual concerns of working with the ceramic material. Students will explore various methods of forming with earthenware to make both functional and expressive works out of clay.

#### ART 276. Ceramics I, B

#### 3 Credits (2+4P)

Beginning ceramics, complementary half to ART 275. (ART 275 and ART 276 do not need to be taken consecutively.) Basic building techniques of coil, slab, and throwing are introduced. High-fire and low-fire clays are used.

#### ART 280. Introduction to Printmaking

#### 3 Credits (2+4P)

Introduction to the field of printmaking through projects that focus on specific processes, such as relief, intaglio, collography, paper lithography, and a variety of transfer and stencil techniques. Students engage in several assignments that are collaborative, as well as individual projects designed for development of personal aesthetics.

#### ART 285. Introduction to Metals and Jewelry

#### 3 Credits (2+4P)

Introduction to fundamental processes, design, and conceptual development for metal fabrication of jewelry and functional/non-functional objects.

#### ART 286. Stained Glass

#### 3 Credits (2+4P)

Instruction in the fundamental fabrication and design techniques for stained glass. Introduction to visual decision making skills, historical, and critical issues of the medium. Community Colleges only.

#### ART 294. Special Topics in Studio

#### 1-3 Credits

Specific subjects and credits to be announced in the Schedule of Classes. No more than 9 credits toward a degree.

Prerequisite: consent of instructor.

#### ART 295G. Introduction to Art History I

#### 3 Credits

An introduction to the principles of art history within a chronological framework of the art of the Western World. All media will be discussed. From prehistoric times to the fourteenth century.

#### ART 296G. Introduction to Art History II

#### 3 Credits

Continuation of ART 295, Art of the Western World from Late Gothic to the present. May be repeated up to 3 credits.

### ART 298. Writing in Art

#### 3 Credits

This reading- and writing-intensive course will introduce students to various approaches of writing about historical art.

## **ASTR-ASTRONOMY (ASTR)**

### ASTR 105G. The Planets

#### 4 Credits (3+2P)

Comparative study of the planets, moons, comets, and asteroids which comprise the solar system. Emphasis on geological and physical processes which shape the surfaces and atmospheres of the planets. Laboratory exercises include analysis of images returned by spacecraft. Intended for non-science majors, but some basic math required. This lecture/lab course satisfies the New Mexico Common Core Area III: Lab Sciences requirement

#### **ASTR 110G. Introduction to Astronomy** 4 Credits (3+2P)

A survey of the universe. Observations, theories, and methods of modern astronomy. Topics include planets, stars and stellar systems, black holes and neutron stars, supernovas and gaseous nebulae, galaxies and quasars, and cosmology. Emphasis on physical principles involving gravity, light and optics (telescopes). Generally non-mathematical. Laboratory involves use of the campus observatory and exercises designed to experimentally illustrate principles of astronomy. This lecture/lab course satisfies the New Mexico Common Core Area III: Lab Sciences requirement.

#### ASTR 199. Introduction to Astronomy Lab, Special 1 Credit

This lab-only listing exists only for students who may have transferred to NMSU having taken a lecture-only introductory astronomy class, to allow them to complete the lab requirement to fulfill the general education requirement. Consent of Instructor required., at some other institution). Restricted to Las Cruces campus only.

Prerequisite(s): Must have passed Introduction to Astronomy lecture-only

### **AUTO-AUTOMOTIVE TECHNOLOGY** (AUTO)

### **AUTO 102. Electrical Measuring Instruments**

2 Credits (1+2P)

Selection, operation, and care of electrical measuring instruments.

### **AUTO 103. Auto Mechanics Fundamentals**

4 Credits (2+4P)

Theory and operation of all areas of auto mechanics. Basic repair and maintenance operations.

### AUTO 105. Welding

#### 4 Credits (2+4P)

Set-up and adjustment of oxyacetylene and arc welding equipment, identification of metals and rod application. Skill development in laying weld beads and different weld positions.

### **AUTO 111. Automotive Mechanics Basics**

#### 4 Credits

Basic maintenance procedures of the major components of the automobile using service repair manuals, hand and power tools, precision measurement equipment, fasteners and chemicals. Restricted to: Community Colleges only.

#### **AUTO 112. Basic Gasoline Engines**

#### 5 Credits (2+6P)

Principles of gasoline engine operation. Identification, design, function of engine components; engine disassembly and reassembly; trouble shooting, and rebuilding heads.

#### AUTO 113. Automotive Electricity and Electronics PT I 4 Credits (2+4P)

Topics include mastery of DC electricity, use of digital multimeters, troubleshooting electrical problems in starting, charging and accessory systems. Restricted to Community Colleges only.

#### **AUTO 114. Automotive Electricity and Electronics PT II** 4 Credits (2+4P)

Advanced AC and DC automotive electronic circuits. Troubleshooting electronically controlled components including supplemental restraint systems and convenience accessories. May be repeated up to 4 credits. Prerequisite(s)/Corequisite(s): AUTO 113. Restricted to Community Colleges campuses only.

### **AUTO 115. Automotive Engine Repair**

#### 5 Credits (2+6P)

Principles of gasoline engine operation. Identification of engine parts, operation, and function. Disassembly and reassembly. Engine problem diagnoses (cooling system, lubrication system, engine noises). Restricted to Community Colleges only.

#### AUTO 117. Electronic Analysis and Tune-Up of Gasoline Engines 5 Credits (2+6P)

Theory and operation of ignition and emission control systems and fuel system. Use of troubleshooting equipment and diagnostic equipment. Prerequisite: AUTO 120 or consent of instructor.

#### **AUTO 118. Technical Math for Mechanics**

3 Credits (2+3P)

Mathematical applications for the automotive trade.

#### AUTO 119. Manual Transmission/Clutch

#### 5 Credits (2+6P)

Manual transmission, transfer cases, and clutch operating principles. Students will diagnose problems, remove and replace, disassemble, repair, and assemble units.

#### **AUTO 120. Electrical Systems**

#### 4 Credits (2+4P)

Troubleshooting and repair of starters, alternators, and associated circuits. Reading electrical diagrams, diagnosis and repair of electrical accessories.

Prerequisite: consent of instructor.

#### **AUTO 122. Automotive Brakes**

#### 4 Credits (2+4P)

Focus is on theory, diagnosis, and service of drum, disc, and anti-lock braking systems, brake component machining, hydraulic component reconditioning, friction and hardware replacement. Restricted to Community Colleges only.

### **AUTO 124. Automotive Heating and Air Conditioning** 4 Credits (2+4P)

R12 and R134A air conditioning systems maintenance diagnosis and repair. R12 to R134A conversion procedures. Troubleshooting automatic temperature controls and leak detection. Restricted to Community Colleges only.

#### AUTO 125. Brakes

#### 5 Credits (2+6P)

Theory of operation, diagnosis, repair, and maintenance of disc and drum brakes; safety and use of special tools.

#### AUTO 126. Suspension, Steering, and Alignment 5 Credits (2+6P)

Types of steering systems, suspension maintenance and repair, fourwheel alignment procedures.

#### **AUTO 127. Basic Automatic Transmission**

#### 4 Credits (2+4P)

Theory and operation of the automatic transmission; maintenance, troubleshooting, diagnosis, and repair of components.

# AUTO 129. Automotive Steering and Suspension 4 Credits (2+4P)

Diagnosis/service of suspension components including shocks, springs, ball joints, manual and power steering systems and four wheel alignment are some areas covered. Restricted to Community Colleges only.

## AUTO 130. Introduction to Transportation Industry 3 Credits

State and national traffic statutes that relate to the trucking industry. A Commercial Driver's License Learner's Permit will be obtained through successful completion of the course.

**Prerequisites:** Must be 18 years of age, have a current driver's license and consent of instructor.

#### AUTO 131. Class A CDL

#### 3 Credits (1+4P)

Instruction in how to perform proper pre-trip inspection; hands-on training with a tractor-trailer unit on the backing range and street driving to develop skills necessary to pass Class A DCL exam. Restricted to Community Colleges campuses only.

**Prerequisite(s):** Class A CDL restricted license (permit) and either restriction of D.O.T.

# AUTO 132. Automotive Air-Conditioning and Heating Systems 4 Credits (2+4P)

Theory and operation, reading schematic diagrams, troubleshooting, repair, and replacement operations performed.

# AUTO 137. Fuel Systems and Emission Controls 4 Credits (2+4P)

Covers theory and operation of fuel system and emission control. Troubleshooting, vacuum diagrams, overhaul, repair and adjustment of carburetion and fuel injection.

Prerequisites: AUTO 117 or consent of instructor.

#### **AUTO 139. Automotive Computer Controls**

4 Credits (2+4P)

Same as OEPM 139.

#### **AUTO 161. Non-Structural Repair**

#### 4 Credits (2+4P)

This basic auto body course is designed to develop the students understanding of general shop safety using hand tools, pneumatic tools and power tools. This course will also cover straightening fundamentals, plastic and composite repair, panel replacement, and adjustments.

#### AUTO 162. Advanced Non-Structural Repair I 4 Credits (2+4P)

This course will involve the students in all phases of minor non-structural collision damage repairs. It will encompass sheet metal repair, advanced panel replacement and alignment.

Prerequisite(s): AUTO 161.

# AUTO 163. Advanced Non-Structural Repair II 4 Credits (2+4P)

This course is a continuation of AUTO 162 with emphasis in all phases of minor non-structural damage repair. The student will be instructed in sheet metal repair and panel alignment as well as the R&I of automotive glass and related components.

Prerequisite(s): AUTO 162.

#### AUTO 164. Automotive Industry Collision Repair I 4 Credits (2+4P)

This advanced course is a continuation of AUTO 161, 162, and 163. This course will incorporate all areas of major non-structural collision damage repair. Through practical application the student will learn how to effectively repair all heavy collision damage using current I-CAR repair standards and procedures.

Prerequisite(s): AUTO 163.

#### AUTO 165. Automotive Industry Collision Repair II 4 Credits (2+4P)

This advanced course is a continuation of AUTO 164 with emplasis on time efficiency. This course will involve the student in all areas of major collision damage repair. The student will be exposed to all applicable I-CAR industry procedures and standards involved in sheet metal and composite panel repair.

Prerequisite(s): AUTO 164.

#### AUTO 172. Introduction to Automotive Refinishing 4 Credits (2+4P)

This course is designed to incorporate all aspects of surface preparation, paint safety, refinishing materials, and refinishing fundamentals. Students will receive instructions for the application of acrylic enamel and base coat/clear coat refinishing systems.

# AUTO 174. Intermediate Automotive Refinishing 4 Credits (2+4P)

This course encompasses all areas of surface preparation, damage repair and refinishing procedures that are necessary for achieving a proper spot repair. Students will also be exposed to safe work habits in the refinishing area and correct automotive detailing procedures.

Prerequisite(s): AUTO 172.

# AUTO 176. Automotive Color Adjustment & Blending 4 Credits (2+4P)

This course will help develop the skills needed to match any type of paint. It will expose the student to color theory, color evaluation, color matching, and other color adjustment factors. The student will be instructed in multiple panel paint blending techniques as well.

Prerequisite(s): AUTO 174.

# AUTO 178. Automotive Overall Refinishing 4 Credits (2+4P)

This course encompasses all areas of automotive refinishing. This advanced course is a continuation of AUTO 176 with emphasis in achieving industry refinishing times and standards consistent with that of I-CAR. The student will be exposed to surface preparation and refinishing techniques involved with overall coat/clear coat refinishing system.

Prerequisite(s): AUTO 176.

# AUTO 181. Frame and Structural Repair 4 Credits (2+4P)

This course will involve the student in all areas of frame and structural damage repairs. Through theory and practical application, the student will learn how to diagnose and repair various types of damage include: mash, twist, sag, and side sway. This course will expose the students to safe work habits while using measuring and straightening equipment.

Prerequisite(s): AUTO 165.

# AUTO 182. Structural Panel Replacement 4 Credits (2+4P)

This course is a continuation of AUTO 181 with infancies in structural panel replacement. The student will be exposed to frame and unibody measuring equipment and their proper use in sectioning procedures. Through theory and practical application the student will learn how to ID structural components, properly separate spot welds, position and weld new body panels in place.

Prerequisite(s): AUTO 181.

### AUTO 201. Engine Performance I

#### 4 Credits (2+4P)

Theory, function, service and analysis of engine related subsystems including ignition, fuel, starting, and charging systems. Emphasis is placed on diagnosis and operation of electronic engine control management systems. Restricted to Community Colleges only.

# AUTO 203. Engine Performance II 4 Credits (2+4P)

Study of engine management systems and emission control systems, their function and relationship to vehicle performance and air pollution. Emphasis is placed on the analysis and repair of non-compliant vehicles. Restricted to Community Colleges only.

# AUTO 204. Engine Performance III 4 Credits (2+4P)

Study of advanced level diagnostic test procedures and the equipment used to analyze OBD-II emission and drivability concerns. Use of Digital Storage Oscilloscopes, current ramping, Scan Tool analysis of 4 and 5 gas analyzers is mastered. Hybrid vehicles and the latest engine control systems are introduced. Restricted to Community Colleges only.

# AUTO 205. Manual Drive Train and Axles 4 Credits (2+4P)

Operation, diagnosis, maintenance, repair or replacement of manual transmissions, clutch assemblies, differentials, drivelines, axles, and manual transaxles. Restricted to Community Colleges only.

# AUTO 206. Automatic Transmissions 5 Credits (2+6P)

Operation, diagnosis, maintenance, and repair of automatic transmissions including rear wheel drive, front wheel drive, and electronically controlled transmissions and transaxles. Restricted to Community Colleges only.

# AUTO 208. Introduction to Alternative Fueled Vehicles 3 Credits

Course will familiarize student with conditions that are resulting in the alternative fueled vehicle movement as well as the design and safety precautions unique to each alternative fuel. Propulsion systems covered include electric vehicles, bio-fueled vehicles, hybrid-electric vehicles and hydrogen powered vehicles, along with other emerging technologies as appropriate. Restricted to: Community Colleges only.

### Prerequisite(s): AUTO 113 and AUTO 114.

**AUTO 209. Hybrid Vehicle Service Techniques** 

#### 3 Credits

Designed for experienced automotive technicians, this course will cover safety procedures, design, operational overview and service techniques as well as minor diagnosis and repair of all classifications of hybrid-electric vehicles. Each student must possess legal Class '0' high voltage gloves and liners to attend this class. Restricted to: Community Colleges only.

Prerequisite(s): AUTO 113 and AUTO 114.

#### **AUTO 221. Cooperative Experience I**

#### 1-6 Credits

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U.

Prerequisite: consent of instructor.

# AUTO 255. Special Problems in Automotive Technology 1-5 Credits

Individual studies in areas directly related to automotive technologies. May be repeated for a maximum of 12 credits.

Prerequisite: consent of instructor.

#### **AUTO 295. Special Topics**

#### 1-6 Credits

Topics to be announced in the Schedule of Classes.

# AXED-AGRICULTURAL EXTN EDUC (AXED)

# AXED 100. Introduction to Agricultural, Extension, and Technology Education

#### 3 Credits

Orientation to programs, philosophies, competencies and leadership skills needed by professionals in agricultural and technology education, extension education, agricultural communications, and related career opportunities in industry, governmental agencies, and international organizations.

# AXED 105. Techniques in Agricultural Mechanization 3 Credits (2+2P)

Development of competencies in agricultural mechanics including safety, tool identification, operation and maintenance of hand and power tools, cold metal, drafting, and plumbing procedures. Designed for any major wishing to improve mechanical skills needed in agriculturally related occupations in education and industry.

### **AXED 200. Special Topics**

#### 1-4 Credits

Specific subjects and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester. No more than 6 credits toward degree.

# AXED 201G. Effective Leadership and Communication in Agricultural Organizations

#### 3 Credits (2+2P)

Theory and practice in leadership and communication for professionals who must work effectively in leadership and supervisory roles with people in agricultural business, industry, government agencies, and education. Course focuses on contemporary leadership theories.

Oral communication skills in informative and persuasive speaking, parliamentary procedure, and for small groups are developed.

# AXED 205. Metal Technology-Fabrication 3 Credits (2+4P)

Processes and procedures of metal fusion, including gas and electric welding techniques and safety. Designed for any major wishing to improve mechanical skills needed in agriculturally related occupations in education and industry.

#### AXED 230. Early Field-Based Experience in Extension and Industry 2 Credits (2)

First Hand view of the roles of professional educators through field experiences with Cooperative Extension or other government agencies. Includes 4 weeks of classroom instruction and 30 hours of observation in a work setting. Consent of Instructor required. Restricted to Las Cruces campus only.

#### AXED 232. Early Field-Based Experience in Agricultural and Technology Education

#### 2 Credits

First-hand view of the roles of professional educators through field experiences in a secondary agricultural or technology education setting. Includes 4 weeks of classroom instruction and 30 hours of observations in a classroom setting. Consent of Instructor required.

#### **AXED 240. Introduction to Agricultural Communication** 3 Credits

Students will learn about the history and theories of agricultural communications, be introduced to the degree program, explore careers in the field, and examine the role of media in agricultural communications

### **B A-BUSINESS ADMINISTRATION (B** A)

#### **B A 104. Introduction to Business**

#### 3 Credits

Survey and integration of functions in business organizations within their social and economic environment. Community Colleges only.

#### B A 105. Special Topics

#### 1-3 Credits

Current topics in business and economics.

#### B A 202. Small Business Enterprise

Appraisal of business functions within the framework of a small business organization.

#### B A 291. Business Administration and Economics Internship and Cooperative Education I

#### 1-3 Credits

Introduction and applications of the principles of business administration and economics. Registration in one course allowed per co-op work phase; a minimum of 12 work weeks is required. Open only to students in the College of Business. Option of S/U or a grade. The amount of academic credit (1-3 cr.) will be determined by the academic experience, and not by the work experience.

## **BCHE-BIOCHEMISTRY (BCHE)**

#### **BCHE 140. Introduction to Biochemistry**

#### 1 Credit

A description of the nature of inquiry in biochemistry, especially with respect to the interaction of chemistry and biology. Both historical development and topics of current interest will be discussed. Graded S/U.

### BCHE 241. Introduction to Research in Biochemistry

#### 1-3 Credits

Techniques and procedures of biochemical research. May be repeated for a maximum of 3 credits.

Prerequisites: 8 credits of chemistry and 3.0 GPA in chemistry.

### **BCIS-BUSINESS COMPUTER SYSTEMS (BCIS)**

#### BCIS 110. Fundamentals of Information Literacy and Systems 3 Credits

Examination of information systems and their impact on commerce, education, and personal activities. Utilization of productivity tools for communications, data analysis, information management and decisionmaking.

### **BCT-BUILDING CONSTRUCTION TECH** (BCT)

### BCT 100. Building Trades I

8 Credits (2+12P)

Equipment and general safety. Human relations, building construction surveying, footings, foundation form work, framing, sheathing, insulation. Basic electrical wiring and plumbing. Classroom instruction, on-the-job training, and problem solving.

#### BCT 101. Introduction to Construction I 2 Credits (2+1P)

Basic safety, including personal protective equipment, how to perform basic construction tasks safely, and what to do if an accident occurs. Includes basic construction methods. May be repeated up to 2 credits. Restricted to Community Colleges campuses only.

Corequisite(s): BCT 102 and BCT 103.

### **BCT 102. Introduction to Construction II**

#### 2 Credits (2+1P)

Introduction to power and hand tools, blueprints, and basic rigging hardware and techniques. May be repeated up to 2 credits. Restricted to Community Colleges campuses only.

Corequisite(s): BCT 101 and BCT 103.

#### **BCT 103. Introduction to Construction Laboratory** 3 Credits

Provides students the opportunity to practice skills they have acquired in BCT 101 and BCT 102. It includes task-oriented projects in which students can apply many of the skills and knowledge that have been presented throughout the National Center for Construction and Education Research (NCCER) Carpentry Program. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Corequisite(s): BCT 101 and BCT 102.

#### BCT 104. Woodworking Skills I

#### 3 Credits (1+4P)

Use and care of hand tools and elementary power tools, safety procedures, and supervised project construction.

#### BCT 105. Woodworking Skills II

#### 3 Credits (1+4P)

Advanced woodworking skills to include use of advanced power tools, power tool safety, and supervised construction.

Prerequisite: BCT 104 or consent of instructor.

#### BCT 106. Woodworking Theory and Practice

#### 3 Credits (2+2P)

History of wood manufacturing, industrial techniques, wood characteristics, stains and finishes. Design and construction of minor wood projects.

#### BCT 107. Painting I

#### 4 Credits (2+4P)

Types and applications of paints and clear coatings. Use of fasteners, caulks, and sealants. Restricted to: Community Colleges only.

### BCT 109. Plumbing I

#### 3 Credits (2+3P)

Covers orientation to the trade. Students will learn about materials used in the plumbing industry and the different types of plumbing fixtures. It includes task-oriented projects in which the students apply many of the skills and knowledge that are presented through the National Center for Construction and Education Research (NCCER) Plumbing Program. May be repeated up to 3 credits.

**Prerequisite(s)/Corequisite(s):** BCT 101, BCT 102. Restricted to Community Colleges campuses only.

# BCT 110. Blueprint Reading for Building Trades 4 Credits (2+4P)

Same as DRFT 151, OEET 101, OEPB 110.

# BCT 111. Small Equipment Maintenance and Repair 4 Credits (2+4P)

Covers small engine theory, troubleshooting and repair, auto maintenance, hydraulic theory and repair lubricants, batteries and scheduled tool maintenance. Restricted to: Community Colleges only.

### BCT 114. Basic Carpentry

3 Credits (1+4P)

Covers orientation to the trade; wood building materials, fasteners, and adhesives; detailed description and explanations of hand-operated and power tools, including safety; framing basics including laying out and constructing of wood floors, walls and ceilings and includes roughing in of door and window openings. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Corequisite(s): BCT 115 and BCT 116.

### BCT 115. Carpentry Level I

#### 3 Credits (1+4P)

Describes the various kinds of roofs and provides instructions for lay out of the different roofing systems. Describes the various types of windows, skylights, and exterior doors and provides instruction for installation. May be repeated up to 3 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

Corequisite(s): BCT 114 and BCT 116.

#### **BCT 116. Basic Carpentry Lab**

#### 2 Credits

Provides students the opportunity to practice skills they have acquired in BCT 114 and BCT 115. It includes task-oriented projects in which students can apply many of the skills and knowledge that have been presented throughout the National Center for Construction and Education Research (NCCER) Carpentry Program. May be repeated up to 2 credits. Restricted to Community Colleges campuses only.

Corequisite(s): BCT 114 or BCT 115.

### BCT 117. Plumbing 1A

#### 3 Credits (2+2P)

This course will introduce students to the plumbing profession. Students will become familiar with the tasks and responsibilities of plumbing professionals in the construction industry and gain a basic knowledge of the plumbing field. Restricted to Community Colleges campuses only.

#### BCT 118. Math for Building Trades

#### 3 Credits

Geometry, algebra, arithmetic, and basic trigonometry pertaining to mathematical applications in the building trades field. Same as OEET 118, DRFT 118, OEPB 118.

Prerequisite: CCDM 103 N.

#### BCT 119. Plumbing 1B

#### 3 Credits (2+2P)

This course continues the introduction of students to the plumbing profession. Students will become familiar with the tasks and responsibilities of plumbing professionals in the construction industry and gain a basic knowledge of the plumbing field. Restricted to Community Colleges campuses only.

Prerequisite(s): BCT 117.

### BCT 130. Professional Development and Leadership

#### 1 Credit

As members and/or officers of various student professional organizations, students gain experience in leadership, team building, and community service. Students competing or participating in Skills USA are required to register for the course. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: BCT majors. S/U Grading (S/U, Audit). Restricted to: Community Colleges only.

#### **BCT 150. Forklift Operation**

#### 1 Credit

Classroom instruction and hands-on practice to prepare students to operate a forklift safely in the workplace. Students will have the opportunity to earn a forklift operator's permit. Consent of Instructor required. Restricted to Community Colleges campuses only.

#### BCT 200. Building Trades II

#### 8 Credits (2+12P)

Continuation of BCT 100: roofing; exterior and interior finish; masonry; door, window, and cabinet installation.

#### **BCT 206. Advanced Cabinetmaking**

#### 3 Credits (1+3P)

Advanced cabinetmaking skills, to include expert use of hand and power tools, professional construction and finishing techniques.

Prerequisites: BCT 105, BCT 106, or consent of instructor.

### BCT 209. Plumbing II

#### 3 Credits (2+3P)

Continuation of BCT 109. Provides students the opportunity to gain more practice in the skills and knowledge learned in Plumbing I. Students will install fixtures and run the various plumbing supply lines from Plumbing Level I. The course included hands on projects in which the students apply many of the competencies that have been presented through the National Center for Construction and Education Research (NCCER) Plumbing Program. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): BCT 109.

#### BCT 217. Building and the Environment

#### 3 Credits

Introduction to LEED's, and Green Building Fundamentals, sustainability, sustainable design and green building evaluating cost implication of green building. Describes site development; managing site water runoff, improving a project's water use efficiency. Discusses renewable energy sources, and introduces student to generating power on-site using renewable energy sources, improving a building's indoor environment quality, improving the building industries' environmental performance and environmental aspects of building maintenance, re-use and conservation.Restricted to: Community Colleges only.

#### BCT 218. Plumbing 2

#### 4 Credits (2+4P)

This course builds on the skills and knowledge students have gained in previous BCT introduction to plumbing courses, focusing on installation of plumbing systems. Students will become familiar with the tasks and responsibilities of plumbing professionals in the construction industry and gain a basic knowledge of the plumbing field.

Prerequisite(s): BCT 117 and BCT 119.

#### BCT 219. Weatherization in Construction 3 Credits (2+2P)

Introduction to industry weatherization standards and practices utilized in the construction of buildings for the purpose of energy conservation. Economic and environmental impacts of the use of energy in heating and cooling building will be examined.

Prerequisite(s): BCT 101, BCT 102 and BCT 103.

#### **BCT 221. Cooperative Experience I**

#### 1-4 Credits

Supervised cooperative work program. Student is employed in an approved occupation and is supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U.

Prerequisite: consent of instructor.

#### **BCT 222. Alternative Building**

#### 3 Credits (2+2P)

Exploration of different types of building techniques and materials other than the traditional wood framed structures. Materials and techniques will include adobe, straw bale, insulated concrete forms, rammed earth and structural insulated panels with an emphasis on "green building" methods. Restricted to: Community Colleges only.

#### **BCT 255. Special Topics**

#### 1-6 Credits (1-6)

Topics to be announced in the Schedule of Classes . May be repeated up to 12 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

#### BCT 290. Special Problems in Building Technology

#### 1-4 Credits

Individual studies in areas directly related to building technologies. Prerequisite: consent of instructor.

## **BIOL-BIOLOGY (BIOL)**

#### **BIOL 101G. Human Biology**

#### 3 Credits

Introduction to modern biological concepts. Emphasis on relevance to humans and their relationships with their environment. Cannot be taken for credit after successful completion of BIOL 111G or BIOL 211G. Appropriate for non-science majors. Requires successful completion of BIOL 101GL in order to meet the NM Common Core Area III Laboratory Science requirements.

### **BIOL 101GL. Human Biology Laboratory**

### 1 Credit Laboratory for BIOL 101G. Laboratory experiences and activities

exploring biological concepts and their relevance to humans and their relationship with their environment.

Prerequisite(s)/Corequisite(s): BIOL 101G.

### **BIOL 110G. Contemporary Problems in Biology**

#### 4 Credits (3+3P)

Fundamental concepts of biology will be presented using examples from relevant problems in ecology, medicine and genetics. For nonscience majors only. Community Colleges only.

#### **BIOL 111G. Natural History of Life**

#### 3 Credits (3)

Survey of major processes and events in the genetics, evolution, and ecology of microbes, plants and animals, and their interactions with the environment. Appropriate for science and nonscience majors. Must be taken with BIOL 111L to meet general education requirements. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): Currently enrolled in MATH 120, grade of C- or better in MATH 120, or a Math Placement Exam score adequate to enroll in mathematics courses beyond MATH 120.

#### **BIOL 111GL. Natural History of Life Laboratory** 1 Credit

Laboratory experiments, demonstrations and exercises on interrelationships among organisms, biodiversity, processes of evolution, and interaction of organisms and their environment. Appropriate for science and nonscience majors. May be repeated up to 1 credits.

Prerequisite(s)/Corequisite(s): BIOL 111G; Currently enrolled in MATH 120, grade of C- or better in MATH 120, or a Math Placement Exam score adequate to enroll in mathematics courses beyond MATH 120.

#### **BIOL 150. Topics in Biology**

#### 1-3 Credits (1-3)

Introductory level coverage of biological topics. May be repeated up to 9

#### **BIOL 154. Introductory Anatomy and Physiology** 4 Credits (3+3P)

Survey of human structure and function (does not replace BIOL 190, BIOL 111G, or BIOL 211G as a prerequisite for advanced courses in biology). Restricted to: Community Colleges only.

#### **BIOL 211G. Cellular and Organismal Biology** 3 Credits

Principles of cellular structure and function, genetics, and organismal physiology. This course prepares the student for continuation in science or allied health fields. Suitable for all majors. Must be taken with BIOL 211L to meet general education requirements. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): a C- or better in MATH 120 or higher and a C- or better in CHEM 110G or CHEM 111G or CHEM 115.

#### **BIOL 211GL. Cellular and Organismal Biology Laboratory** 1 Credit

Laboratory demonstrations, experiments and exercises on molecular and cellular biology and organismal physiology. Must have passed BIOL 211G or be concurrently enrolled in BIOL 211G and BIOL 211L. Pre/ May be repeated up to 1 credits.

Prerequisite(s)/Corequisite(s): a C- or better in BIOL 211G, MATH 120 or higher, and a C- or better in CHEM 110G or CHEM 111G or CHEM 115.

### **BIOL 219. Public Health Microbiology**

The characteristics of pathogenic microorganisms and the diseases that they cause. Will not meet the microbiology requirements for biology or medical technology majors.

Prerequisite: BIOL 211G and BIOL 211GL.

#### **BIOL 221. Introductory Microbiology**

#### 3 Credits

Principles of isolation, taxonomy, and physiology of microorganisms. Restricted to Community Colleges campuses only.

Prerequisite(s): CHEM 110G or CHEM 111G or CHEM 112G.

Corequisite(s): BIOL 221 L.

#### BIOL 221 L. Introductory Microbiology Laboratory 1 Credit

A laboratory course to accompany BIOL 221 or BIOL 219. **Prerequisite:** BIOL 221 or BIOL 219 or concurrent enrollment.

### BIOL 225. Human Anatomy and Physiology I

#### 4 Credits (3+3P)

The first in a two-course sequence that covers the structure and function of the human body, including terminology of the human gross anatomy, chemistry overview, cell structure, cell physiology (including DNA, protein synthesis and cell division). The organization of cells and tissues and their metabolic and homeostatic processes and regulation are also covered. Physical and chemical operation of organs and systems of the human body include the intergumentary, skeletal, muscular, and nervous systems. Pre/ Restricted to: Community Colleges only.

Corequisite(s): CHEM 110G or CHEM 111G.

# BIOL 226. Human Anatomy and Physiology II 4 Credits (3+3P)

The second in a two-course sequence that covers the structure and function of the human body. Includes the physical and chemical operation of the organs and systems of the human body, including endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary and reproduction system. Concepts of nutrition, metabolism, energy, fluid and electrolyte balance, heredity pregnancy and human embryonic and fetal development are also covered. Restricted to: Community Colleges only.

Prerequisite(s): BIOL 225, CHEM 110G or CHEM 111G.

#### **BIOL 227. Pathophysiology**

#### 3 Credits

A study of the structure and function of the human body with specialized emphasis on disease processes.

**Prerequisite(s):** AHS 153 or BIOL 225 Corequisite/Prerequisites(s): AHS 154 or BIOL 226 Restricted to: Community Colleges only.

#### **BIOL 250. Special Topics**

#### 1-3 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 6 credits. Community Colleges only.

#### **BIOL 253. Human Anatomy**

#### 4 Credits (3+3P)

Detailed presentations of human anatomy, with laboratory. For nursing, prenursing, and human nutrition and food science majors only. Restricted to: HNFS, PNUR majors.

Prerequisite(s): Grade of C- in BIOL 211G and either CHEM 111G or CHEM 110G.

### **BIOL 254. Human Physiology**

#### 3 Credits

Physical and chemical operation of the organs and systems of the human body. Not open to students who have passed BIOL 354 or BIOL 381.

Prerequisite(s): Grade of at least C- in BIOL 211G; BIOL 211GL;

CHEM 111G or CHEM 110G.

#### BIOL 262. Human Pathophysiology I 3 Credits

The first in a two-course sequence that covers changes in body physiology that result from disease or injury. Includes a general introduction to pathophysiology as well as an overview of altered cellular and tissue biology, injury, inflammation, and neoplasia. Students will also explore deviation from fluid, hemodynamic, and endocrinologic balance. Topics related to the science of pathophysiology, including pathology, pathogenesis, etiology, epidemiology, and clinical manifestations, are also discussed throughout the course where relevant. Grade of C- or higher in microbiology is recommended. Restricted to Community Colleges campuses only.

Prerequisite(s): Grade of C- or higher in BIOL 225 and BIOL 226.

#### BIOL 263. Pathophysiology II

#### 3 Credits

The second in a two-course sequence that covers changes in body physiology that result from disease or injury. This course focuses on the pathophysiology of the nervous, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Topics related to the science of pathophysiology, including pathology, pathogenesis, etiology, epidemiology, and clinical manifestations, are also discussed throughout the course where relevant. Grade of C- or higher in microbiology is recommended. Restricted to Community Colleges campuses only.

Prerequisite(s): Grade of C- or higher in BIOL 225, BIOL 226, and BIOL 262.

### **BLAW-BUSINESS LAW (BLAW)**

#### BLAW 230. Business Law

#### 3 Credits

Introduction to law in general and application to business specifically; comprehensive study of the law of contracts; and the principal and agent relationship. Offered at all NMSU Community Colleges except Dona Ana Community College. Credit may not be earned in both BLAW 230 and BLAW 317.

# BMGT-BUSINESS MANAGEMENT (BMGT)

#### **BMGT 110. Introduction to Business**

#### 3 Credits

Terminology and concepts of the business field. Role of accounting, computers, business management, finance, labor, and international business in our society. Restricted to: Community Colleges only.

#### BMGT 112. Banks and Your Money

#### 3 Credits

Banking in today's economy: language and documents of banking, check processing, teller functions, deposit function, trust services, bank bookkeeping, loans, and investments. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

#### BMGT 126. Retail Management

#### 3 Credits

Phases of retailing, including types of retail outlets and basic problems of organizing and operating a retail store. Restricted to: Community Colleges only.

#### **BMGT 132. Principles of Selling**

#### 3 Credits

Analysis of customer behavior, persuasive communication, process of the sales interview. Restricted to: Community Colleges only.

#### BMGT 136. Fundamentals of Buying and Merchandising 3 Credits

Covers operational aspects of procuring and selling merchandise for the retail store. Procedures covered are buying, receiving, pricing strategies, sales promotions and operational controls. Restricted to: Community Colleges only.

#### BMGT 138. Advertising

#### 3 Credits

Psychological approach to non-personal consumer persuasion; applied techniques in media selection, layout mechanics, production methods, and campaign structures. Restricted to: Community Colleges only.

#### BMGT 140. Principles of Supervision I

#### 3 Credits

Principles of supervision emphasizing planning, organization, rating of employees and procedures to develop good morale. Introduction to interpretation of case studies. Restricted to: Community Colleges only.

#### **BMGT 150. Income Taxation**

#### 3 Credits

Federal income taxation of individuals, sole proprietorships, partnerships, corporations, trusts, and estates with particular reference to CLU, life insurance and annuities. Restricted to: Community Colleges only.

#### BMGT 155. Special Topics I

#### 1-3 Credits (1-3)

Introductory special topics of lower division level work that provides a variety of timely subjects and content material. May be repeated up to 9 credits. Restricted to Community Colleges campuses only.

### **BMGT 160. Self-Presentation and Etiquette**

#### 3 Credits

Introduction to business etiquette based on tradition, social expectations, and professional behavior standards. Restricted to: Community Colleges only.

### BMGT 191. ENACTUS (Students in Free Enterprise)

#### 1 Credit

ENACTUS is an international organization promoting and teaching business entrepreneurship. Students learn teamwork, leadership, and networking skills by participating in regional and national business competitions and community service projects. May be repeated up to 6 credits. Restricted to: BMGT or Pre-Business majors. Restricted to Community Colleges only.

### BMGT 201. Work Readiness and Preparation

#### 3 Credits

Instruction in methods of selection, seeking, acquiring and retaining employment. Addresses work success skills, business etiquette, employer expectation and workplace norms. Restricted to Community Colleges campuses only.

### BMGT 205. Customer Service in Business

#### 3 Credits

Establishes concepts of service quality in relationship to business success and maximization of returns to the organization. Explores techniques for delivering quality and service in a variety of business settings. Restricted to: Community Colleges only.

#### **BMGT 208. Business Ethics**

#### 3 Credits

The course examines the underlying dimensions of ethics in business, investigating ethics in relationship to the organization, the stakeholders, and society. Exploration of ethical issues from a historical context, analyzing actual events through the lens of business decision making, including legal/political, sociocultural, economic, and environmental considerations will be undertaken. Restricted to Community Colleges campuses only.

#### BMGT 210. Marketing

#### 3 Credits

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. May be repeated up to 3 credits. Crosslisted with: MKTG 203. Restricted to Community Colleges campuses only.

Prerequisite(s): BMGT 110 or BUSA 111.

### BMGT 212. Supervisory and Leadership Trends

#### 3 Credits

Current trends in marketing, merchandising, sales promotion and management; in manufacturing, merchandising and service types of businesses. Extensive use of practical student project. Restricted to Community Colleges only.

Prerequisite(s): BMGT 110 or BUSA 111.

#### **BMGT 213. Consumer Lending**

#### 3 Credits

Principles of credit evaluation, types of credit, marketing, collections, legal aspects, installment lending, leasing management, insurance, and rate structure and yields. Restricted to: Community Colleges only.

Prerequisite(s): BMGT 112.

### BMGT 215. Banks and the Money Supply

#### 3 Credits

Practical application of the economics of money and banking. Required of all students electing the banking option. Restricted to: Community Colleges only.

#### BMGT 216. Business Math

#### 3 Credits

Application of basic mathematical procedures to business situations, including percentage formula applications, markup, statement analysis, simple and compound interest, and annuities. Restricted to: Community Colleges only.

Prerequisite(s): CCDM 103 N or satisfactory math score on ACT.

### BMGT 221. Internship I

#### 1-3 Credits (1-3)

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and instructor. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: BMGT majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

#### **BMGT 225. Introduction to Commercial Lending**

#### 3 Credits

Commercial lending overview, the lending process, portfolio management, and regulation and business development. Restricted to: Community Colleges only.

Prerequisite(s): BMGT 112.

#### BMGT 231. Legal Issues in Business

#### 3 Credits

Survey of the legal environment of business and common legal principles including: the sources of law, dispute resolution and the U.S. court systems, administrative law, tort law, contract law, agency and employment law, business structure and governance, ethics and corporate social responsibility. Explores sources of liability and presents strategies to minimize legal risk. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

#### **BMGT 232. Personal Finance**

#### 3 Credits

Budgeting, saving, credit, installment buying, insurance, buying vs. renting a home, income tax statement preparation, investment, and estate disposal through will and trust. Restricted to: Community Colleges only.

#### **BMGT 235. Credit Administration**

#### 3 Credits

Covers factors influencing and determining loan policy: methods of credit investigation and analysis, credit techniques, credit problems, and types of loans. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): BMGT 112.

#### **BMGT 239. Visual Marketing Techniques**

#### 3 Credits

Provides a basic understanding of visual marketing and merchandising techniques. The importance of effective presentation of a store and its merchandise is covered, as is line, balance and artistic display. Restricted to: Community Colleges only.

#### **BMGT 240. Human Relations**

#### 3 Credits

Human interactions in business and industrial settings. Motivation and learning experiences as related to problems of the worker and supervisor. Practical applications of human behavior. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

#### **BMGT 248. Introduction to Quality Management**

#### 3 Credits

Introductory practices of total quality management practices aimed at all levels of an organization to continually improve performance to include competitiveness in today s business world. Restricted to: Community Colleges only.

#### BMGT 250. Diversity in the Workplace

#### 3 Credits

Concepts of culture, diversity, prejudice, and discrimination within the domestic workforce/society. Restricted to Community Colleges campuses only.

Prerequisite(s): BMGT 110 or BUSA 111.

#### **BMGT 260. Real Estate Practice**

#### 3 Credits

This course is a requirement for licensure in real estate for the state of New Mexico. Topics covered include: real estate finance, settlement, foreclosure, federal taxation, valuation and appraisal, land descriptions and math skills. These topics are requirements of the New Mexico Real Estate Commission. Restricted to: Community Colleges only.

#### **BMGT 264. Real Estate Law**

#### 3 Credits

This course is a requirement for licensure in real estate for the state of New Mexico. Topics covered include: ownership of real estate, real estate brokerage relationships, contracts, environmental concerns and federal laws that affect real estate. These topics are requirements of the New Mexico Real Estate Commission. Restricted to: Community Colleges only. Crosslisted with: PL S 264

#### BMGT 268. Real Estate Broker's Basic Course

#### 3 Credits

State of New Mexico specific criteria that apply to real estate licensure: purchase agreements, listing agreements, New Mexico Rules and Regulations, and landlord tenant legislation. Restricted to: Community Colleges only.

Prerequisite(s): BMGT 260 & BMGT 264.

#### **BMGT 272. E-Commerce Operations**

#### 3 Credits

Includes the many forms of e-commerce and emerging technologies that will impact the business of tomorrow. Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 105 or CS 110 or BCIS 110.

#### BMGT 275. Entrepreneur I

#### 3 Credits

Introduces students to the concept of entrepreneurship and the the process of business startups. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): BMGT 110 or BUSA 111.

#### **BMGT 277. Small Business Management**

#### 3 Credits

This course is designed to acquaint the student with the opportunities encountered in the management and operations of a small business enterprise. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): BMGT 275.

#### **BMGT 280. Introduction to Human Resources**

#### 3 Credits

Personnel functions encompassing job analysis, recruitment, selection, training, appraisals, discipline, and terminations. Restricted to Community Colleges campuses only.

Prerequisite(s): BMGT 110 or BUSA 111 or B A 104.

# BMGT 282. Introduction to International Business Management 3 Credits

Overview of the social, economic and cultural environment of international business transactions. Restricted to Community Colleges only.

Prerequisite(s): BMGT 110 or BUSA 111.

# BMGT 285. Introduction to Manufacturing Operations 3 Credits

Introduction to issues related to manufacturing, including an overview of the production function, product design and development, location, layout, forecasting, planning, purchasing, materials/inventory, and quality management. Restricted to Community Colleges campuses only.

Prerequisite(s): (BMGT 110 or BUSA 111) and (BMGT 140 or MGT 201).

#### **BMGT 286. Introduction to Logistics**

#### 3 Credits

Overview on the planning, organizing, and controlling of transportation, inventory maintenance, order processing, purchasing, warehousing, materials, handling, packaging, customer service standards, and product scheduling. Restricted to: Community Colleges only.

#### BMGT 287. Introduction to Export/Import

#### 3 Credits

Procedures and documentation for exporting and importing products. Emphasis on NAFTA regulations and other U.S. border operations crossings. Restricted to Community Colleges only.

Prerequisite(s): BMGT 110 or BUSA 111.

#### **BMGT 290. Applied Business Capstone**

#### 3 Credits

Refines skills and validates courses taken in BMGT program. Business simulations, case studies and projects used to test and improve business practices. Student must be within 25 credits of graduation. May be repeated up to 3 credits. Restricted to: BMGT majors. Restricted to Community Colleges campuses only.

**Prerequisite(s):** (BMGT 110 or BUSA 111), and (BMGT 140 or MGT 201), and (BMGT 240 or SOC 101 or PSY 201), and MKTG 203 and FIN 206.

#### **BMGT 298. Independent Study**

#### 3 Credits

Individual studies directed by consenting faculty with prior approval of department chair. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): Sophomore standing with 3.0 GPA.

# **BOT-BUSINESS OFFICE TECHNOLOGY** (BOT)

#### **BOT 101. Keyboarding Basics**

#### 3 Credits (2+2P)

Covers correct fingering and mastery of the keyboard to develop skillful operation. Formatting basic business letters, memos, and manuscripts.

### **BOT 102. Keyboarding: Document Formatting**

#### 3 Credits (2+2P)

Designed to improve keyboarding speed and accuracy; introduce formats of letters, tables and reports. A speed and accuracy competency requirement must be met.

Prerequisite: BOT 101 or consent of instructor.

#### BOT 105. Business English I

#### 3 Credits

Training and application of the fundamentals of basic grammar, capitalization and sentence structure (syntax).

#### **BOT 106. Business Mathematics**

#### 3 Credits (2+2P)

Mathematical applications for business, including training in the touch method of the 10-key calculator.

Prerequisite: CCDM 103 N or adequate score on math placement exam.

#### BOT 109. Business English II

#### 3 Credits

Training and application of the fundamentals of punctuation, numbers, basic writing and editing skills.

Prerequisite: C or better in BOT 105.

#### **BOT 110. Records Management**

#### 3 Credits

Principles, methods and procedures for the selection, operation and control of manual and automated records systems.

#### **BOT 120. Accounting Procedures I**

#### 3 Credits (2+2P)

Business accounting principles and procedures. Use of special journals, cash control, and merchandising concepts. Reports for sole proprietorships.

#### **BOT 121. Accounting Procedures II**

#### 3 Credits (2+2P)

Continuation of BOT 120, emphasizing accounting principles and procedures for notes and interest, depreciation, partnerships and corporations, cash flow and financial statement analysis. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 120 or ACCT 221.

#### **BOT 135. Keyboarding Technique Review**

#### 3 Credits

Emphasis on improving keyboarding speed and accuracy.

Prerequisite: BOT 101 or equivalent.

#### **BOT 140. Payroll Accounting**

#### 3 Credits (2+2P)

Payroll procedures including payroll tax forms and deposits. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): ACCT 221 or BOT 120.

#### **BOT 150. Medical Terminology**

#### 3 Credits

Understanding of the basic elements of medical words. Use of medical abbreviations. Same as NURS 150 and OEHO 120.

# BOT 169. Spanish Grammar for Business Administration 3 Credits

Introductory course in Spanish grammar and practical business terms required for the proper application of fundamental oral and written business communication skills for Spanish speakers in the field of business administration. Restricted to Community Colleges campuses only.

**Prerequisite(s):** Spanish-speaking ability and computer keyboarding ability.

#### BOT 170. Office Communications in Spanish I

#### 3 Credits

Develop oral and written communications skills of native or near-native speakers of Spanish. The student will learn basic letter writing skills, customer service techniques, and telephone etiquette in Spanish. Restricted to Community Colleges campuses only.

**Prerequisite(s):** BOT 169, Spanish-speaking ability, and computer keyboarding ability.

### BOT 171. Office Communications in Spanish II

#### 3 Credits

Develop oral and written communications skills of native or near-native speakers of Spanish. Emphasis placed on learning the office assistant's role within the office environment. Compose complex business correspondence and learn to make international travel arrangements.

Prerequisite: BOT 101 or BOT 170.

#### **BOT 191. Taking Minutes & Proofreading**

#### 3 Credits

Preparation and practice producing minutes suited for different meeting types and purposes. Provides strategies to prepare for meetings, to record proceedings, and to transcribe minutes while incorporating proofreading skills practice. Topics include legal requirements, meeting types, minute formats, and duties/expectations of the minute taker and the meeting chair. Graded: S/U. Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 109 or consent of instructor.

# BOT 202. Keyboarding Document Production 3 Credits (2+2P)

Further development of keyboarding speed and accuracy. Production of complex letters, memos, tables, reports and business forms. A speed and accuracy competency requirement must be met.

Prerequisites: BOT 102 and BOT 109, or consent of instructor.

# BOT 203. Office Equipment and Procedures I 3 Credits (2+2P)

Office organization, telephone techniques, equipment and supplies, handling meetings, human relations, mail procedures, and travel. **Prerequisites:** BOT 213 or C S 110G or consent of instructor.

### BOT 205. Microcomputer Accounting I

#### 3 Credits (2+2P)

Introduction to automated accounting systems on microcomputers. **Prerequisite:** working knowledge of computers and accounting or consent of instructor.

### BOT 206. Microcomputer Accounting II

#### 3 Credits (2+2P)

Microcomputer accounting applications, integrating spreadsheets, word processing, graphics, and database. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 121 or BOT 215.

#### **BOT 207. Machine Transcription**

#### 3 Credits (2+2P)

Creating office documents using transcribing equipment and microcomputer software. Emphasis on proofreading, editing and grammar.

**Prerequisites:** minimum keyboarding of 45 wpm and C or better in BOT 105 or BOT 109 or equivalent and BOT 211 or BOT 213.

# BOT 208. Medical Office Procedures 3 Credits (2+2P)

Current computerized and traditional administrative medical office procedures will be introduced. Practical knowledge on managing required record keeping in a medical office environment will be emphasized. Restricted to Community Colleges campuses only.

**Prerequisite(s):** BOT 109 or ENGL 111G, HIT 150 or AHS 120, and computer keyboarding ability or consent of instructor.

# BOT 209. Business and Technical Communications 3 Credits

Effective written communication skills and techniques for career success in the work place. Composition of letters, memos, short reports, forms, and proposals, and technical descriptions and directions.

**Prerequisites:** ENGL 111G and computer keyboarding ability or consent of instructor.

#### **BOT 211. Information Processing I**

#### 3 Credits (2+2P)

Defining and applying fundamental information processing concepts and techniques using the current version of leading software. Restricted to Community Colleges only.

Prerequisite(s): BOT 101 or consent of instructor.

#### **BOT 213. Word Processing I**

#### 3 Credits (2+2P)

Operation and function of a word processor. Specific equipment to be announced in the Schedule of Classes.

Prerequisite: BOT 101 or keyboarding proficiency.

#### **BOT 214. Word Processing II**

#### 3 Credits (2+2P)

Advanced operation and functions of a word processor. Specific equipment to be announced in the Schedule of Classes.

Prerequisite: BOT 213 or consent of instructor.

#### **BOT 215. Spreadsheet Applications**

#### 1-3 Credits

Use of spreadsheets to include graphics and business applications. Same as OECS 215. May be repeated under different subtitles listed in the Schedule of Classes.

#### **BOT 217. Powerpoint Presentation**

#### 3 Cradite

Comprehensive, hands-on approach to learning and applying basic and advanced features of PowerPoint. These include text enhancements, objects, fills, colors, animation, charts, sound, video, and hyperlinks. Students demonstrate appropriate audience and communication tools to deliver presentations.

**Prerequisites:** BOT 211 or ability to demonstrate keyboarding and Windows proficiency.

#### **BOT 218. Information Processing II**

#### 3 Credits (2+2P)

Advanced information processing techniques using current version of leading software. May be repeated for a maximum of 6 credits.

Prerequisite: BOT 211 or consent of instructor.

### BOT 220. Internship in Business Office Technology

#### 2 Credits

Experience in a supervised office position. Student must work at least eight hours per week. May be repeated for a maximum of 4 credits.

Prerequisites: sophomore standing and consent of instructor.

#### BOT 221. Internship I

#### 1-3 Credits

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: BOT & HIT majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

#### BOT 222. Internship II

### 1-3 Credits

Continuation of BOT 221. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: BOT & HIT majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 221 and consent of instructor.

#### **BOT 223. Medical Transcription I**

#### 3 Credits (2+2P)

Concepts in medical transcription are introduced on how to produce a variety of reports required in a medical office or facility utilizing accurate medical terminology, spelling, grammar, and document formatting. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): HIT 150 or AHS 120 and HIT 158 and BOT 209.

#### **BOT 228. Medical Insurance Billing**

#### 3 Credits (2+2P)

Comprehensive overview of the insurance concepts and applications required for successfully and accurately completing and submitting insurance claims and reimbursement processes for various insurance carriers, both private and government, will be emphasized. Restricted to Community Colleges campuses only.

Prerequisite(s): HIT 150 or AHS 120 and BOT 208.

### **BOT 233. Advanced Medical Transcription**

#### 3 Credits (2+2P)

Builds upon the concepts introduced in Medical Transcription I providing greater understanding of how to produce advanced reports dictated by physicians with increasing speed and accuracy. Emphasis will be on proofreading and editing of operative reports, patient history and physicals, office notes, labor and delivery reports, consultation reports, discharge summaries, and other medical reports. May be repeated up to 3 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 223 and HIT 130.

#### **BOT 239. Personal Development**

#### 3 Credits

Development of a marketable, employable office systems person, to include interview, voice, manners, and apparel.

#### **BOT 240. Introduction to Individual Taxation**

#### 3 Credits

Overview of Individual Federal Taxation; awareness of tax problems pitfalls and planning opportunities; focus on individual personal financial concerns and tax planning. One semester of accounting principles/procedures is recommended.

#### **BOT 241. Auditing and Business Issues**

#### 3 Credits

Introduction to basic auditing concepts, the purpose for the auditing process, and requirements of persons assisting with the audit process. The course will also deal with issues of business law including contracts, sales, torts, strict liability, and business ethics. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 120 or ACCT 221.

#### **BOT 244. Tax Preparation**

#### 3 Credits

Introduces basic federal and state tax codes for preparing individual income tax returns. Emphasis on use of tax software.

Prerequisite: keyboarding proficiency.

### **BOT 250. Electronic Office Systems**

#### 3 Credits (2+2P)

Management of the electronic office. Office use of computers, printers, fax machines, copiers, and scanner concepts will be covered.

Prerequisite: BOT 211.

BOT 255. Special Topics

#### 1-4 Credits

Specific subjects to be announced in the Schedule of Classes.

### **BOT 260. Bookkeeping Simulation Capstone**

#### 3 Credits (2+2P)

Refines the professional and technical skills students have learned while completing the BOT-Bookkeeping Assistant Option curriculum by demonstrating how coursework ties together. Designed as a bookkeeping assistant capstone course.

Prerequisite(s): BOT 121 or ACCT 221, BOT 140, BOT 205, and BOT 244, or consent of instructor.

# BOT 270. Business Office Technology Capstone 3 Credits (2+2P)

Refines professional skills learned in the BOT program and ties all BOT coursework together. Restricted to: Community Colleges only.

Prerequisite(s): BOT 102; and BOT 120; and BOT 209 or ENGL 203G or ENGL 218G; and BOT 211 or OECS 211.

# BUSA-BUSINESS ADMINISTRATION (BUSA)

#### **BUSA 111. Introduction to Business**

#### 3 Credits

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. May be repeated up to 3 credits.

# C D-COMMUNICATION DISORDERS (C D)

#### C D 221. Introduction to Communication Disorders

#### 3 Credits

Basic information about speech, language, and hearing disorders; orientation to the professions of speech-language pathology and audiology.

### **C E-CIVIL ENGINEERING (C E)**

### C E 109. Computer Drafting Fundamentals

### 3 Credits (2+2P)

Same as DRFT 109, ET 109, SUR 109.

#### C E 151. Introduction to Civil Engineering

#### 3 Credits

Problem solving and use of computer software for civil engineering applications. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): MATH 190G. Prerequisite(s): ENGR 100.

#### C E 160. Geology for Engineers

#### 4 Credits (3+3P)

Basic concepts of geology, earth materials, and earth processes as they relate to engineering practice. Restricted to Las Cruces campus only.

#### C E 198. Special Topics

#### 1-3 Credits

May be repeated for a maximum of 6 credits.

Prerequisite: consent of department head.

#### C E 233. Mechanics-Statics

#### 3 Credits

Engineering mechanics using vector methods. May be repeated up to 3 credits

Prerequisite(s)/Corequisite(s): PHYS 215G. Prerequisite(s): MATH 192G and cumulative GPA of 2.0.

#### C E 234. Mechanics-Dynamics

#### 3 Credits

Kinematics and dynamic behavior of solid bodies utilizing vector methods. May be repeated up to 3 credits. Crosslisted with: M E 234. **Prerequisite(s):** C E 233, MATH 192G, PHYS 215G.

#### C E 256. Environmental Engineering and Science

#### 3 Credits

Principles in environmental engineering and science: physical chemical systems and biological processes as applied to pollution control. Crosslisted with: E S 256

Prerequisite(s): CHEM 111 and MATH 191G.

#### C E 256 L. Environmental Science Laboratory

#### 1 Credit

Laboratory experiments associated with the material presented in C E 256. Same as E S 256L.

Corequisite: C E 256.

#### C E 298. Special Topics

#### 1-3 Credits

May be repeated for a maximum of 6 credits. **Prerequisite:** consent of department head.

# C EP-COUNSELING & EDUC PSY (C EP)

#### C EP 110G. Human Growth and Behavior

#### 3 Credits

Introduction to the principles of human growth and development throughout the life span.

#### C EP 199. Academic Excellence

#### 1 Credit

Academic curriculum of excellence that includes the development of collaborative learning and student success environment, learning diverse learning styles and multiple intelligences, and developing multicontextual academic communication styles. Students must enroll in course for both Fall and Spring semesters. Course does not count toward CEP minor. May be repeated up to 2 credits.

#### C EP 210. Educational Psychology

#### 3 Credits

Psychological foundations as they apply to the learner in the class room setting.

#### C EP 215. The Preschool Child

#### 3 Credits

Survey of psychological development from conception to age five.

#### C EP 240. Adolescence in School Settings

#### 3 Credits

Survey of psychological development during the adolescent years.

# C EP 298. Exploration of Counseling & Community Psychology 3 Credits

An exploration of careers, activities, & techniques in counseling, school, and community psychology. Course does not count towards CEP minor. May be repeated up to 6 credits.

#### C EP 298 H. Exploration of CCP

#### 3 Credits

An exploration of careers, activities, & techniques in counseling, school, and community psychology. Taught with 298 with differentiated instruction and/or independent project to be determined. Restricted to Las Cruces campus only.

#### C EP 299. Academic Excellence Classes

#### 1-6 Credits (1-6)

Academic curriculum of excellence that includes an in-depth understanding of the elements that promote student academic success. Students will develop leadership and presentation skills needed to forge effective student mentor relationships and conduct outreach to campus and local community leaders to cultivate a collaborative learning environment. May be repeated up to 6 credits.

# C J-CRIMINAL JUSTICE (C J)

#### C J 101G. Introduction to Criminal Justice

#### 3 Credits

Examination of crime and justice within the broader social and cultural context of U.S. society from interdisciplinary social science perspectives. Includes critical analysis of criminal justice processes and the ethical, legal, and political factors affecting the exercise of discretion by criminal justice professionals.

#### C J 199. Special Topics in Criminal Justice I

#### 1-3 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated under different topics for a maximum of 6 credits.

#### C J 205. Criminal Law

#### 3 Credits

Rules, principles, and doctrines of criminal liability in the United States. The historical development, limits, and functions of the substantive criminal law. May be repeated up to 3 credits.

### C J 210. The American Law Enforcement System

#### 3 Credit

Historical and philosophical foundations of law and order. An in-depth examination of the various local, state, and federal law enforcement agencies.

### C J 221. Fundamentals of Criminal Investigation

#### 3 Credits

Investigation procedures from crime scene searches, collection of evidence, and case preparation. Community Colleges only. (Note: students completing C J 221 may not take C J 321.)

#### C J 230. Introduction to Corrections

#### 3 Credits

Development of correctional philosophy, theory, and practice. Instructional and non-institutional alternatives available in the corrections process.

#### C J 250. Courts and the Criminal Justice System

#### 3 Credits

Structures and functions of American courts. Roles of attorneys, judges, and other court personnel; operation of petit and grand juries, trial and appellate courts.

### C J 293. Field Experience in Criminal Justice

#### 3-6 Credits

Field experience in a public criminal justice agency or equivalent private sector organization. Supervised internship experience, conferences, and observations. Restricted to majors. Community Colleges only.

**Prerequisites:** C J 101G, prior arrangement and consent of instructor and a GPA of 2.0 or better in major.

## C S-COMPUTER SCIENCE (C S)

#### CS 110. Computer Literacy

#### 3 Credits

This course provides a broad introduction to computing, including computer and information technology concepts; economic and social implications of technology; database management, spreadsheet, word processing, and presentation applications.

### C S 111. Computer Science Principles

#### 4 Credits (3+2P)

This course provides a broad and exciting introduction to the field of computer science and the impact that computation has today on every aspect of life. It focuses on exploring computing as a creative activity and investigates the key foundations of computing: abstraction, data, algorithms, and programming. It looks into how connectivity and the Internet have revolutionized computing and demonstrates the global impact that computing has achieved, and it reveals how a new student in computer science might become part of the computing future.

Prerequisite(s): MATH 120 or higher.

#### C S 117. Introduction to Computer Animation

#### 3 Credits

Introductory course for learning to program with computer animation as well as learning basic concepts in computer science. Students create interactive animation projects such as computer games and learn to use software packages for creating animations in small virtual worlds using 3D models. Recommended for students considering a minor/major in computer science or simply interested in beginning computer animation or programming.

#### C S 150. C Programming

#### 3 Credits (2+2P)

Programming in the C language. May be repeated up to 3 credits. **Prerequisite(s):** MATH 120 or higher.

#### C S 151. C++ Programming

#### 3 Credits (2+2P)

Introduction to object-oriented programming in the C++ language. May be repeated up to 3 credits.

Prerequisite(s): MATH 120 or higher.

### C S 152. Java Programming

#### 3 Credits (2+2P)

Programming in the Java language. May be repeated up to 3 credits. **Prerequisite(s):** MATH 120 or higher.

### C S 153. Python Programming I

#### 3 Credits

This course is an introduction to programming in the Python language, covering fundamental scripts, data types and variables, functions, and simple object creation and usage. The focus will be on preparing students to use Python in their own areas. No prior programming experience is required.

Prerequisite(s): MATH 120 or higher.

### C S 154. Python Programming II

#### 3 Credits

This course covers advanced Python programming, including classes, objects, and inheritance, embedded programming in domain applications, database interaction, and advanced data and text processing. The focus will be on preparing students to use Python in their own areas.

Prerequisite(s): CS 153 or CS 453.

#### C S 155. Internet Programming I

#### 3 Credits

This course is an introduction to programming for the Web in PHP and Javascript, covering fundamental web scripting ideas, CSS, data types and variables, functions, simple object creation and usage. Javascript usage will focus on dynamic page content. No prior programming experience is required, though a basic understanding of HTML will be assumed.

Prerequisite(s): MATH 120 and a basic understanding of HTML.

#### C S 156. Internet Programming II

#### 3 Credits

This course covers advanced web scripting, including Javascript with AJAX, PHP integration with databases, object oriented features of PHP and Javascript, advanced CSS usage, and using web application frameworks.

Prerequisite(s): CS 155 or CS 455.

# C S 157. Topics in Software Programming and Applications 3 Credits (2+2P)

Current topics in computer programming and software applications. Topic announced in the Schedule of Classes. May be repeated if subtitle is different.

#### C S 158. R Programming I

#### 3 Credits

This course is an introduction to data processing in the R language, covering fundamental script configuration, data types and data collections, R control structures, and basic creation of graphs and data visualizations. This course will not focus on the statistical capabilities of R, though some basic statistical computations will be used.

Prerequisite(s): MATH 121G.

#### C S 159. R Programming II

#### 3 Credits

This course covers advanced R programming, including advanced data collection processing, advanced data visualizations, object oriented features of R, and file processing. It is recommended that students have one statistics course before taking this course.

Prerequisite(s): CS 158 or CS 458.

# C S 171G. Introduction to Computer Science 4 Credits (3+2P)

Computers are now used widely in all area of modern life. This course provides understanding of the theoretical and practical foundations for how computers work, and provides practical application and programming experience in using computers to solve problems efficiently and effectively. The course covers broad aspects of the hardware, software, and mathematical basis of computers. Weekly labs stress using computers to investigate and report on data-intensive scientific problems. Practical experience in major software applications includes an introduction to programming, word processing, spreadsheets, databases, presentations, and Internet applications.

Prerequisite(s): MATH 210G or MATH 120 or higher.

#### C S 172. Computer Science I

#### 4 Credits (3+2P)

Computational problem solving; problem analysis; implementation of algorithms. Recursive structures and algorithms. Crosslisted with: C S 460.

Prerequisite(s): MATH 121G or higher; C S 111 or successful placement.

#### C S 209. Special Topics.

#### 1-3 Credits

May be repeated for a maximum of 12 credits.

#### C S 271. Object Oriented Programming 4 Credits (3+2P)

Introduction to problem analysis and problem solving in the objectoriented paradigm. Practical introduction to implementing solutions in the C++ language. Pointers and dynamic memory allocation. Handson experience with useful development tools. May be repeated up to 4

Prerequisite(s): C- or better in C S 172 or E E 112.

#### C S 272. Introduction to Data Structures 4 Credits (3+2P)

Design, implementation, use of fundamental abstract data types and their algorithms: lists, stacks, queues, deques, trees; imperative and declarative programming. Internal sorting; time and space efficiency of

Prerequisite(s): At least a C- in C S 172, or placement.

#### C S 273. Machine Programming and Organization 4 Credits (3+2P)

Computer structure, instruction execution, addressing techniques; programming in machine and assembly languages.

Prerequisite(s): At least a C- in C S 172 or E E 161.

#### C S 278. Discrete Mathematics for Computer Science 4 Credits (3+2P)

Discrete mathematics required for Computer Science, including the basics of logic, number theory, methods of proof, sequences, mathematical induction, set theory, counting, and functions. Crosslisted with: MATH 278.

Prerequisite(s): At least C- in C S 172.

### CCDE-DEVELOPMENTAL ENGLISH (CCDE)

#### **CCDE 110 N. General Composition** 4 Credits (3+2P)

Instruction and practice in preparation for college-level writing. Students will develop and write short essays. Provides laboratory. May be repeated up to 4 credits. Traditional Grading with RR. Restricted to Community Colleges campuses only.

### CCDL-DEVELOPMENTAL ESL (CCDL)

#### CCDL 101 N. Basic Skills in English as a Second Language I 4 Credits (3+2P)

Developmental studies course for ESL students. Development of basic skills in speaking, listening, reading, and writing English as a second language with emphasis on speaking and listening. Pronunciation stressed. Course intended for U.S. citizens and residents who are nonnative speakers of English.

Prerequisite: English language screening or consent of instructor.

#### CCDL 103 N. Basic Skills in English as a Second Language II 4 Credits (3+2P)

Continuation of CCDL 101N for ESL students. Course intended for U.S. citizens and residents who are nonnative speakers of English. Prerequisite: English language screening or consent of instructor.

#### CCDL 105 N. Intermediate Skills in English as a Second Language I 4 Credits (3+2P)

Intermediate level with emphasis on reading and writing. Grammar and syntax stressed. Course intended for U.S. citizens and residents who are nonnative speakers of English.

Prerequisite: English language screening or consent of instructor.

#### CCDL 107 N. Intermediate Skills in English as a Second Language II 4 Credits (3+2P)

Continuation of CCDL 105N. Course intended for U.S. citizens and residents who are nonnative speakers of English.

Prerequisite: English language screening or consent of instructor.

## CCDM-DEVELOPMENTAL **MATHEMATICS (CCDM)**

#### CCDM 100 N. Mathematics Preparation for College Success 1-4 Credits

Mathematics skills course designed for college students with math skills insufficient for success in CCDM 103N. May be repeated for a maximum of 4 credits. RR applicable.

### CCDM 103 N. Pre-Algebra

#### 4 Credits (3+2P)

Fundamental mathematics operations and arithmetic computations. Introduction to algebra and applied geometry. Provides laboratory and individualized instruction. RR applicable.

#### CCDM 105 N. Mathematics Preparation and Pre-Algebra 5 Credits (4+2P)

A total immersion course that combines CCDM 100N and CCDM 103N using tutorials, manipulatives, and classroom instruction. Completion of this class is equivalent to the completion of CCDM 100N and CCDM 103N. Restricted to: Community Colleges only.

Prerequisite(s): Math Placement Exam.

#### CCDM 112 N. Developmental Algebra I 4 Credits (3+2P)

Fundamental algebra operations, algebraic expressions, solving linear equations, systems of equations and applications of linear equations. Introduction to exponents and polynomials. Provides laboratory instruction. Completion of CCDM 112N and CCDM 113N is equivalent to completion of CCDM 114N. Graded: Traditional with RR. Traditional Grading with RR. Restricted to Community Colleges campuses only. Prerequisite(s): Grade of C or better in CCDM 103N or CCDM 105N or adequate placement score.

#### CCDM 113 N. Developmental Algebra II 4 Credits (3+2P)

Fundamental algebra operations, polynomials, factoring, solving quadratics by factoring, rational expressions, exponents and radical expressions (continuation of CCDM 112N). Provides laboratory instruction. Completion of CCDM 112N and CCDM 113N is equivalent to completion of CCDM 114N. Graded: Traditional with RR. Restricted to: Community Colleges only.

Prerequisite(s): Grade of C or better in CCDM 112N or consent of instructor.

### CCDM 114 N. Algebra Skills

4 Credits (3+2P)

Fundamental algebra operations: algebraic expressions, solving linear and quadratic equations, factoring, radicals, exponents. Provides laboratory and individualized instruction. Completion of CCDM 114N meets basic skills requirement. Graded: Traditional with RR. Traditional Grading with RR. Restricted to Community Colleges campuses only. Prerequisite(s): C or better in CCDM 103N or CCDM 105N or adequate placement score.

# CCDR-DEVELOPMENTAL READING (CCDR)

### CCDR 101 N. Introduction to Basic Reading

#### 4 Credits (3+2P)

Provides basic reading skills through comprehension and vocabulary development. Emphasis on oral language literacy and reading fluency. Course earns institutional credit but will not count toward degree requirements. May be repeated up to 4 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): Appropriate placement score.

# CCDR 103 N. Comprehensive Reading Development 4 Credits (3+2P)

Provides integration of basic reading skills, including vocabulary development, text comprehension, and critical reading skills. Course earns institutional credit but will not count towards degree requirements. May be repeated up to 4 credits. Traditional Grading with RR. Restricted to Community Colleges campuses only.

Prerequisite(s): Appropriate placement score.

# CCDR 105 N. Fundamentals of Academic Reading. 3 Credits (2+2P)

Fundamentals of academic reading skills. Emphasis on vocabulary development and text comprehension through literature based instruction. Course earns institutional credit but will not count towards degree requirements. Graded: Traditional with RR. May be repeated up to 3 credits. Traditional Grading with RR. Restricted to Community Colleges campuses only.

Prerequisite(s): Appropriate placement score.

# CCDR 110 N. Effective College Reading 3 Credits (2+2P)

Provides a variety of strategies for effective reading and studying at the college level. Emphasis on reading across disciplines. Course earns institutional credit but will not count towards degree requirements. Graded: Traditional with RR. May be repeated up to 3 credits. Traditional Grading with RR. Restricted to Community Colleges campuses only. Prerequisite(s): Appropriate placement score.

# CCDS-DEVELOPMENTAL SKILLS (CCDS)

### CCDS 109 N. Study Skills for Reading

#### 1-3 Credits

Individualized reading skill strategies necessary for success in college classroom. May be repeated for a maximum of 3 credits. Graded traditional or S/U.

#### CCDS 111 N. Study Skills for Math

#### 1-3 Credits

Individualized study skill strategies necessary for success in the math classroom. May be repeated for a maximum of 3 credits.

#### CCDS 113 N. Study Skills for English

#### 1-3 Credits

Individualized study skill strategies necessary for success in the composition classroom. May be repeated for a maximum of 3 credits.

## **CHEF-CULINARY ARTS (CHEF)**

#### CHEF 101. Culinary Arts Kitchen Orientation 3 Credits

Provides students with basic information and skills necessary for success in the Culinary Arts program. Students learn basic kitchen routines, safety and sanitation, professional conduct and deportment, standard kitchen calculations, knife handling, and are introduced to the laboratories for initial cooking experiences. Restricted to Community Colleges campuses only.

#### CHEF 125. Introductory Cake Decorating

#### 1 Credit

Introduction to the professional cake decorating techniques used by pastry chefs. Basic skills of piping a variety of icings into different patterns are taught. Restricted to Community Colleges campuses only. **Prerequisite(s):** Consent of instructor.

#### **CHEF 126. Intermediate Cake Decorating**

#### 1 Credit

Introduction to more advanced professional cake decorating techniques used by pastry chefs. Fondant work and more complex decorating schemes are taught. Restricted to Community Colleges campuses only. **Prerequisite(s):** CHEF 125.

#### CHEF 127. Chocolate Work

#### 1 Credit

Introduction to working with chocolate utilizing a variety of methods. Tempering, forming, molding, and other professional techniques will be taught. Restricted to Community Colleges campuses only.

Prerequisite(s): Consent of Instructor.

#### **CHEF 128. Advanced Chocolate Work**

#### 1 Credit

More advanced treatments of chocolate are explored and professional techniques for the chocolatier are developed. Restricted to Community Colleges campuses only.

Prerequisite(s): CHEF 127.

# CHEF 129. Wedding Cake Design and Construction 1 Credit

Basic skills in designing wedding (or other specialty event) cakes. Includes shaping, icing selection, decorating scheme, presentation, transportation, and remote set up. Restricted to Community Colleges campuses only.

Prerequisite(s): CHEF 125 and CHEF 126.

#### **CHEF 155. Special Topics**

#### 1-3 Credits (1-3)

Specific subjects to be announced in the Schedule of Classes. May be repeated up to 6 credits. Restricted to Community Colleges campuses only

### CHEF 165. Math for Kitchen Operations

#### 3 Credits

Fundamental mathematical concepts and computations, including measurement, recipe scaling and conversions, metric unit conversion, ingredient yield calculations, ratios and cost extensions are covered. Examples of basic mathematical calculations use kitchen and food service functions, as well as situations to demonstrate principles.

# CHEF 211. Food Production Management I 3 Credits (2+2P)

Introduction to kitchen design, workflow, and commercial equipment. Techniques, methods, and application of basic food production principles. Practical experience in cooking processes from a managerial viewpoint. Crosslisted with: HOST 211. Restricted to Community Colleges only.

# CHEF 212. Food Production Management II 3 Credits (2+2P)

Selection and use of ingredients. Demonstration and application of classical and modern cooking and preparation techniques. Management techniques for kitchen personnel. Recipe design and analysis. Crosslisted with: HOST 212. Restricted to Community Colleges only.

Prerequisite(s): CHEF 211 or consent of instructor.

# CHEF 213. Bakery Management I 3 Credits (2+2P)

Fundamentals of baking from a supervisory/management perspective. Exposure to commercial equipment and processes. Introduction to commercial alternatives to scratch-preparation methods. Crosslisted with: HOST 213. Restricted to Community Colleges only.

### CHEF 214. Bakery Management II

#### 3 Credits (2+2P)

Advanced techniques and management of bakery operations are explored. Students learn classical forms and techniques. Modern methods of preparing traditional pastry and baked goods are introduced. Crosslisted with: HOST218. Restricted to Community Colleges only. **Prerequisite(s):** CHEF 213 or consent of instructor.

# CHEF 233. Culinary Arts Fundamentals I 4 Credits (1+9P)

Introduction to the basics of culinary arts, including ingredients recognition, cooking methods and techniques, knife usage, preparation of basic stocks, mother sauces, starches and vegetables. Students will participate in laboratory work designed to create an understanding of the professional role of the culinarian. Preparation and production of food products integral to service to guests is incorporated in the course. May be repeated up to 4 credits. Consent of Instructor required. Restricted to: CHEF, HOST, HSMG, HOCH majors. Restricted to Community Colleges campuses only.

# CHEF 234. Culinary Arts Fundamentals II 4 Credits (1+9P)

Continuation of introductory course focusing on meat cookery, daughter sauces, cold food preparation, poultry and seafood. Safe use of equipment is emphasized while experiencing differing methods of preparation and cooking. Preparation and production of food products integral to service of guests is incorporated in this course. May be repeated up to 4 credits. Restricted to: HOST,HSMG,CHEF majors. Restricted to Community Colleges campuses only.

Prerequisite(s): CHEF 233 with a grade of "C-" or better.

# CHEF 235. Advanced Culinary Arts I 4 Credits (1+9P)

Exploration and experience in preparation techniques beyond the basic level. Nutritional components of food are discussed, as in the application of good nutrition practices in recipe design. Students are encouraged to use creative methods to expand the individual's culinary expressions. Prepares food products for service to guests in both bulk feeding and individual service settings. Plans, prepares, serves and critiques meals provided for students, faculty and staff. May be repeated up to 4 credits. Prerequisite(s)/Corequisite(s): CHEF 234 with a grade of "C" or better if course has been previously taken. Restricted to: CHEF majors. Restricted to Community Colleges campuses only.

# CHEF 236. Advanced Culinary Arts II 4 Credits (1+9P)

Advanced techniques and experimental use of food combinations to enhance the student's repertoire of skills and abilities. Utilizes knowledge to develop recipes for unique products. Plans, prepares, serves and critiques meals provided for students, faculty and staff. Restricted to: CHEF majors. Restricted to Community Colleges campuses only. Prerequisite(s): CHEF 235 with a grade of "C" or better.

# CHEF 237. Banquet/Catering Production 3 Credits (1+6P)

Planning and implementation of the culinary aspects of catered functions. Development of time schedules, work assignments and service plans for catered events and banquet functions. Production of food items in appropriate quantities for catered events. Costing and control functions are covered. May be repeated up to 6 credits. Restricted to: CHEF, HOST majors. Restricted to Community Colleges campuses only. **Prerequisite(s):** Grade of "C" or above in CHEF 233.

### CHEF 240. Baking Fundamentals I

#### 4 Credits (1+9P)

Introduction to baking techniques, measurment and use of ingredients; equipment use and chemical reactions inherent in the baking process. Production of simple desserts and baked goods. Itroduction to working with bread doughs. Restricted to: HOST, CHEF majors. Restricted to Community Colleges campuses only.

Corequisite(s): CHEF 233.

#### CHEF 241. Baking Fundamentals II 4 Credits (1+9P)

More advanced baking and bread making techniques are covered in this course with emphasis on the more advanced elements of quantity production. Students work with a variety of products and ingredients. Restricted to: HOST, CHEF majors. Restricted to Community Colleges campuses only.

Prerequisite(s): grade of "C" or above in CHEF 240.

#### CHEF 242. Intermediate Baking I 4 Credits (1+9P)

More advanced baking and pastry techniques are covered in this course with emphasis on the basic elements of patisserie production. Focus is on preparing students to work in a pastry kitchen. Restricted to: HOST, CHEF majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Grade of "C" or above in CHEF 241.

#### CHEF 243. Intermediate Baking II

#### 3 Credits (1+6P)

Continuation of work with basic elements of patisserie products including laminated doughs and filled products. Students prepare creams, custards, fillings and are introduced to cake assembly procedures. Restricted to: HOST, CHEF majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Grade of "C" or above in CHEF 242.

# CHEF 245. Pastry Art and Techniques 3 Credits (1+6P)

Advanced skills for the pastry chef including pulled sugar work, spun sugar, chocolate art, pastillage, marzipan molding, butter carving and advanced decorating techniques are explored. Students prepare specialty items for display and competition. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: CHEF majors. Restricted to Community Colleges campuses only.

Prerequisite(s): CHEF 240.

#### CHEF 255. Special Topics

#### 3 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated up to 6 credits. Restricted to: CULI, HOST, HSMG majors. Restricted to Community Colleges campuses only.

#### CHEF 256. International Cuisine

#### 3 Credits (1+6P)

Exploration into a variety of international cuisines is undertaken, including the cultural and historical backgrounds of the foods being prepared. Students work on developing themed menus and production plans for meals utilizing a single international cuisine. May be repeated up to 6 credits. Restricted to: CHEF, HOST majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Grade of "C" or above in CHEF 233.

#### CHEF 257. Garde Manger

#### 3 Credits (1+6P)

Traditional garde manger skills are taught, including plated salads, cold foods, entrements, pates, forcemeat, terrines, charcuterie and chaud froid work. The art and craft of food design, preparation and service are emphasized. May be repeated up to 3 credits. Restricted to: CHEF, HOST majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Grade of "C" or above in CHEF 233.

#### CHEF 260. Nutrition for Chefs

#### 3 Credits

Aspects of basic human nutritional requirements are covered as are the applications of the standards to the cooking and baking. Meeting the USDA nutrient guidelines while preparing good tasting food is discussed, calorie, fat and sodium reduction techniques are explored.

### **CHEM-CHEMISTRY (CHEM)**

#### CHEM 100. Basic Chemistry

#### 3 Credits

For students whose preparatory science or math training has been deficient. Does not meet the chemistry requirement in any curriculum. **Prerequisite:** Enhanced ACT composite score of at least 18 or a grade of C or better in CCDM 114 N.

#### CHEM 101. General Supplemental Instruction I

#### 1 Credit

Collaborative workshop for students in General Chemistry I. Course does not count toward departmental degree requirements. May be repeated for a maximum of 2 credits.

Corequisite: CHEM 111G.

#### CHEM 102. General Supplemental Instruction II

#### 1 Credit

Collaborative workshop for students in General Chemistry II. Course does not count toward departmental degree requirements. May be repeated for a maximum of 2 credits.

Corequisite: CHEM 112G.

### CHEM 103. Principles of Supplemental Instruction III

#### 1 Cred

Collaborative workshop for students in CHEM 110G, Principles and Applications of Chemistry. Course does not count toward departmental degree requirements. May be repeated for maximum of 2 credits.

Co-requisite: CHEM 110G.

# CHEM 110G. Principles and Applications of Chemistry 4 Credits (3+3P)

A survey of the properties and uses of the elements and their compounds. In addition to classical chemistry, attention is paid to the materials from which consumer products are made, to the production of energy, and to environmental considerations.

Prerequisite: 3 years of high school math or CCDM 114N.

#### CHEM 111G. General Chemistry I

#### 4 Credits (3+3P)

Descriptive and theoretical chemistry. CHEM 111G/112G are General Education alternative to CHEM 110G.

**Prerequisite:** (1) grade of C or better in MATH 120 or a Mathematics Placement Exam Score adequate to enroll in mathematics courses beyond MATH 120; and (2) one of the following: B or better in a second semester high school chemistry course, or grade of at least C in CHEM 100, or an enhanced ACT score of at least 22.

#### CHEM 112G. General Chemistry II

#### 4 Credits (3+3P)

Descriptive and theoretical chemistry. CHEM 111G/112G are General Education alternative to CHEM 110G.

Prerequisite(s): CHEM 111G.

### CHEM 115. Principles of Chemistry I

#### 4 Credits (3+3P)

Detailed introduction to analytical, inorganic and physical aspects of chemistry; both descriptive and theoretical explanations. Structured for chemistry and biochemistry majors but appropriate for other physical and life science students. CHEM 115/116 are General Education alternatives to CHEM 110G.

**Prerequisite:** Eligible to take MATH 190G and an ACT composite score of 22 or higher.

#### CHEM 116. Principles of Chemistry II

#### 4 Credits (3+3P)

Recommended for chemistry majors and other qualified students. CHEM 115/116 are General Education alternatives to CHEM 110G.

Prerequisites: grade of C or better in CHEM 115.

# CHEM 210. Chemistry for the Allied Health Sciences 3 Credits

Discussion and application of the established facts and concepts of general organic chemistry and biochemistry to acquire a molecular understanding of a variety of health related issues, from atmospheric ozone holes to human nutrition.

Prerequisite: CHEM 110G or CHEM 111G.

#### **CHEM 211. Organic Chemistry**

#### 4 Credits (3+3P)

A one-semester survey for students requiring a brief coverage of important classes of organic compounds. May be repeated up to 4 credits.

Prerequisite(s): CHEM 112G.

#### CHEM 217. General Chemistry III

#### 3 Credits (2+3P)

Quantitative aspects of general chemistry: solid state structure, equilibrium, thermodynamics, and kinetics. Required of chemical science majors who have taken CHEM 111G/112.

Prerequisite: CHEM 112G.

#### CHEM 241. Introduction to Research

#### 1-3 Credits (3+9P)

Techniques and procedures of chemical research. May be repeated for a maximum of 3 credits.

Prerequisites: 8 credits of chemistry and a 3.0 GPA in chemistry.

#### CHEM 242. Explorations in Chemistry

#### 1 Credit

Historical and current developments, careers in chemistry, computer applications and use of the library by chemists. To be completed before the end of the sophomore year. Graded S/U.

### CHEM 251. Special Topics in Chemistry

#### 1-6 Credits (1-6)

Specific subjects in Chemistry. These subjects will be announced in the 'Schedule of Classes'. It may be repeated under different topics for a maximum of 12 credits.

### **CHIN-CHINESE (CHIN)**

#### CHIN 111. Elementary Chinese I

#### 4 Credits

Mandarin Chinese for beginners.

#### CHIN 112. Elementary Chinese II

#### 4 Credits

Mandarin Chinese for beginners. **Prerequisite:** C or better in CHIN 111.

#### CHIN 211. Intermediate Chinese I

#### 3 Credits

Speaking, reading and writing Mandarin Chinese. Restricted to Las Cruces campus only.

Prerequisite(s): C or better in CHIN 112.

### CHIN 212. Intermediate Chinese II

#### 3 Credits

Speaking, reading and writing Mandarin Chinese. Restricted to Las Cruces campus only.

Prerequisite(s): C or better in CHIN 211.

# CHME-CHEMICAL & MATERIALS ENGR (CHME)

# CHME 101. Introduction to Chemical Engineering Calculations 2 Credits

Introduction to the discipline of chemical engineering, including: an overview of the curriculum; career opportunities; units and conversions; process variables; basic data treatments; and computing techniques including computer programming and use of spreadsheets.

**Prerequisite(s)/Corequisite(s):** MATH 190G. Restricted to Las Cruces campus only.

#### **CHME 102. Material Balances**

#### 2 Credits

Perform material balances in single- and multi-phase, reacting and non-reacting systems under isothermal conditions.

Prerequisite(s)/Corequisite(s): CHEM 111G or CHEM 115. Prerequisite(s): MATH 190G, CHME 101.

### CHME 201. Energy Balances & Basic Thermodynamics 3 Credits

Chemical Engineering energy balances; combined energy and material balances including those with chemical reaction, purge and recycle; thermochemistry; application to unit operations. Introduction to the first and second laws of thermodynamics and their applications. May be repeated up to 3 credits. Restricted to Las Cruces campus only.

Prerequisite(s): CHME 102, CHEM 115 or CHEM 111G, and MATH 192G.

# CHSS - COMM HEALTH/SOC SRVCS (CHSS)

# CHSS 101. Overview of Health and Community Services 3 Credits

Health and community service professions with emphasis on public health, community health education, and environmental/occupational health.

# CHSS 216. Ethical and Research Issues in Human and Community Service

#### 3 Credits

Ethical and legal responsibilities of health personnel with emphasis on research applications. May not receive credit for both CHSS 216 and CHSS 316. Community Colleges only.

# CHSS 295. Leadership/Mentorship Training for the CHSS Ambassadors Program

#### 1 Credit

Leadership development for volunteers serving as CHSS ambassadors. Focus on public relations and CHSS undergraduate degree programs. Graded S/U.

Prerequisite: consent of instructor.

# CHSS 299. Service Learning Experience in Human and Community Services

#### 3 Credits

Exploration of contemporary social, civic, economic and ethical problems that require student participation in collaborative efforts within the community. Requires 30 clock hours of community based service for each credit. Graded: S/U. Contact instructor for approval.

Prerequisite(s): CHSS 101, HL S 150 and HL S 275 or consent of instructor.

Corequisite(s): HL S 295 or CHSS 216.

# CMI - CINEMA & FILM/VIDEO PROD (CMI)

# CMI 100. Introduction to the Creative Media Industry 3 Credits

This class is an introductory course for students interested in learning about the creative media industry and the Creative Media Institute. It offers a broad view of the entire industry including Marketing, Production, Budgets, Jobs, New Media Literacy, and Industry Standards. Students will listen to experts in the field, and become involved in open discussions about the industry and use new information to complete hands-on assignments in the laboratory. Restricted to Las Cruces campus only.

#### CMI 200. Sound Design 1

#### 3 Credits

Focuses on the techniques for creating, recording and manipulating sounds through challenging sound design projects. Crosslisted with: CMT 206.

**Prerequisite(s)/Corequisite(s):** CMI 235. Restricted to: DFM,ANVE majors. Restricted to Las Cruces campus only.

#### CMI 205. Cinematography I

#### 3 Credits

Theories and techniques of visual design in videography and the aesthetics of lighting. Crosslisted with: CMT 205.

**Prerequisite(s)/Corequisite(s):** CMI 235. Restricted to: DFM,ANVE majors. Restricted to Las Cruces campus only.

#### CMI 216. Editing I

#### 3 Credits

Focuses on individual editing skills including capture, interface, basic cuts, and transitions. Crosslisted with: CMT 195.

**Prerequisite(s)/Corequisite(s):** CMI 235. Restricted to: DFM,ANVE majors. Restricted to Las Cruces campus only.

### CMI 220. Drawing for Animation

#### 3 Credits

Introductory study of the human and animal form in relation to animation. Students learn fundamentals and exaggeration of the figure, as related to proportion, rhythm, mechanics, and motion. Areas of focus are: basic form, proportion, shape, contour, gesture, anatomy, portraiture, perspective, clothing effects and drawing from observation. Restricted to: CMT,DFM,ANVE majors.

#### CMI 228. History of Cinema I

#### 3 Credits

This course surveys the history of cinema - investigating the process by which the original "cinema of attractions" evolved into a globally dominant form of visual storytelling. We will explore the development of cinema both as an art form and as an industry, and consider the technological, economic, cultural factors, as well as many key international movements that helped shape it. Restricted to: G-CMI, DFM, ANVE majors.

### CMI 231. History of Animation

#### 3 Credits

Explores the history of Animation as an art form and industry through readings, screenings, lecture and periodic guest speakers. Restricted to: G-CMI, ANVE, DFM majors. Restricted to Las Cruces campus only.

#### CMI 232. Storyboarding

#### 3 Credits

Examines effective writing principles for creating storyboards that communicate the overall picture of a project. There are timing, scene complexity, emotion and resource requirements. Crosslisted with: ENGL 232. Restricted to: DFM,ANVE, G-CMI majors. Restricted to Las Cruces campus only.

#### CMI 233. Light, Shade, Render

#### 3 Credits

This course will explore the theory and practice of 3D lighting and rendering methodologies. Techniques covered will implement cameras, lighting sources, textures, surface-mapping and algorithmic rendering to produce stylized and photo realistic images. Topics covered will include direct and indirect lighting, shaders that simulate physical substances and effects, rendering multiple passes and simulating physical lens effects. Restricted to: DFM,ANVE majors. Restricted to Las Cruces campus only.

Prerequisite(s): CMI 260, CMI 280, or Consent of Instructor.

# CMI 235. Narrative: Principles of Story Across the Media 3 Credits

Examines the various strategies of written and visual storytelling: narrative structure and its principle components (plot, theme, character, imagery, symbolism, point of view), with an attempt to connect them to elements of contemporary forms of media expression, including screenwriting, playwriting, writing for documentaries and animation, etc. Crosslisted with: ENGL 235. Restricted to: G-CMI, DFM, ANVE majors. Restricted to Las Cruces campus only.

#### CMI 240. Digital Illustration

#### 3 Credits

Introductory course examining traditional artistic expressions and translating visual art experiences into a digital art medium to enhance visual storytelling. Students acquire basic principles of drawing and painting through hands-on experience manipulating tonal value, composition, form development, light and shadow, color theory, rendering realism, and graphic design. Restricted to: DFM,ANVE majors. Restricted to Las Cruces campus only.

### CMI 245. 2-D Compositing & FX

#### 3 Credits

The purpose of this course is to familiarize students with the powerful compositing and special effects tools of Adobe After Effects for 2D, traditional animation. Students will learn how to assemble an existing unrendered animation into a final piece with advanced 3D lighting, spacing, and digital effects so that it can achieve a dynamic, professionally rendered look. Restricted to Las Cruces campus only.

### CMI 250. Beginning 2-D Animation

#### 3 Credits

Learn the basics of digital 2D animation by creating an animated short from a storyboarded scene using professional animation, imaging, and editing software. Restricted to: DFM,ANVE majors. Restricted to Las Cruces campus only.

#### CMI 260. Foundations of 3D Animation

#### 3 Credits

The objective of this course is to provide a hands-on overview of the 3D animation production process. Students will be introduced to basic story development and the creation of computer generated assets and cinematic sequences. The course will survey specialty areas of digital animation and various software and techniques applied in entertainment and information media. Restricted to: DFM,ANVE majors. Restricted to Las Cruces campus only.

Prerequisite(s): CMI 235, CMI 232 or consent of instructor.

### CMI 270. Rigging for 3D Animation

#### 3 Credits

This course will introduce principles and practices of current 3D animation rigging. Students will develop fundamental methods necessary to create character rigs. Students will learn aesthetic, technical, and optimization concepts as they apply to organic and mechanical designs. Topics will include: hierarchies, constraints, deformation rigging, skeleton creation, skinning, forward and inverse kinematics, controls, body and facial rigging. Restricted to: DFM,ANVE majors.

Prerequisite(s): CMI 260.

#### CMI 280. Modeling

#### 3 Credits

This course will introduce 3D modeling methods and current practices. Students will learn preliminary and detailed modeling techniques using industry standard software. Methods will emphasize formal and functional aspects of modeling as they apply to mechanical, organic, and sculpted topology for application in animation, games, and information media. Restricted to: DFM,ANVE majors. Restricted to Las Cruces campus only.

#### CMI 290. 3-D Animation

#### 3 Credits

Overview of the essentials and principles of 3D animation; creative methods for using industry standard tools to produce the illusion of movement for storytelling. Topics include, keyframe and curve animation, kinematics, cycle animation, camera animation, deformers, and constraints.

Prerequisite(s): CMI 260, CMI 250 or consent of instructor.

# CMT-CREATIVE MEDIA TECHNOLOGY (CMT)

# CMT 100. Introduction to Visual Communications 3 Credits

Overview of the process of crafting a digital product from conception to final. Incorporates basic principles of art and design, typography, layout, color and imagery, logos and advertising basics. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

# CMT 108. Introduction to Media Technologies 1-3 Credits (1-3)

Introduction to various media technologies. May be repeated up to 12 credits. Restricted to Community Colleges campuses only.

#### CMT 110. Introduction to Web Design

#### 1 Credit

Basics of creating simple web sites for personal use.

#### CMT 115. Digital Photography and Imaging I

#### 3 Credits (2+2P)

Principles and techniques of photography using digital equipment with an emphasis on lighting, focus, and composition.

#### CMT 120. Introduction to Creative Media

#### 3 Credits (2+2P)

Exploration and discovery of the creative processes through art, music, theater, narrative, and other avenues.

#### CMT 126. Film Crew Training I

#### 9 Credits

This course was designed in collaboration with the NM IATSE Local 480 union and the NM Film Office and focuses on providing hands-on training for students wishing to work on film crews. The course will offer an overview of the primary below-the-line craft areas of film production. Restricted to: Community Colleges only.

### CMT 130. Introduction to Web Design

#### 3 Credits (2+2P)

Introduction to web development techniques, theory, and design. Incorporates HTML and industry-standard web editing software in developing various web sites. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): ART 161 OR CMT 145.

# CMT 135. Introduction to 3D Computer Animation 3 Credits (2+4P)

Learning to work in a 3D environment. Introduction to the basics of modeling, animation, dynamics, and rendering. Working with polygons, NURBS and subdivisions, and editing in multiple interfaces. May be repeated for a maximum of 6 credits.

#### CMT 140. Print Media I

#### 3 Credits (2+2P)

Creation and design of publications and presentation materials using page layout software. May be repeated for a maximum of 6 credits.

#### **CMT 142. Computer Illustration**

#### 3 Credits (2+2P)

Preparation of digital graphics with a vector or draw program for use in print, web, video, animations, and multimedia. May be repeated for a maximum of 6 credits.

#### CMT 145. Image Processing I

#### 3 Credits (2+2P)

Design and creation of digital graphics using a raster or bitmap program for use in print, multimedia, video , animation and web. May be repeated for a maximum of 6 credits.

#### CMT 150. 2D Animation

### 3 Credits (2+2P)

Concepts and techniques in storyboarding and creating interactive 2D animations for web, multimedia and video.

Prerequisites: CMT 142.

#### CMT 151. Evolution of Electronic Games

#### 3 Credits (2+2P)

Focus on the evolution of video games and how they have shaped mainstream entertainment. May be repeated up to 6 credits.

#### CMT 155. Selected Topics

#### 1-4 Credits (1-4)

Specific titles to be announced in the Schedule of Classes. May be repeated for a maximum of 18 credits. May be repeated up to 18 credits. Restricted to Community Colleges campuses only.

#### CMT 156. Film Crew Training II

#### 9 Credits

The purpose of this course is to provide applied training in a specific film production crew craft area, in which a student has decided to specialize. The various craft areas include but are not limited to, Art Dept., Grip., Electric, Sound, Production Office, Script Supervision, Props, Set Dressing, Locations, Special Effects, Hair/Makeup, Wardrobe, Production Assistant/ Set Operations. Restricted to: Community Colleges only.

Prerequisite(s): CMT 126.

#### CMT 160. Modeling and Animation

#### 3 Credits (2+2P)

Building on student's knowledge of 2D animation, covers modeling, animating objects and scenes in a 3D environment using various camera and lighting effects. May be repeated for a maximum of 6 credits. Restricted to: Community Colleges only.

### CMT 165. Writing and Storyboarding

#### 3 Credits (2+2P)

Learning good writing principles to create storyboards and scripts that communicate the overall picture of the project, timing, scene complexity, emotion, and resource requirements.

Prerequisite: CMT 135 or CMT 160.

### CMT 170. History of Film: A Global Perspective

#### 3 Credits

Explores the history of cinema from the earliest 19th century developments to the present digital video revolution. Offers students a broader base of understanding of the tools and methodologies used in the craft.

#### CMT 175. 3-D Character Design

#### 3 Credits (2+4P)

Focus on designing a character and then taking that design and building it in 3D using intermediate modeling techniques. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 135 or CMT 160.

#### CMT 180. Design Principles

#### 3 Credits (2+2P)

Techniques and theories of design principles, including layout foundations, logo building, type, color, and story-boarding and their application to print, web, animation and video. Restricted to: Community Colleges only.

Prerequisite(s): CMT 142 or CMT 146.

# CMT 182. Environmental Modeling, Shading and Lighting 3 Credits (2+4P)

Modeling design techniques to create natural and architectural environments to be used for animated films and gaming. Study of various lighting techniques, shading and shadowing.

Prerequisite: CMT 135 or CMT 160.

### CMT 185. 3D Shading and Lighting Techniques

#### 3 Credits (2+4P)

Study of various global, scene and character lighting techniques, shading and shadowing, and creating atmospheres and reflections that bring computer generated 3D scenes to life. Examines environmental and studio lighting to bring real life experience into the digital production process.

Prerequisite: CMT 135 or CMT 160.

#### CMT 190. Digital Video Production I

#### 3 Credits (2+4P)

A hands-on study of the tools and techniques used to produce the independent video. Through the production of various short projects, the student explores how the ideas of the writer/director are translated into a visual story. May be repeated for a maximum of 6 credits.

#### CMT 195. Digital Video Editing I

#### 3 Credits (2+2P)

A study of the basic tools and techniques of non-linear digital video editing. May be repeated for a maximum of 6 credits.

#### CMT 200. Critical Game Studies

#### 3 Credits (2+2P)

Focus on creating a complete design document utilizing techniques and standards used in the industry today. May be repeated for up to 6 credits. Restricted to: Community Colleges only.

#### CMT 205. Cinematography

#### 3 Credits (2+2P)

Theory and techniques of visual design in cinematography and the aesthetics of lighting. May be repeated for a maximum of 6 credits. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 190.

#### CMT 206. Principles of Sound

#### 3 Credits (2+2P)

Study of soundtrack design theory, and the use of audio editing software that is compatible with media editing software to create soundtracks for different visual media. Pre/ Restricted to: Community Colleges only.

Corequisite(s): CMT 195.

#### CMT 210. Digital Video Production II

#### 3 Credits (2+2P)

Advanced techniques of the tools and application of professional film making. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 190.

#### CMT 215. Digital Video Editing II

#### 3 Credits (2+2P)

Advanced features of digital video, audio/music, and titling production software. Included are color correction, vector scopes, motion effects, and advanced editing techniques used by filmmakers. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 195.

# CMT 216. Digital Photography and Imaging II 3 Credits (2+2P)

Provide understanding and skills needed for advanced digital capture, editing, optimizing and manipulating photographic images for print, web and multimedia applications. The course will prepare students to make more advanced technical and more refined aesthetic decisions relative to specific photographic applications. Restricted to: Alamogordo campus, Carlsbad campus, Dona Ana campus.

Prerequisite(s): CMT 115.

# CMT 217. Layer Animation & 3D Applications in Photoshop 1 Credit

This is an advanced course in Photoshop 2D techniques and motion graphic applications pertaining to the animation of Photoshop Layers juxtaposed over time and space relationships. Restricted to: CMT majors. Restricted to Community Colleges only.

Prerequisite(s): CMT 145.

# CMT 218. Video for Social Interaction and Informal Commerce 3 Credits

The use of DSLR video has opened the way for photographers to be able to add video as a component of expression. This course shows the ways that this tool can be used for on-line instructional videos, demonstrations and presentations. As more and more commercial entities become involved in YouTube and other social media, this becomes a vocationally viable form of visual communication. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: Community Colleges only.

### CMT 220. Environmental Scene Design

3 Credits (2+4P)

Modeling design techniques used to create environments and scenes for use in animated films and games. Investigation of both natural and architectural environments to be recreated in the virtual world.

Prerequisite: CMT 135 or CMT 160.

#### CMT 221. Internship

#### 1-3 Credits

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. May be repeated up to 9 credits. Consent of Instructor required. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

Prerequisite(s): Consent of instructor.

### CMT 222. Pre-production Management

3 Credits (2+2P)

Pre-production planning paperwork breakdowns, budgeting, and scheduling; taking a project from start to finish from a producers standpoint.

Prerequisite: CMT 190.

#### CMT 223. Media Production Services

#### 1-3 Credits

A design studio environment in which students obtain real-world experience while providing service to college and non-profit associations with faculty supervision using a variety of media. Can be used with permission to fulfill cooperative requirement. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 180 or ART 163.

#### CMT 224. Environmental Scene Design II

#### 3 Credits

Second level of modeling design techniques used to create environments and scenes for use in animated films and games. Investigation of both natural and architectural environments to be recreated in the virtual world. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 220.

### CMT 225. Anatomical Character Design

#### 3 Credits (2+4P)

Focus on building anatomy-based 3D characters. Advanced study in NURBS, subdivisions, and polygon modeling techniques used to create fully functional and realist models. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 175.

### CMT 226. Film Crew Cooperative Experience

#### 3-6 Credits (3-6)

Industry production experience in specific craft areas for film crew technicians who have successfully completed two semesters of FTTP. Restricted to: Dona Ana campus, Carlsbad campus.

Prerequisite(s): CMT 156.

#### CMT 227. Advanced Character Animation

#### 3 Credits (2+2P)

Focus on complex rigging techniques as well as utilizing advanced animation functions to blend multiple animations into complex animations. May be repeated for a maximum of 6 credits. Restricted to: Community Colleges only.

Prerequisite(s): CMT 160.

#### CMT 228. Level Design Concepts

#### 3 Credits (2+2P)

Focus on the design and creation of video game levels. Dealing with the challenges and pitfalls of different video game genres. May be repeated for a maximum of 6 credits. Prerequisite: CMT 200

#### CMT 229. 3D Digital Sculpting

#### 3 Credits

Introduce students to the 3D Sculpting programs which are the industry standard sculpting programs. Students will learn how to create complex high polygon sculpts and normal maps and transfer the models into 3D studio Max and Autodesk Maya. May be repeated up to 6 credits. Restricted to: Community Colleges only.

Prerequisite(s): CMT 160.

#### CMT 230. Web Design II

#### 3 Credits (2+2P)

Creating and managing well-designed, organized web sites using HTML and web development software. May be repeated for a maximum of 6 credits. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 130.

#### CMT 235. Web Design for Small Businesses

#### 3 Credits (2+2P)

Technology and techniques for designing and building a web presence for small business. May be repeated for a maximum of 6 credits. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 130.

#### CMT 236. Digital Audio Fundamentals

#### 3 Credits (2+2P)

Advanced digital audio post production and recording techniques using current entertainment industry-standard software and hardware. Restricted to: Community Colleges only.

### CMT 240. Print Media II

#### 3 Credits (2+2P)

Refining of technical design skills using advanced features of page layout software in preparing a variety of business-related documents. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 140.

#### CMT 242. Advanced Computer Illustration

#### 3 Credits (2+2P)

Advanced techniques in 2D vector drawing and fundamentals of 3D illustration for use in print, web, and multimedia applications. May be repeated up to 6 credits. Restricted to Community Colleges campuses

Prerequisite(s): CMT 142.

#### CMT 245. Image Processing II

#### 3 Credits (2+2P)

Advanced techniques in editing and manipulation of raster images for digital graphics for print, multimedia and web. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 145.

#### CMT 247. Production Audio

#### 3 Credits (2+2P)

Essential tools and techniques in: field and studio recording and mixing, environmental assessment, film set protocol, various microphones, audio documentation, wildlines, ambient audio. Restricted to: Community Colleges only.

Prerequisite(s): CMT 190 and CMT 236.

#### CMT 248. Music Production and Mastering

#### 3 Credits (2+2P)

Introduction to fundamental tools and techniques in music production and mastering. Including: microphones and microphone techniques, live and studio recording, editing, mixing, and introduction to mastering digital audio. Restricted to: Community Colleges only.

Prerequisite(s): CMT 206 and CMT 236.

# CMT 249. Layer Animation and 3D Applications in Photoshop 3 Credits

This is an advanced course in Photoshop 3D techniques and motion graphic applications pertaining to the animation of Photoshop Layers juxtaposed over time and space relationships. May be repeated up to 6 credits. Restricted to Community Colleges only.

Prerequisite(s): CMT 245.

#### CMT 251. Gaming Platform and Standards

#### 3 Credits (2+2P)

Focus on the different gaming platforms and their corresponding gaming demographics and standards. May be repeated up to 6 credits. Restricted to: CMT majors. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 200.

#### CMT 252. Game Tools and Techniques

#### 3 Credits (2+2P)

Focus on the different engines and gaming technologies that power the games of today. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 200.

### CMT 254. History of Media Design

#### 3 Credits

An introduction to the principles of design history and theory within a chronological framework of historical and emerging media.

#### CMT 255. Special Topics

#### 1-4 Credits

Specific topics to be announced in the Schedule of Classes. May be repeated for a maximum of 18 credits.

#### CMT 256. Typography

#### 3 Credits

Foundation in typography with an emphasis on history of typography and the practical application and impact of font choices for print, web, animation and video. Deals with studies in font or letter construction and font choices focusing on design, application, incorporation, and visual impact. Restricted to: Community Colleges only.

Prerequisite(s): CMT 142.

#### CMT 258. Advanced Camera Techniques

#### 3 Credits (2+2P)

Professional camera techniques and training for electronic news gathering and studio filmmaking. Utilizes high-end handheld shooting techniques, cranes, dollies, and steadicam training. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 190.

#### CMT 260. 3D Special Effects

#### 3 Credits (2+4P)

Creating advanced virtual special effects for both rigid and soft bodies. Using MEL, dynamic principles, mixing nodes, and advanced particle systems. How to drive particles over surfaces, add texture to flow, create surface tensions, and use collision events to drive texture. Study of integrating computer-generated images with real-life video and audio.

Prerequisite: CMT 160 or CMT 225.

### CMT 265. Personal Character Development

#### 3 Credits (2+4P)

Focus on the development of personal character(s), from sketch to render. Develop complete biographies of character, then build, skin and animate with as many personal attributes as possible.

Prerequisite: CMT 225.

#### CMT 275. Advanced Web Techniques

#### 3 Credits (2+2P)

Creating and managing complex web sites using advanced techniques and tools. May be repeated for a maximum of 6 credits. Restricted to: Community Colleges only.

Prerequisites: CMT 145 and CMT 230.

#### CMT 276. Advanced Photography Workshops

#### 1 Credit

This is a series of 1-credit workshops offering specialized and intense advanced skill training and upgrading applications of photography for commercial purposes and training in photographic skills and styles presented by a variety of professional lecturers. May be repeated up to 7 credits. Restricted to Community Colleges only.

Prerequisite(s): CMT 115.

#### CMT 285. Print Media III

#### 3 Credits (2+2P)

Refinement of skills needed to prepare a variety of documents for print and the service bureau. May be repeated for a maximum of 6 credits.

Prerequisite: CMT 140 or CMT 240.

### CMT 290. Advanced 3d Animation Workshop A

### 3 Credits (2+4P)

Program capstone. Students will utilize the skills learned in the program to produce their final animation. Group integrated projects are strongly recommended to emulate a real-work animation studio environment. May be repeated for a maximum of 9 credits.

Prerequisite: consent of instructor.

Corequisite: CMT 291.

### CMT 291. Advanced 3d Animation Workshop B

#### 3 Credits (2+4P)

Program capstone. Students will utilize the skills learned in the program to produce their final animation. Group integrated projects are strongly recommended to emulate a real-work animation studio environment. May be repeated for a maximum of 9 credits.

Prerequisite: consent of instructor.

Corequisite: CMT 290.

### CMT 292. Creative Media Studio

#### 3 Credits (2+2P)

A studio environment where students specialize in creating film-festival quality and portfolio-ready projects under the supervision of faculty. May be repeated for a maximum of 6 credits.

Prerequisites: CMT 190 and CMT 195 or CMT 160.

#### CMT 294. Creative Media Studio II

#### 3 Credits

Second level of studio environment where students specialize in creating film-festival quality and portfolio ready projects under the supervision of faculty. Restricted to Community Colleges campuses only.

Prerequisite(s): CMT 292.

# CMT 295. Professional Portfolio Design and Development 1-3 Credits

Personalized design and creation of the student's professional portfolio including hard-copy, demo reel, and online. May be repeated up to 6 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

Prerequisite(s): Consent of instructor.

#### CMT 298. Independent Study

#### 1-3 Credits

Individual studies directed by consenting faculty with prior approval of department head. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): Minimum GPA of 3.0 and sophomore standing.

### **COLL-COLLEGE (COLL)**

#### COLL 101. College/Life Success

#### 1-3 Credits

Provides students with an opportunity to cultivate the skills, values, and attitudes necessary to become confident, capable students, and contributing community members. Topics include time management, memory techniques, relationships, health issues, money management, and college and community resources.

#### **COLL 103. Managing Your Money**

#### 1 Credit

Principles and strategies for effective money management. Includes financial goal setting, both short and long term. Explores the relationship between career and income earning potential. Explores issues of credit and debt management and prevention of identity theft.

### COLL 108. Academic Reading and Study Skills

#### 1-4 Credits

Introduction to and practice with strategies for effective reading and studying at the college level. Provides laboratory.

### COLL 111. Academic Skills for Mathematics

#### 1-3 Credits (1-3)

Emphasis on study skills for success in math, up to the calculus level, tailored to meet individual student needs. Topics include test preparation strategies, efficient time management and practice methods, and introduction to and practice with learning software. Consent of instructor required.

### COLL 120. Career Exploration

#### 1 Credit

Survey of careers possible with community college associate degrees. Information on how to make a career choice.

#### **COLL 155. Special Topics**

#### 1-4 Credits

Covers specific study skills and critical thinking topics. Specific sub-titles to be listed in the Schedule of Classes. May be repeated for a maximum of 8 credits.

#### **COLL 201. Critical Thinking Skills**

#### 3 Credits

Introduction to critical thinking processes. Develops higher order thinking necessary to evaluate clearly, logically, and accurately one s academic and life experiences. Practical emphases on assertive thinking and perspectives.

Prerequisite: placement scores for CCDE 110 N or higher.

### **COMM-COMMUNICATION (COMM)**

### COMM 250. Introduction to the Communication Major 1 Credit

This is a one-credit course for new Communication Studies majors. It helps them get acquainted with the department, the department head (professor for this course, the professors, other students, and the department student organizations. It also deals with degree mapping and career mapping and any problems the students are having in their first year. Finally, the students learn about the the Communication Studies discipline and various communication careers they can pursue with their degree. The class meets one day each week for one hour. Restricted to: Communication Studies majors. Restricted to Las Cruces campus only.

#### COMM 253G. Public Speaking

#### 3 Credits

Principles of effective public speaking, with emphasis on preparing and delivering well-organized, logical, and persuasive arguments adapted to different audiences.

#### **COMM 265G. Principles of Human Communication**

#### 3 Credits

Study and practice of interpersonal, small group, and presentational skills essential to effective social, business, and professional interaction.

#### **COMM 285. Survey of Communication Theory**

#### 3 Credits

Exploration of major theories, concepts and methods of research in the study of human communication. Primarily for majors.

#### COMM 290. Independent Study

#### 1-3 Credits

Individualized, self-paced projects for students with a special interest in communication topics. May be repeated for a maximum of 6 credits. **Prerequisites:** COMM 265G and sophomore standing.

#### **COMM 291. Special Topics**

#### 1-3 Credits

Specific subjects and credits to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

### **CSEC - CYBERSECURITY (CSEC)**

#### CSEC 275. Introduction to Crytography

#### 3 Credits

Introduction to the foundation of cryptography, principles behind cryptographic design, and cryptographic applications. Topics include encryption techniques, common cryptographic protocols and security functions. Restricted to Community Colleges campuses only.

Prerequisite(s): MATH 120.

#### CSEC 280. Introduction to Cyber Defense

#### 3 Credits

Introduction to computer network attacks and countermeasures used to reduce threat exposure to individuals and organizations. This course will examine common types of cyber threats and current industry standard techniques to defend against common cyber-attacks.

Prerequisite(s)/Corequisite(s): OECS 269. Restricted to Community Colleges campuses only.

# CSEC 285. Introduction to Managing Information Security 3 Credits

Managerial aspects of information security and assurance including access control models, information security governance, accountability metrics, legal responsibilities, and information security program assessment

**Prerequisite(s)/Corequisite(s):** A ST 251G or STAT 251G. Restricted to Community Colleges campuses only.

# CTFM-CLTHNG/TXTLS/FSHN MRCHDSG (CTFM)

#### CTFM 178. Fundamentals of Fashion

#### 3 Credits

Survey of the fashion business from fiber to end product.

#### CTFM 202. Fashion Practicum

#### 1-3 Credits (1-3)

Applied field experience in the related areas of apparel design, fashion merchandising, and textile science. May be repeated up to 3 credits. Restricted to: CTFM majors. Restricted to Las Cruces campus only.

#### CTFM 270. Fashion Illustration

#### 3 Credits (1+4P)

Human figure sketches and fashion illustration as a form of communication. Emphasis on color, proportion, cut, and fabric detail. **Prerequisites:** ART 110G.

# CTFM 273. Concepts in Apparel Construction 3 Credits (1+4P)

Application of generalizations and principles of garment construction to varied fabrics and designs. Analysis and evaluation of apparel merchandise with emphasis on the quality of garment construction. Restricted to: Main campus only. Restricted to CTFM, FCSE majors.

#### CTFM 289. Fashion Studio I

#### 3 Credits

Applied principles in the criteria of pattern making: flat pattern and draping techniques. Projects will require three dimensional approaches in apparel design. Restricted to: CTFM majors. Restricted to Las Cruces campus only.

## **DANC-DANCE (DANC)**

#### **DANC 101G. Dance Appreciation**

#### 3 Credits

An investigation of movement, dance and choreographic work as a vehicle for understanding culture. Includes concepts in dance appreciation, themes and purposes of dance analysis of dance works, exposure to different styles of dance and understanding the roles and effects of major historical periods. Restricted to: Main campus only.

#### DANC 102. Introduction to Hip-Hop Dance

#### 1 Credit

This course is an introduction to Hip-Hop dance. The movement material will cover West coast and Southern styles with the inclusion of the history and evolution of Hip-Hop dance. No previous dance experience required. May be repeated up to 4 credits. Restricted to Las Cruces campus only.

#### DANC 109. Argentine Tango I

#### 1 Credit

Introduction to skills and techniques of Argentine Tango.

#### DANC 118. West Coast Swing I

#### 1 Credit

Students will learn to dance the smooth style of Swing. The West Coast Swing may be danced to ANY style of music that has a beat (Country, R&B, Hip Hop, Disco, House). Also featured is the Hustle (fast paced and exhilarating). May be repeated up to 4 credits. Restricted to Las Cruces campus only.

#### DANC 120. Ballet Folklorico I

#### 1 Credit

Introductory course in folklorico dances of New Mexico and Mexico. May be repeated for a maximum of 2 credits.

#### **DANC 121. Beginning Country Western Dance**

#### 1 Credit

Beginning County Western dance, including Country Western two-step, nightclub two-step, polka, and Country Western line dance. May be repeated up to 2 credits. Restricted to Las Cruces campus only.

#### **DANC 122. Introduction to Latin Social Dance**

#### 1 Credit

Introduction to Latin social dance for non dance majors. Students will learn basic Latin dance technique and partnering work. May be repeated up to 2 credits. Restricted to Las Cruces campus only.

#### DANC 123. Ballet Technique I

#### 1 Credit

Introduction to basic ballet technique, vocabulary, and history. Includes practical application of anatomical placement, posture and control through participation and academic study. May be repeated for a maximum of 2 credits.

### DANC 124. Jazz Technique I

#### 1 Credit

Introduction to basic jazz technique, styles, and history through participation and academic study. May be repeated for a maximum of 2 credits.

### **DANC 125. Introduction to Ballroom Dance**

#### 1 Credit

Introduction to ballroom dance for non dance majors. Students will learn basic ballroom technique and partnering work. May be repeated up to 2 credits. Restricted to Las Cruces campus only.

#### DANC 126. Modern Dance Technique I

#### 1 Credit

Introduction to and development of basic modern dance technique, history, and aesthetics through participation and academic study. May be repeated for a maximum of 2 credits.

#### DANC 127. Tap Dance I

#### 1 Credit

Introduction to skills and techniques of tap dance. May be repeated for a maximum of 2 credits.

#### **DANC 128. Latin Club Dance**

#### 1 Credit

Introduction to the most popular Latin Club Dances to include the Salsa, Merengue, and Bachata. May be repeated up to 2 credits. Restricted to Las Cruces campus only.

#### DANC 129. Flamenco I

#### 1 Credit

Introduction to skills and techniques of flamenco dance. May be repeated for a maximum of 2 credits.

#### DANC 151. Master Works

#### 1 Credit

This course investigates the work of master choreographers in contemporary, Spanish, and social dance styles. Students will engage in exploring concepts in dance appreciation, themes and purposes of dance by analyzing dance works using principles, elements, and process of compositional design. This course will require students to communicate their opinions through verbal discussions, group projects, and written assignments. Restricted to Las Cruces campus only.

# DANC 200. Dance Pedagogy: Educational Theory 1 Credit

This course will examine how people learn cognitively, physically, and emotionally so that students can become better at self-teaching and self-assessment. Students will study several educational theories and how they relate to dance. Restricted to Las Cruces campus only.

#### **DANC 202. Dance Ensemble**

#### 1 Credit

This course will include learning the elements of dance composition. The students in this course will be the dancers for the students in Dance Choreography II. This course is a requirement for freshman dance majors whose emphasis is in contemporary dance. May be repeated up to 2 credits. Consent of Instructor required. Restricted to Las Cruces campus only.

#### DANC 203. Dance Production I

#### 1 Credit

Students will learn the production process of dance events which may include performances, festivals, workshops, conferences. May be repeated up to 4 credits. Consent of Instructor required. Restricted to Las Cruces campus only.

#### DANC 204. Dance Sport I

#### 1 Credit

Performance-based, team formation dance in a variety of Latin and ballroom dances. May be repeated up to 4 credits. Consent of Instructor required. Restricted to Las Cruces campus only.

**Prerequisite(s):** Consent of instructor and one of DANC 121, DANC 122, DANC 125, or DANC 128.

#### DANC 205. Contemporary Dance Ensemble I

#### 1 Credit

Performance-based instruction for students pursuing a career in contemporary dance. Instruction includes contemporary dance repertory and choreography for stage, outdoor arenas, and site-specific areas. May be repeated up to 4 credits. Consent of Instructor required. Restricted to Las Cruces campus only.

#### DANC 206. Spanish Dance Ensembles I

#### 1 Credit

Performance-based instruction for students pursuing a career in dance with an emphasis in Spanish Dance. Instruction includes dance repertory and choreography for stage, outdoor arenas, and site-specific areas. May be repeated up to 4 credits. Consent of Instructor required. Restricted to Las Cruces campus only.

#### DANC 209. Argentine Tango II

#### 1 Credit

Intermediate study in Argentine tango. Learn advanced patterns, techniques and partnering skills. May be repeated up to 2 credits. Consent of Instructor required. Restricted to Las Cruces campus only. **Prerequisite(s):** Consent of instructor.

### DANC 210. Classical Spanish II

#### 2 Credits (1+3P)

The study of theory, techniques, and practice of Classical Spanish at the intermediate level. Includes historical and cultural contexts of this art form. May be repeated up to 8 credits. Consent of Instructor required. Restricted to Las Cruces campus only.

Prerequisite(s): DANC 129.

#### DANC 212. Intermediate Hip-Hop Dance

#### 2 Credits

This course is for students who have experience in Hip-Hop dance. The movement material will cover West coast and Southern styles with the inclusion of the history and evolution of Hip-Hop dance. May be repeated up to 8 credits. Restricted to Las Cruces campus only.

# DANC 218. West Coast Swing II 2 Credits

Students will take their West Coast Swing & Hustle to the next level. Learn Intermediate and Advanced figures and techniques in both dances. Students will also enjoy advanced study on musicality and blending to create new amalgamations as well as practice in advanced leading & following techniques. May be repeated up to 8 credits. Consent of Instructor required. Restricted to Las Cruces campus only.

Prerequisite(s): DANC 118.

#### **DANC 221. Country Western Dance**

#### 2 Credits

Intermediate skills in country/western two-step, nightclub two-step, polka, and Western line dances. May be repeated up to 4 credits. Restricted to Las Cruces campus only.

Prerequisite(s): DANC 121 or consent of instructor.

#### DANC 222. Bronze American Rhythm

#### 2 Credits (1+2P)

Bronze level American Rhythm patterns, techniques, and partnering with emphasis on elements of dance. Consent of Instructor required. Restricted to Las Cruces campus only.

### DANC 223. Ballet Technique II

#### 2 Credits

Continued study of classical ballet technique, vocabulary, and history through participation and academic study. May be repeated up to 8 credits. Restricted to Las Cruces campus only.

### DANC 224. Jazz Technique II

#### 2 Credits

Continued study of jazz technique and history through participation and academic study. May be repeated up to 8 credits. Restricted to Las Cruces campus only.

# DANC 225. Bronze American Smooth 2 Credits (1+2P)

Bronze level American Smooth patterns, technique, and partnering with an emphasis on the elements of dance. May be repeated up to 4 credits. Consent of Instructor required. Restricted to Las Cruces campus only. **Prerequisite(s):** DANC 125 or consent of instructor.

# DANC 226. Modern Dance Technique II 2 Credits

Continued study of postmodern dance technique and history through participation and academic study. May be repeated up to 8 credits. Restricted to Las Cruces campus only.

#### DANC 227. Tap Dance II

#### 1 Credit

Continued study of skills and techniques of tap dance at the advanced level. May be repeated for a maximum of 2 credits.

Prerequisite: DANC 127 or consent of instructor.

#### DANC 229. Flamenco II

#### 2 Credits

The study of theory, techniques and practice of Flamenco at the intermediate level. Includes historical and cultural contexts of this art form. May be repeated up to 8 credits. Restricted to Las Cruces campus only.

Prerequisite(s): Dance 129.

### DANC 232. Bronze International Latin

#### 2 Credits

This is the style of Latin dance that is danced around the globe and is featured in the World DanceSport Championships. Students will learn the Bronze Level figures and techniques in four (4) International Style dances: Rumba, Cha Cha, Samba & Jive and the techniques. May be repeated up to 8 credits. Consent of Instructor required. Restricted to Las Cruces campus only.

Prerequisite(s): DANC 222.

# DANC 235. Bronze International Standard 2 Credits

This is the style of Ballroom dance that is performed around the globe and is featured in the World DanceSport Championships. Learn the Bronze Level figures and techniques in five (5) International Style dances: Waltz, Tango, Viennese Waltz, Foxtrot & Quickstep. Students will focus on understanding technical Elements of Dance, memorizing and performing routines. May be repeated up to 8 credits. Consent of Instructor required. Restricted to Las Cruces campus only.

Prerequisite(s): DANC 225.

#### DANC 269. DanceSport Choreography I 2 Credits

An introduction to the process and theory behind creating original choreography for both performance and competition level dance. With focus on the individual couple, gain necessary skills, knowledge and practice in choreographing Ballroom, Latin, Swing &/or Nightclub dance routines in various practical settings. Consent of Instructor required. Restricted to Las Cruces campus only.

### DANC 275. Dance Studio Management

#### 3 Credits

The study and practice of studio management. Includes study of financial procedures, marketing, entrepreneurship, leadership, management, fundraising and other related topics. Restricted to majors and minors.

### DANC 279. Flamenco Choreography I

#### 2 Credits

Students develop and perform solo dance studies with an emphasis placed on the development of personal movement vocabulary, phrase building, and the exploration of choreographic tools for Flamenco on stage. Discussion, critiquing, and descriptive writing about their choreographic processes will supplement direct physical work. May be repeated up to 4 credits. Consent of Instructor required. Restricted to Las Cruces campus only.

#### DANC 280. Improvisation I

#### 1 Credit

Introduction and development of basic movement improvisation skills.

#### DANC 289. Principles of Choreography I

#### 2 Credits

Solo dance choreography technique. Course must be passed with a grade of C or higher. Consent of instructor required. Restricted to: Main campus only. Restricted to Dance Majors Dance Minors majors.

## **DAS-DENTAL ASSISTING (DAS)**

# DAS 101. Introduction to Dental Assisting 2 Credits

An introduction to the duties and responsibilities of a dental assistant. Includes brief lessons on head and neck anatomy, chair side assisting, sterilization techniques, dental office emergencies, and dental office management. Restricted to: Community Colleges only.

# DAS 111. Bio-Dental Science 4 Credits (3+3P)

An introduction to biomedical and dental sciences with emphasis on head and neck anatomy and tooth morphology. Includes microbiology, general anatomy and physiology, histology and embryology of the oral cavity, pathology and pharmacology as they relate to dentistry.

Corequisite(s): DAS 113, DAS 115, and DAS 117.

Prerequisite(s)/Corequisite(s): PSY 201G, PHLS 150G, and HNDS 251. Prerequisite(s): ENGL 111G, BIOL 154, and (COMM 253G or COMM 265G). Restricted to: OEDA majors. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

### DAS 113. Dental Assisting I

#### 4 Credits (2+6P)

Introduction to chair side assisting procedures, instrumentation, infection control, equipment safety and maintenance, dental office emergencies, and management of pain and anxieties.

Corequisite(s): DAS 111, DAS 115, and DAS 117.

Prerequisite(s)/Corequisite(s): PSY 201G, PHLS 150G, and HNDS 251. Prerequisite(s): ENGL 111G, BIOL 154, and (COMM 253G or COMM 265G). Restricted to: OEDA majors. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

#### DAS 115. Dental Radiology 3 Credits (2+3P)

Radiation physics, hygiene, and safety theories. Emphasis on the fundamentals of oral radiographic techniques and interpretation of radiographs. Includes exposure of intra-oral radiographs, quality assurance, radiographic interpretation, patient selection criteria, and other ancillary radiographic techniques.

Corequisite(s): DAS 111, DAS 113, and DAS 117.

Prerequisite(s)/Corequisite(s): PSY 201G, PHLS 150G, and HNDS 251. Prerequisite(s): ENGL 111G, BIOL 154, and (COMM 253G or COMM 265G). Restricted to: OEDA majors. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

#### DAS 117. Dental Materials

#### 3 Credits (2+3P)

Composition, chemical and physical properties, manipulation and uses of dental materials. Laboratory experiences include the application and manipulation of various materials used in dentistry.

Corequisite(s): DAS 111, DAS 113, and DAS 115.

Prerequisite(s)/Corequisite(s): PSY 201G, PHLS 150G, and HNDS 251. Prerequisite(s): ENGL 111G, BIOL 154, and (COMM 253G or COMM 265G). Restricted to: OEDA majors. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

#### DAS 123. Dental Assisting Practicum 6 Credits (1+15P)

This course is the clinical component of the program that combines general practice and experiences in the work place. Seminar topics focus on the practicum experiences and critique of performance. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

Prerequisite(s): DAS 111, DAS 113, DAS 115, and DAS 117. Corequisite(s): DAS 125, DAS 127, and DAS 129.

#### **DAS 125. Professional Concepts**

#### 3 Credits

Emphasis on the development of professionalism for the dental office. Includes oral communication, psychology, patient relations, problemsolving skills, stress management, and employability in addition to dental jurisprudence and ethics. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

Prerequisite(s): DAS 111, DAS 113, DAS 115, and DAS 117. Corequisite(s): DAS 123, DAS 127, and DAS 129.

#### DAS 127. Dental Office Management 2 Credits

This capstone course is an introduction to business office procedures, including telephone management, appointment control, accounts payable, completion of third party reimbursement forms, inventory control data entry for charges and payments, management recall, basic dental computer software and operating basic business equipment. Restricted to: OEDA majors. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

Prerequisite(s): DAS 111, DAS 113, DAS 115, and DAS 117. Corequisite(s): DAS 123, DAS 125, and DAS 129.

### **DAS 129. Preventive Dentistry**

#### 2 Credits

Prevention of dental diseases, oral hygiene instruction, fluoride, community dental health, and nutrition. Development, implementation and evaluation of a community dental health project. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

Prerequisite(s): DAS 111, DAS 113, DAS 115, and DAS 117. Corequisite(s): DAS 123, DAS 125, and DAS 127.

#### DAS 130. Dental Assisting II

#### 4 Credits (2+6P)

Continuation of chair side assisting skills and techniques with a major emphasis on four-handed dentistry. This capstone course includes specialties within dentistry and expanded chair side functions. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

Prerequisite(s): DAS 111, DAS 113, DAS 115, DAS 117, DAS 123, DAS 125, DAS 127, and DAS 129.

#### DAS 131. Dental Office Management I

#### 3 Credits

Introduction to the field of dental office management with emphasis placed on professional verbal and written communication skills utilized within the dental office. Content includes dental terminology, charting, and back office experience as they relate to dental reception and management.

Prerequisite(s)/Corequisite(s): DAS 101, AHS 120, and AHS 202. Prerequisite(s): ENGL 111G. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

### DAS 133. Dental Office Management II

#### 3 Credits

Places emphasis on computer programs specifically designed for dental office management (Dentrix, Sof Dent, etc.) Expanded course content on oral communication and telephone skills, appointment scheduling, patient relations, stress management solutions, and comprehensive critical thinking/problem solving skills.

Prerequisite(s)/Corequisite(s): AHS 202. Prerequisite(s): ENGL 111G, DAS 101, and AHS 120. Restricted to Alamogordo, Carlsbad and Dona Ana campuses.

#### DAS 155. Special Topics

#### 1-6 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

Prerequisite: consent of instructor.

## **DHYG - DENTAL HYGIENE/HYGIENIST** (DHYG)

#### DHYG 110. Preclinical Dental Hygiene 3 Credits

Basic scientific principles and current theory, prevention of disease transmission, ethical and professional treatment of patients, clinical learning preparation, and introduction to comprehensive patient care. Offered concurrently with DHYG 112 to provide dental hygiene students with introductory knowledge, skills and attitudes to function in the clinical setting. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### DHYG 112. Preclinical Dental Hygiene Lab 3 Credits

Clinical application to basic theories and procedures used in dental hygiene practice. Techniques of instrumentation used in performing diagnostic, preventive and therapeutic services utilized when providing comprehensive patient care. Student will practice these techniques on manikins and student partners in the clinic. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

### **DHYG 114. Oral Histology and Embryology**

Introduction and description of general histology and embryology with emphasis on the microscopic structures of enamel, dentin, pulp, cementum, periodontal ligament, bone, oral mucosa, epithelial attachment and development of orofacial structures. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### DHYG 116. Head and Neck Anatomy

#### 3 Credits

Comprehensive study of the anatomy of the head and neck regions, including skeletal, nervous, circulatory, lymphatic, and muscular systems. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

### DHYG 117. Dental Anatomy

#### 2 Credits (2+1P)

A detailed study of nomenclature, morphologic characteristics, and physiologic relationships of human primary and permanent teeth as related to the clinical practice of dental hygiene. Laboratory activities develop observation and dexterity skills. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### DHYG 118. Dental Radiology 3 Credits (3+4P)

Study of radiation physics, hygiene and safety theories. Fundamentals of oral radiographic techniques and interpretation of radiographs. Includes exposure of intra-oral radiographs, quality assurance, radiographic interpretation, patient selection criteria, ancillary radiographic techniques and application to dental hygiene treatment. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

### DHYG 120. Dental Hygiene Theory I

#### 3 Credits

Continuation of the theoretical basis for dental hygiene clinical practice. Emphasis on emergency care, planning dental hygiene care, health promotion and disease prevention, oral rehabilitation and care of appliances, modifications of dental hygiene care through the life-span, and an introduction to medically comprised patients. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### DHYG 122. Clinical Dental Hygiene I

#### 3 Credits

Application of dental hygiene procedures on a variety of clinical patients under direct supervision of faculty. Emphasis on patient assessment and diagnosis, treatment procedures, appointment planning and prevention techniques. Theory is simultaneously related to practical experience. Offered concurrently with DHYG 120. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### DHYG 124. General and Oral Pathology

#### 3 Credits

Introduction to general pathology with focused study of diseases and disorders of the oral cavity and their interrelationship with body systems; developmental anomalies of the teeth and jaws; manifestations of disease in the oral cavity, head and neck. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### DHYG 126. Periodontology

#### 3 Credits

Study of normal and diseased periodontium to include the structural, functional and environmental factors. Emphasis on etiology, pathology, evaluation of disease, treatment modalities, and therapeutic and preventative periodontics relative to the hygienist's role as a co-therapist in a contemporary practice setting. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

### DHYG 132. Clinical Dental Hygiene II

#### 2 Credits

Continuation of clinical skills, patient assessment and diagnosis, treatment and appointment planning, preventive techniques and application of dental hygiene procedures at an intermediate level under the direct supervision of faculty. Clinical-based instruction helps students synthesize new knowledge, apply previous knowledge, and gain experience managing the workflow. Theory is simultaneously related to practical experience. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only. Prerequisite(s): "C" or above in DHYG 120, DHYG 122, DHYG 124,

DHYG 126, DHYG 134. Corequisite(s): DHYG 218.

### **DHYG 134. Dental Materials**

#### 3 Credits (2+2P)

Study of the composition, chemical and physical properties, manipulations, and uses of dental materials. Emphasis on materials and procedures for which the dental hygienist is directly responsible. Laboratory experiences include application and manipulation of various materials used in dentistry. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

# DHYG 210. Dental Hygiene Theory III 2 Credits

Advanced theory of dental hygiene and information on periodontal therapies relative to the hygienist's role as a co-therapist in clinical practice. Continuation of the study of dental hygiene care for medically comprised patients and an introduction to special needs patients. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### DHYG 212. Clinical Dental Hygiene III 4 Credits

Continuation of clinical skills, patient assessment and diagnosis, treatment and appointment planning, preventive techniques and applications of dental hygiene procedures at the intermediate to competent level under supervision of faculty. Emphasis on dental hygiene treatment for the medically compromised and periodontally involved patients. Theory is simultaneously related to practical experience. Offered concurrently with DHYG 210. May be repeated up to 4 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

### **DHYG 214. Dental Pharmacology**

#### 3 Credits

Study of the pharmacologic aspects of drugs and drug groups with which the dentist and dental hygienist are directly and indirectly concerned. Emphasis is placed on nomenclature, origin, physical and chemical properties, preparation, modes of administration and effects of drugs upon the body systems. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

### DHYG 215. Medical and Dental Emergencies 2 Credits

This course provides an overview of medical and dental emergencies encountered most frequently in the dental setting. It also provides the student with knowledge and techniques on how to address those emergencies should they occur. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

# DHYG 217. Research Methodology 2 Credits

This course provides an introduction to the principles and application of research methods in social, behavioral and medical research. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

### DHYG 218. Pain and Anxiety Management

#### 2 Credits

Study of the application of various physical, chemical, and psychological modalities to the prevention and treatment of preoperative and postoperative patient anxiety and pain. Emphasis on administration of local anesthesia and nitrous oxide. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

# DHYG 219. Pain and Anxiety Management Clinical 1 Credit

Clinical application of concepts learned in DHYG 218. Emphasis on the administration and techniques of local anesthesia and monitoring nitrous oxide. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

Prerequisite(s): DHYG 218.

### DHYG 220. Dental Hygiene Theory IV

#### 3 Credits

Theoretical preparation for advanced clinical practice. In-depth study of dental hygiene care for patients with special needs. Case Study presentations and a Board Review are utilized to demonstrate the synthesis of comprehensive dental hygiene knowledge, skills and attitudes. The most current dental and dental hygiene technology will be reviewed as it related to clinical practice. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

# DHYG 222. Clinical Dental Hygiene IV 4 Credits

Clinical sessions combine basic and advanced dental hygiene skills with time management techniques essential for private practice. Comprehensive patient care to include assessment, dental hygiene diagnosis, treatment planning, implementation and evaluation of dental care, nonsurgical periodontal therapy, adjunct clinical procedures, ultrasonic instrumentation, patient management, sealants, and comprehensive programs for control of oral diseases will be emphasized. Theory is simultaneously related to practical experience. Students are encouraged to develop independent decision-making with minimal faculty supervision. May be repeated up to 4 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

# DHYG 224. Principles of Practice 2 Credits

Examination of the dental hygienist's role in both traditional and non-traditional employment settings. Career planning, resume preparation and interviewing are practices. An understanding of the law, professional ethics of dental hygiene and the need for lifelong learning are emphasized. Future roles of the dental hygienist and emerging issues in dental hygiene will be explored. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

# DHYG 225. Dental Public Health Education 3 Credits

Study of principles and concepts of community public health and dental health education. Emphasis on dental epidemiology and statistical methods, community assessment, educational planning, implementation, and evaluation, scientific review of literature, and classroom presentation. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

# DHYG 255. Special Topics in Dental Hygiene 1-6 Credits (1-6)

Study of special topics related to the advanced practice of dental hygiene. May include educational methodology as well as applications in clinical practice, research, or community service. Consent of instructor required. Restricted to: Community Colleges only. Restricted to DHYG majors.

# DMS-DIAGNOSTIC MED SONOGRAPHY (DMS)

# DMS 100. Introduction to Clinical Practicum 1 Credit

Introduction to working in the medical environment. Includes preparation for clinical internship and observation hours in the ultrasound department. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

# DMS 101. Introduction Sonography/Patient Care 2 Credits

Introduction to the careers in sonography, terminology, medical ethics, scanning planes, applications of ultrasound, professional standards and patient care. May be repeated up to 2 credits. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

# DMS 116. Introduction to Vascular Technology 2 Credits

Review of basic ultrasound physics and principles, peripheral vascular anatomy, hemodynamics, Doppler evaluation, peripheral vascular scanning techniques, physiologic testing and the carotid arteries and the peripheral vascular system. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 116 L. Vascular Technology I Lab

#### 1 Credit

Includes protocol development, scanning techniques, recognition of anatomical relationships and the normal ultrasound appearance of the carotid arteries and peripheral vasculature utilizing real-time sonographic equipment including Doppler. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

#### DMS 130. Pelvic Sonography

#### 1 Credit

Includes the anatomy, sectional anatomy and normal physiology of the pelvic structures; including the uterus, ovaries, prostate, pelvic muscles, lower GI, appendix and vessels as well as scanning techniques, sonographic appearance and Doppler evaluation of the pelvis. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

#### DMS 130 L. Pelvic Sonography Lab 1 Credit

Includes protocol development, scanning techniques, recognition of anatomical relationships and the normal ultrasound appearance of the pelvic structures including the uterus, ovaries, prostate, lower gastrointestinal system, appendix and pelvic muscles utilizing real-time sonographic equipment including Doppler. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

#### DMS 140. Abdominal Sonography

#### 3 Credits

Includes the anatomy, sectional anatomy and normal physiology of prevertebral vessels, liver, biliary system, pancreas, upper gastrointestinal system, kidneys, adrenals, and spleen as well as scanning techniques, sonographic appearance and Doppler evaluation of the deep abdominal organs. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 140 L. Abdominal Sonography Lab

#### 1 Credit

Includes protocol development, scanning techniques, recognition of anatomical relationships and the normal ultrasound appearance of prevertebral vessels, liver, biliary system, pancreas, upper gastrointestinal system, kidneys and spleen utilizing real-time sonographic equipment including Doppler. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

# DMS 150. Sonographic Principles and Instrumentation I 1 Credit

Includes the fundamental properties and mathematical relationships between variables of wave parameters, acoustic variables, attenuation, pulsed wave operation, transducers, system operation, Doppler, and artifacts utilizing real-time sonographic equipment. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 160. 1st Trimester Obstetric Sonography

#### 1 Credit

Includes the embryology, anatomy, sectional anatomy, normal physiology, biometrics, assessment, and sonographic appearance of the 1st trimester fetus, placenta, uterus and adnexa as well as scanning techniques according to recognized protocols. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

# DMS 165. 2nd/3rd Trimester Obstetric Sonography 1 Credit

Includes the anatomy, sectional anatomy, normal physiology, biometrics, assessment, and sonographic appearance of the 2nd and 3rd trimester fetus, placenta, uterus, and adnexa as well as scanning techniques according to recognized protocols. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

#### DMS 170. Clinical Practicum I

### 2 Credits (8-10P)

Development of technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at the developmental level. Ongoing reinforcement and broadening of knowledge base related to hospital procedures and policies. Continued observation, assistance and performance of patient care and sonographic duties under direct supervision. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 180. Clinical Practicum II

#### 5 Credits

Development of technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at the beginner level. Ongoing reinforcement and broadening of knowledge base related to hospital procedures and policies. Continue observation, assistance and performance of patient care and sonographic duties under direct supervision. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

#### DMS 201. Sonographic Procedures Lab

#### 1 Credit

Advances scanning skills, system optimization, anatomic recognition of abdominal and pelvic structures utilizing real-time sonographic equipment including Doppler. Includes sonographic evaluation of the first trimester pregnancy and normal fetus. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

#### DMS 216. Vascular Technology II

#### 2 Credits

Includes the pathology and pathophysiology of the vascular system, scanning techniques, clinical presentation, ultrasound appearance and Doppler evaluation seen with pathological conditions of the carotid arteries, deep and peripheral vascular systems. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 216 L. Vascular Technology II Lab

#### 1 Credit

Includes progressive development of skills following recognized protocols, scanning techniques, recognition of anatomical relationships with differentiation of normal and abnormal ultrasound appearance of the carotid arteries, deep and peripheral vascular systems utilizing real-time sonographic equipment including Doppler. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

#### DMS 226. Sonographic Case Studies I

#### 1 Credit

Includes integration of didactic knowledge, clinical presentation, laboratory values, sonographic appearance and related medical imaging of a variety of pathological conditions through a variety of case analysis and presentations. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 227. Sonographic Case Studies II

#### 1 Credit

Continuation of DMS 226, integration of didactic knowledge, clinical presentation, laboratory values, sonographic appearance and related medical imaging of a variety of pathological conditions through a variety of case analysis and presentations. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 230. Gynecologic Pathology

#### 2 Credits

Includes the pathology and pathophysiology of the female reproductive system, scanning techniques, clinical presentation, ultrasound appearance and Doppler evaluation seen with pathological conditions of the uterus, ovaries, and adnexa. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 240. Abdominal Pathology I

#### 2 Credits

Includes the pathology and pathophysiology of abdominal structures of the prevertebral vessels, liver, biliary system, pancreas, spleen and gastrointestinal system; scanning techniques, ultrasound appearance, clinical presentation and Doppler evaluation seen with pathological conditions. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 245. Abdominal Pathology II

#### 2 Credits

Includes the pathology and pathophysiology of abdominal structures of the genitourinary system, spleen, retroperitoneum, adrenal glands, abdominal wall and prostate; scanning techniques, ultrasound appearance, clinical presentation and Doppler evaluation seen with pathological conditions. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

# DMS 248. Pediatric Sonography 2 Credits

Includes the anatomy of the brain, skull, spine, hips, and normal developmental changes as well as pathology and pathophysiology of specific conditions that affect the premature infant, newborn and pediatric population across a variety of body systems. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

#### DMS 250. Sonographic Principles and Instrumentation II 3 Credits

Includes properties of sound and its use in diagnostic imaging, artifacts, system operation, Doppler, basic hemodynamics, image optimization, bio effects, quality assurance, and new technologies in ultrasound imaging. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

# DMS 255. Vascular Physics 2 Credits

Includes a review of sound properties and its use in diagnostic imaging, artifacts, system operation, Doppler, image optimization, bio effects, quality assurance, and in-depth application of fluid properties and hemodynamics in vascular ultrasound imaging. Restricted to: DMS

majors. Restricted to Community Colleges campuses only.

# DMS 260. High Risk Obstetric Sonography 3 Credits

Includes congenital malformations of the developing fetus, high risk pregnancies, multiple gestation, maternal conditions and invasive procedures. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 270. Clinical Practicum III

#### **5 Credits**

Continued development of technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at an intermediate level. Ongoing reinforcement and broadening of knowledge base related to hospital procedures and policies. Continued observation, assistance and performance of patient care and sonographic duties under limited supervision. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

# DMS 280. Clinical Practicum IV 5 Credits

Application of technical and professional aspects of diagnostic ultrasound in a hospital or clinical setting at a proficient level. Ongoing reinforcement and broadening of knowledge base related to hospital procedures and policies. Continued observation, assistance and performance of patient care and sonographic duties under limited supervision. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 290. Small Parts & Superficial Structures 2 Credits

Includes anatomy, pathology and pathophysiology, protocol development, scanning techniques, recognition of anatomical structures and the normal and pathological ultrasound appearance of the breast, thyroid, neck, scrotum, non-cardiac chest and musculoskeletal ultrasound.

Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 291. Registry Preparation: OB/GYN

#### 1 Credit

Registry preparation mock examinations over materials covered in Obstetric and Gynecological ultrasound. Students must pass this course with a 74% or better OR pass national certification in OB/GYN Sonography. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### DMS 292. Registry Preparation: Abdomen 1 Credit

Registry preparation mock examinations over materials covered in abdominal ultrasound including small parts and superficial structures. Students must pass this course with a 74% or better OR pass ARDMS national certification exam in Abdominal Sonography. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

# DMS 293. Registry Preparation: Vascular 1 Credit

Registry preparation mock examinations over materials covered in vascular ultrasound. Students must pass this course with a 74% or better OR pass national certification in Vascular Technology. Restricted to: DMS majors. Restricted to Community Colleges campuses only.

### **DRFT-DRAFTING (DRFT)**

# DRFT 101. Introduction to Drafting and Design Technologies 1 Credit

Professional and student organizations associated with the Drafting and Design Technologies program, degree requirements, employment skills and work habits, and university and college policies and procedures will be explored. Students will be introduced to the current learning management system and career-readiness certification. Restricted to Community Colleges only.

# DRFT 105. Technical Drawing for Industry 3 Credits (2+2P)

Technical sketching, basic CAD, and interpretation of drawings with visualization, speed and accuracy highly emphasized. Areas of focus include various trades such as machine parts, welding, heating and cooling, and general building sketches/plan interpretation.

# DRFT 108. Drafting Concepts/Descriptive Geometry 2 Credits (1+2P)

Basic manual drafting skills, sketching, terminology and visualization. Graphical solutions utilizing applied concepts of space, planar, linear and point analyses. Metric and S.I. units introduced.

# DRFT 109. Computer Drafting Fundamentals 3 Credits (2+2P)

Introduction to principles and fundamentals of drafting using both manual drawing techniques and computer-aided drafting (CAD) applications. May be repeated up to 3 credits. Crosslisted with: E T 109 and C E 109. Restricted to Community Colleges campuses only.

# DRFT 112. Drafting Concepts/Computer Drafting Fundamentals I 4 Credits (2+4P)

Basic drafting skills, terminology, and visualization. Introduction to principles and fundamentals of computer-aided drafting. Same as  ${\sf ET106}.$ 

Prerequisites: OECS 207, OECS 125 or consent of instructor.

# DRFT 113. Drafting Concepts/Computer Drafting Fundamentals II 4 Credits (2+4P)

Drafting for mechanical/industrial applications; machine part detailing, assemblies in orthographic, isometric, auxiliary, oblique, and sectional views. Two-dimensional AutoCAD with introduction to 3-D AutoCAD. Same as E T 216. Restricted to: Community Colleges only.

Prerequisite: DRFT 112.

# DRFT 114. Introduction to Solid Modeling 3 Credits (2+2P)

2D mechanical drafting and 3D mechanical solid modeling utilizing the latest version of AutoCAD software. Industry dimensioning and annotation standards will be emphasized. 2D multi-view working drawings, 3D solid models, and basic 3D model assemblies will be introduced. Restricted to Community Colleges campuses only. **Prerequisite(s):** DRFT 109.

### DRFT 115. General Construction Safety

#### 3 Credits

Overview of general construction safety related to building, highway and road construction, and surveying field work for entry-level individuals. Students will also have the opportunity to earn a 10-hour construction industry OSHA card. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

### DRFT 120. Survey Equipment Fundamentals

### 2 Credits

Introduces the application and the setup to the following surveying equipment: Automatic Level, Total station, and Global Positioning Systems. Field safety knowledge is required. Restricted to Community Colleges only.

#### **DRFT 130. General Building Codes**

#### 3 Credits (2+2P)

Interpretation of the Building Code, local zoning codes, A.D.A. Standards and the Model Energy Code to study construction and design requirements and perform basic plan checking. Restricted to: Community Colleges only.

### DRFT 135. Electronics Drafting I

#### 3 Credits (2+2P)

Drafting as it relates to device symbols; wiring, cabling, harness diagrams and assembly drawings; integrated circuits and printed circuit boards; schematic, flow and logic diagrams; industrial controls and electric power fields. Drawings produced using various CAD software packages.

# Prerequisites: DRFT 108 and DRFT 109. DRFT 143. Civil Drafting Fundamentals

#### 3 Credits (2+2P)

Introduction to drafting in the field of Civil Engineering. Drawings, projects, and terminologies related to topographic, contour drawings, plan and profiles, and street/highway layout. Crosslisted with: E T 143. Restricted to Community Colleges only.

Prerequisite(s): DRFT 109.

# DRFT 151. Construction Principles and Print Reading 3 Credits (2+2P)

Introduction to construction materials, methods, and basic cost estimating and print reading applicable in today's residential, commercial, and public works industry. Instruction by print reading and interpretation, field trips, and actual job-site visits and progress evaluation.

#### **DRFT 153. Survey Drafting Applications**

#### 3 Credits (2+2P)

Introduction to drafting in the field of survey engineering. Drawings, projects and terminologies related to Point Data, topography, land/boundary surveys, legal descriptions and plat surveys. Using the current Autodesk software. Crosslisted with: SUR 143. Restricted to: Community Colleges only.

Prerequisite(s): DRFT 109.

# DRFT 160. Construction Take-Offs and Estimating 3 Credits (2+2P)

Computing and compiling materials and labor estimates from working drawings using various techniques common in general building construction and in accordance with standard specifications and estimating formats. Use of spreadsheets and estimating software introduced

Prerequisite: DRFT 151.

### DRFT 161. Introduction to Construction Management

Introduction to the construction industry and construction management; construction documents and contracts; project planning, scheduling and administration; construction site management; and the role of Building Information Modeling (BIM) in construction management. Pre/ Restricted to: Community Colleges only.

Corequisite(s): DRFT 151 or consent of instructor.

# DRFT 164. Intermediate Mechanical Drafting/Solid Modeling 3 Credits (2+2P)

Intermediate 3D mechanical parametric solid modeling and assembly creation utilizing the latest version of Autodesk Inventor software. The creation of 2D working drawings from 3D solid models will be emphasized. Geometric Dimensioning and Tolerancing (GD&T), basic material properties, and industry standard fastening and manufacturing methods will be introduced.

Prerequisite(s)/Corequisite(s): DRFT 114. Restricted to Community Colleges campuses only.

# DRFT 165. Introduction to Building Information Modeling 3 Credits (2+2P)

Introduction to Building Information Modeling (BIM) in the development of virtual 3D building models, construction documents, renderings and basic animations related to architectural, structural, and mechanical/electrical/plumbing building components. Utilizes the latest BIM technologies in the integration one, parametric BIM. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

# DRFT 176. Solid Modeling, Rendering and Animation 3 Credits (2+2P)

Introduction to three dimensional drafting and solid modeling, rendering and animation for architecture and engineering fields. Material application, mapping, and scene lighting will be introduced. Restricted to: Community Colleges only.

Prerequisite(s): DRFT 109.

# DRFT 180. Residential Drafting 3 Credits (2+2P)

Basic residential drafting including, floor plans, foundation plans, sections, roof plans, exterior and interior elevations, and site plans. Applicable residential building and zoning codes, construction methods and materials, adaptable residential design, and drawing and sheet layout for architectural drafting will be introduced. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): DRFT 109.

#### **DRFT 181. Commercial Drafting**

#### 3 Credits (2+2P)

Drafting principles, plan coordination, and code analysis applicable in the development of working drawings for commercial, public, and industrial building projects. Students will utilize National Cad Standards, ADA Standards, and will be introduced to modern office practice. Pre/ Restricted to: Community Colleges only.

Prerequisite(s): DRFT 109.

Corequisite(s): DRFT 180.

#### DRFT 190. Finding and Maintaining Employment 2 Credits

Techniques in self-evaluations, resume writing, application completion, job interviewing, and job retention. Exposure to work ethics, employee attitudes, and employer expectations.

### **DRFT 204. Geographic Information Systems Technology** 3 Credits (2+2P)

The use of digital information for which various digitized data creation methods are captured. Users will capture, store, analyze and manage spatially referenced data in a modeled mapping procedure. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

### **DRFT 214. Advanced Solid Modeling**

### 3 Credits (2+2P)

Advanced 3D mechanical parametric solid modeling and assembly creation utilizing the latest version of Solidworks software. The creation of 2D working drawings from 3D solid models and the creation of 3D models for machining/manufacturing will be emphasized. Geometric Dimensioning and Tolerancing (GD&T), material properties, and industry standard fastening and manufacturing methods will be further explored. Prerequisite(s)/Corequisite(s): DRFT 114. Restricted to Community Colleges campuses only.

#### **DRFT 215. Construction Site Safety Management** 3 Credits

Construction safety, compliance, documentation, and reporting requirements for individuals with construction site safety management responsibilities. Students will have the opportunity to earn a 30-hour construction industry OSHA card. Consent of Instructor required. Restricted to Community Colleges campuses only.

#### **DRFT 222. Surveying Fundamentals** 3 Credits (2+2P)

Elementary surveying and civil drafting theory and techniques for non engineering majors. Includes traverse plotting, site plans, mapping, cross sections, and development of plan and profile drawings. Actual basic field measurement/surveying as well as extensive manual and CAD projects will be assigned. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): DRFT 109 and MATH 190G.

### DRFT 230. Building Systems Drafting 3 Credits (2+2P)

Development of working drawings for electrical, plumbing, and HVAC systems, for residential and commercial building through the applications of both 2D Drafting and 3D Building Information Modeling (BIM) techniques. Basics of project setup, National CAD Standards, ADA Standards, modern office practice, code analysis, as well as Sustainability and LEED for new construction. Restricted to: Community Colleges only. Prerequisite(s): DRFT 180 or DRFT 181.

### **DRFT 240. Structural Systems Drafting** 3 Credits (2+2P)

Study of foundations, wall systems, floor systems and roof systems in residential, commercial and industrial design/construction. Produce structural drawings including foundation plans, wall and building sections, floor and roof framing plans, shop drawings and details; schedules, materials lists and specifications. Use of various software.

Restricted to: Community Colleges only. Prerequisite(s): DRFT 180 or DRFT 181.

### DRFT 242. Roadway Development Drafting 3 Credits (2+2P)

Advanced civil/survey technology and drafting related to roadway development. Emphasis is on relevant terminology, codes/standards, and the production of complex working drawings such as topographical/ grading, drainage, master utilities, roadway P P/details/etc., according to agency standards. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): DRFT 143.

### **DRFT 243. Land Development Drafting** 3 Credits (2+2P)

Advanced civil/survey technology and drafting related to land development. Emphasis is on relevant terminology codes/standards, and the production of complex working drawings such as subdivision plats, local utility and drainage plans, construction details roadway P P, etc., according to local development/ agency standards.

Prerequisite: DRFT 143 and DRFT 153.

### DRFT 250. Principles of Detailing and Design 3 Credits (2+2P)

Advanced practice in construction documentation in the development and coordination of working drawings & specifications. In particular, will utilize Architectural Graphic Standards, National CAD Standards, and ADA standards to develop detail drawings related to Architectural, Civil, Structural and Building Mechanical systems. Will also be introduced to basic principles, factors, and process of building design such as space planning, site analysis, and basic architectural programming. Restricted to: Community Colleges only.

Prerequisite(s): DRFT 180 or DRFT 181.

### **DRFT 254. Spatial Data Processing** 3 Credits (2+2P)

Utilizes the tools and technologies of GIS, processing volumes of geodata identifying a numerical, coded or listed map. Involves the analysis of spatial data from various diverse applications and place in a descriptive mapping process. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): DRFT 204. **DRFT 255. Independent Study** 

### 1-3 Credits (1-3)

Instructor-approved projects in drafting or related topics specific to the student's individual areas of interest and relevant to the drafting and graphics technology curriculum. Consent of instructor required. May be repeated for a maximum of 6 credits.

# DRFT 265. Advanced Building Information Modeling Applications 3 Credits (2+2P)

Advanced applications of Building Information Modeling (BIM) including the creation of, and practice in collaborative work sets, data and design analyses, energy modeling and analysis, preliminary LEED analysis, construction take-offs & estimation, and construction animation, through use of various BIM and related software. Restricted to: Community Colleges only.

Prerequisite(s): DRFT 165.

#### DRFT 274. GIS Theory and Analysis

#### 3 Credits (2+2P)

Analyzes the hypothesis in which location and spatial data sufficiently quantifies the appropriate statistical methodology. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): DRFT 254.

# DRFT 276. Computer Rendering and Animation I 3 Credits (2+2P)

Introduction to technical applications of computer generated renderings and animations for the architecture and engineering fields. 3D models, photo-realistic renderings, and basic animation movie files will be produced utilizing industry standard modeling and animation software.

# DRFT 278. Advanced CAD Applications 3 Credits (2+2P)

Introduction to advanced CAD commands, applications, usage techniques, and user customization. the latest version of the National CAD Standards will also be explored. Restricted to: Community Colleges only.

Prerequisite(s): DRFT 109.

# DRFT 288. Portfolio Development 3 Credits (2+2P)

Production of a portfolio consisting of previously produced student work related to the student's individualized degree option. Process shall include the compilation and organization of working and presentation drawings, construction documents, BIM Models, and renderings/animations. Students will learn the basics of design layout and online portfolio documentation. Job search and resume preparation activities will also be required. Production of new material and content may also be required. This course is designed as a last semester course in the Drafting & Design curricula. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): Consent of Instructor.

#### **DRFT 290. Special Topics**

### 1-4 Credits (1-4)

Topics subtitled in the Schedule of Classes. May be repeated for a maximum of 12 credits.

### **DRFT 291. Cooperative Experience**

#### 1-6 Credits (1-6)

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. Student meets with advisor weekly. Graded S/U.

Prerequisite: consent of instructor.

# DRFT 295. Professional Development and Leadership DAGA 1 Credit

Students gain experience in leadership, team building, performing community service, and membership and/or leadership in a student organization. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

# **E E-ELECTRICAL ENGINEERING (E E)**

# E E 100. Introduction to Electrical and Computer Engineering 4 Credits (3+3P)

Introduction to analog (DC) and digital electronics. Includes electric component descriptions and equations, Ohm's law, Kirchhoff's voltage and current laws, ideal op-amp circuits, Boolean algebra, design of combinational and sequential logic circuits and VHDL or VERILOG. May be repeated up to 4 credits.

Prerequisite(s)/Corequisite(s): C- or better in MATH 190G.

### E E 112. Embedded Systems

#### 4 Credits (3+3P)

Introduction to programming through microcontroller-based projects. Extensive practice in writing computer programs to solve engineering problems with microcontrollers, sensors, and other peripheral devices. **Prerequisite(s):** C- or better in E E 100.

# E E 200. Linear Algebra, Probability and Statistics Applications 4 Credits (3+3P)

The theory of linear algebra (vectors and matrices) and probability (random variables and random processes) with application to electrical engineering. Computer programming to solve problems in linear algebra and probability.

Prerequisite(s): C- or better in E E 112 and MATH 192G.

#### E E 201. Electric Circuit Analysis

#### 3 Credits

Electric component descriptions and equations. Kirchhoff's voltage and current laws, formulation and solution of RLC network equations using time domain concepts. For nonmajors only. Minimum 2.0 GPA.

Prerequisite(s): C or better in MATH 192G.

# E E 212. Introduction to Computer Organization 4 Credits (3+3P)

Concepts of modern computer organization, CPU control, pipelining, memory hierarchies, memory mapping, hardware-software interface, and operating systems.

Prerequisite(s): C- or better in E E 112 and MATH 190G.

# E E 230. AC Circuit Analysis and Introduction to Power Systems 4 Credits (3+3P)

Electric component descriptions and equations; complete solutions of RLC circuits; steady-state analysis of AC circuits; application to power system analysis. May be repeated up to 4 credits.

Prerequisite(s)/Corequisite(s): PHYS 216G. Prerequisite(s): C- or better in E E 100 and MATH 192G.

# E E 240. Multivariate and Vector Calculus Applications 3 Credits

Vector algebra, cylindrical and spherical coordinates, partial derivatives, multiple integrals. Calculus of vector functions through electrostatic applications. Divergence, gradient, curl, divergence theorem, Stokes's theorem, Coulomb's Law, Gauss's Law, electric field, electric potential. Applications in Matlab.

Prerequisite(s): C- or better in MATH 192G and E E 112.

# **E S-ENVIRONMENTAL SCIENCE (E S)**

# E S 110G. Introductory Environmental Science 4 Credits (3+2P)

Introduction to environmental science as related to the protection, remediation, and sustainability of land, air, water, and food resources. Emphasis on the use of the scientific method and critical thinking skills in understanding environmental issues.

### E S 256. Environmental Engineering and Science

#### 3 Credits

Principles in environmental engineering and science: physical chemical systems and biological processes as applied to pollution control.

Restricted to: Main campus, Alamogordo campus, Grants campus,

Carlsbad campus. Crosslisted with: C E 256

Prerequisite(s): CHEM 111G and MATH 191G.

#### E S 256 L. Environmental Science Laboratory

#### 1 Credit

Laboratory experiments associated with the material presented in E S 256. Same as C E 256L.

Corequisite: ES 256.

# E T-ENGINEERING TECHNOLOGY (E T)

#### E T 101. Introduction to Engineering Technology

#### 1 Credit

The development of engineering technology, with an introduction to engineering technology, education, and practice. Graded S/U.

### ET 104. Soldering Techniques

#### 1 Credit

Fundamentals of soldering, desoldering, and quality inspection of printed circuit boards.

# E T 106. Drafting Concepts/Computer Drafting Fundamentals I 4 Credits (2+4P)

Basic drafting skills, terminology, and visualization. Introduction to principles and fundamentals of computer-aided drafting. Community Colleges only. Same as DRFT 112.

Prerequisite: OECS 125, OECS 207, or consent of instructor.

### ET 109. Computer Drafting Fundamentals

#### 3 Credits (3+2P)

Crosslisted with: DRFT 109, C E 109 and SUR 109

#### ET 110. Introduction to 3-D Modeling (Solid Works)

#### 3 Credits (2+3P)

Introduction to SolidWorks, a 3-D modeling software. The foundation for designing mechanical parts and assemblies.

#### ET 120. Computation Software

### 2-3 Credits (2-3)

The use of spreadsheet software in the field of engineering technology.

#### E T 125. Introduction to Renewable Energy

#### 3 Credits

Renewable energy systems, including topics in thermal-solar photovoltaic, wind, geothermal systems, and other current topics. Theory, practical applications, safety considerations and the economics of alternative renewable energy systems compared to conventional systems.

#### E T 153. Introduction to Computer Networks

#### 3 Credits

Introduction to basic computer network fundamentals including International Open Systems Interconnect (OSI), the seven-layer model, and various networking hardware devices. Community Colleges only.

### E T 154. Construction Methods and Communications

#### 3 Credits

Blueprint reading, specifications, and introduction to materials used in construction

#### ET 155. Network Operating Systems I

#### 3 Credits (3+1P)

Introduction to a computer network operating system. May not be used as part of an E T degree program on main campus. Restricted to: Community Colleges only.

Prerequisite(s): ET 120 or ET 122.

#### ET 156. Introduction to Information Security

#### 2 Credits

This course introduces information security terminology, historical evolution of digital security, types of PC and network system vulnerabilities and types of information loss. In addition, methods of information protection and integrity, intrusion detection, and recovery of data are introduced.

**Prerequisite(s)/Corequisite(s):** E T 120. Restricted to Community Colleges campuses only.

# E T 160. Introduction to Information Engineering Technology 3 Credits

An information engineering technology approach to the basics of computer systems and data, computer architecture, hardware and software operation, networks, and data communications. May be repeated up to 3 credits.

#### ET 182. Digital Logic

#### 3 Credits

The use of truth tables, Boolean equations, and diagrams to define, simplify, and implement logic-valued functions.

### ET 183. Applied DC Circuits

#### 3 Credits (2+2P)

Application of Ohm's law, Kirchhoff's laws, Thevenin's, and Norton's theorems to the analysis of DC passive circuits. Embedded Lab. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): MATH 121G.

### ET 183 L. Applied DC Circuits Lab

#### 1 Credit

DC applied circuits lab. May be repeated up to 1 credits.

Corequisite(s): ET 183.

#### ET 184. Applied AC Circuits

### 3 Credits (2+2P)

Application of circuit laws and theorems to analysis of AC passive circuits. Resonant circuit, polyphase circuit and magnetic circuit topics are introduced. Embedded Lab. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): MATH 190G. Prerequisite(s): ET 183.

### ET 184 L. Applied AC Circuits Lab

#### 1 Credit

AC applied circuits lab May be repeated up to 1 credits.

Corequisite(s): ET 184.

### ET 190. Applied Circuits

### 4 Credits (3+2P)

Application of Ohm's law, Kirchhoff's laws, and Thevenin's theorems to the analysis of AC and DC passive circuits. Electronic circuit topics are introduced. Embedded lab.

Prerequisite(s)/Corequisite(s): MATH 190G.

#### ET 191. Applied Circuits Laboratory

#### 1 Credit

Applied Circuits Lab May be repeated up to 1 credits.

### ET 200. Special Topics

#### 1-3 Credits

Directed study or project. May be repeated for a maximum of 6 credits. **Prerequisite:** consent of department head.

#### ET 203. Computational Foundations

#### 3 Credits

Fundamental concepts of various proof techniques. These concepts will be applied to the use of computer algorithms, programming languages and other engineering and technology applications. May be repeated up to 3 credits.

Prerequisite(s): MATH 190G and ET 262.

#### ET 210. Intermediate 3-D Modeling (Solid Works)

#### 3 Credits (2+2P)

Intermediate 3-D modeling. Applied modeling of techniques to prepare for SolidWorks certification (CSWA). May be repeated up to 3 credits.

Prerequisite(s): E T 110.

### ET 217. Manufacturing Processes

#### 3 Credits

Introduction to manufactuing and processing, including: casting, forming, and machining. Emphasis on creating products with the appropriate techniques. May be repeated up to 3 credits. Crosslisted with: I E 217. **Prerequisite(s)/Corequisite(s):** E T 217L. Prerequisite(s): E T 110 and MATH 121G.

#### ET 217 L. Manufacturing Processes Lab

#### 1 Credit

Hands-on laboratory in machine shop to apply topics from E T 217, including: casting, forming, and machining. May be repeated up to 1 credits.

Prerequisite(s)/Corequisite(s): ET 217.

#### ET 220. Internship

#### 1-6 Credits

Internship requiring an approved number of hours of varied and progressive experience in the field of study. The scope and other requirements of the internship are stated in an individualized syllabus and through a memorandum of understanding between the faculty mentor and the industry partner. May be repeated up to 6 credits. Consent of Instructor required.

Prerequisite(s): ET 283.

#### E T 230. Introduction to Servo Systems

### 1 Credit

Introduction to Servo Systems. Topics include uses of servos in the industry, servo types, lop gains and frequency response, software control systems, damping, feedback, encoders, synchros and resolvers. Restricted to Community Colleges campuses only.

Prerequisite(s): E T 246. E T 240. Applied Statics

### 3 Credits

Fundamental topics of applied statics, including force system analysis, equilibrium, free body diagrams, methods of joints and sections, distributed loads, friction, centroids, area moments, and shear and moment diagrams. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): MATH 235G or MATH191G.

Prerequisite(s): PHYS 211G or PHYS 215G.

#### ET 241. Applied Dynamics

### 3 Credits

The foundation for understanding particles and bodies in motion and the forces involved, including: projectile motion, Newton's Laws of Motion, conservation of energy, and impusle and momentum. May be repeated up to 3 credits.

Prerequisite(s): ET 240, (MATH 235 or MATH 191G).

### ET 245. Computer Hardware Fundamentals

#### 3 Credits (2+2P)

Computer hardware fundamentals including architecture, interfacing, peripherals, troubleshooting, system upgrades, and maintenance. May be repeated up to 3 credits. Restricted to Las Cruces campus only.

#### ET 246. Electronic Devices I

#### 4 Credits (3+3P)

Solid-state devices including diodes, bipolar-transistors, and field effect transistors. Use of these devices in rectifier circuits, small signal and power amplifiers. May be repeated up to 4 credits.

Prerequisite(s): ET 190 or ET 184.

#### ET 253. Networking Operating Systems II

#### 3 Credits (3+1P)

Introduction to a computer network operating system. May not be used as part of an E T degree program on main campus. Restricted to Community Colleges campuses only.

Prerequisite(s): E T 155.

### ET 254. Concrete Technology

#### 3 Credits (2+2P)

Fundamentals of aggregates, Portland cement, and asphalt used in design and construction.

### ET 255. Linux System Administration

#### 3 Credits

Introduction to Linux system administration.

Prerequisite(s)/Corequisite(s): ET 160.

### E T 256. Networking Operating Systems III

#### 3 Credits (3+1P)

Introduction to a computer network operating system. May not be used as part of an E T degree program on main campus. Restricted to Community Colleges campuses only.

Prerequisite(s): E T 253.

### ET 262. Software Technology I

#### 3 Credits (2+2P)

An introduction to computer programming concepts as applied to engineering technology. Includes basic logic design, algorithm development, debugging and documentation. History and use of computers and their impact on society. May be repeated up to 3 credits. **Prerequisite(s)/Corequisite(s):** E T 182 or MATH 190G.

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### E T 272. Electronic Devices II

### 4 Credits (3+3P)

Operational amplifiers, positive and negative feedback, computer aided circuit analysis. In addition circuits include integrator, differentiators and phase shift networks. May be repeated up to 4 credits.

Prerequisite(s)/Corequisite(s): MATH 235G or MATH 191G.

Prerequisite(s): ET 246.

# E T 273. Fundamentals of Networking Communications I 4 Credits (2+4P)

Introduction to networking basics, including computer hardware and software, electricity, networking terminology, protocols, LANs, WANs, OSI model, IP addressing, and design and documentation of basic network and structure cabling. Community Colleges only. May be repeated up to 4 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): ET 153.

#### E T 276. Electronic Communications

### 3 Credits (2+2P)

Antennas, transmission devices, A-M and F-M transmission and detection, pulse systems, microwave systems.

Prerequisite(s): ET 246.

#### ET 277. Computer Networking I for IET

#### 3 Credits (2+2P)

Computer network design and applications for LAN to WAN, protocols, switches, bridges, routers, NT server, TCP/IP networks, network diagnostics, voice over IP, wireless networks, and the OSI layers from physical to transport. May be repeated up to 3 credits.

Prerequisite(s): ET 182.

#### E T 280. Introduction to Multimedia

#### 3 Credits

Introduction to video, audio and other digital presentation methods.

Prerequisite(s): E T 255. E T 282. Digital Electronics

#### 4 Credits (3+3P)

Applications of digital integrated circuits, multiplexers, counters, arithmetic circuits, and microprocessors. May be repeated up to 4 credits. **Prerequisite(s)/Corequisite(s):** (E T 190 or E T 184). Prerequisite(s): E T 182.

### ET 283. Hardware PC Maintenance

#### 3 Credits (3+1P)

Installing, configuring, troubleshooting, and maintaining personal computer hardware components.

Prerequisite(s): ET 120 or ET 122.

#### ET 284. Software PC Maintenance

### 3 Credits (3+1P)

Installing, configuring, troubleshooting, and maintaining personal computer operating systems.

Prerequisite(s): ET 120 or ET 122.

#### E T 285. Advanced Information Security

#### 3 Credits

Examines the field of information security within a real-world context of issues faced by today's IT professionals. May be repeated up to 3 credits. **Prerequisite(s)/Corequisite(s):** E T 283. Prerequisite(s): E T 156.

# E T 286. Information Security Certification Preparation 4 Credits (3+1P)

An overview of general security concepts for information technology systems.

Prerequisite(s): ET 285.

### ET 287. PC Disaster and Data Recovery

#### 3 Credits

This course provides an overview of the various causes of personal computer data failure and methods to mitigate the loss of your personal computer data. The focus is on restoring your personal computer to full PC functionality and recovering lost and damaged files after one of these unforeseen problems. In addition, the course provides a means to lessen the impact of these inevitable events with the preparation of a disaster recovery plan.

Prerequisite(s): ET 120 or ET 122.

# E T 290. Networking Wireless Communication 3 Credits (3+1P)

This course provides an introduction to wireless networking and communications. Some of the topics covered are protocols, transmission methods, and IEEE 802.11 standards. Wireless LAN (WLAN) fundamentals, devices, and security, cellular telephony, broadband, and satellite communications.

Prerequisite: ET 273.

#### ET 291. PC Forensics and Investigation

#### 3 Credits

Introduction to computer forensics and investigative fundamentals. Topics include understanding computer forensic and investigation law and requirements, processing crime and incident scenes, and the extraction, preservation, analysis and presentation of computer-related evidence.

Prerequisite(s): ET 120 or ET 122.

# ECED-EARLY CHILDHOOD EDUCATION (ECED)

# ECED 115. Child Growth, Development, and Learning 3 Credits

This basic course in the growth, development, and learning of young children, prenatal through age eight, provides students with the theoretical foundation for becoming competent early childhood professionals.

### ECED 125. Health, Safety, and Nutrition

#### 2 Credits

This course provides information related to standards and practices that promote children's physical and mental well being sound nutritional practices, and maintenance of safe learning environments.

### ECED 135. Family and Community Collaboration

#### 3 Credits

This beginning course examines the involvement of families and communities from diverse cultural and linguistic backgrounds in early childhood programs. Ways to establishes collaborative relationships with families in early childhood settings is discussed.

Prerequisite(s): ECED 115 and ENGL 111G.

# ECED 215. Curriculum Development Through Play 3 Credits

The beginning curriculum course places play at the center of curriculum in developmentally appropriate early childhood programs. It addresses content that is relevant for children birth through age four and developmentally and culturally sensitive ways of integrating content into teaching and learning experiences. Information on adapting content areas to meet the needs of children with diverse abilities and the development of IFSP's and IEP's is included. Consent of instructor required.

Prerequisite(s): ECED 115 and ENGL 111G.

Corequisite(s): ECED 220.

# ECED 220. Early Childhood Education Practicum I 2 Credits

The beginning practicum course will provide experiences that address curriculum content that is relevant for children birth through age four in developmentally and culturally sensitive ways. Consent of instructor required.

Prerequisite(s): ECED 115 and ENGL 111G.

Corequisite(s): ECED 215.

#### ECED 225. Curriculum Development and Implementation II 3 Credits

The second curriculum course focuses on developmentally appropriate curriculum content in early childhood programs, age 3 through third grade. Development and implementation of curriculum in all content areas, including literacy, numeracy, the arts, health and emotional wellness, science, motor and social skills, is emphasized. Information on adapting content areas to meet the needs of children with diverse abilities and the development of IEP's is included. Consent of instructor required.

Prerequisite(s): ECED 115, ENGL 111G.

Corequisite(s): ECED 230.

# ECED 230. Early Childhood Education Practicum II 2 Credits

The second field-based curriculum course focuses on practicing developmentally appropriate curriculum content in early childhood programs, age 3 through third grade. Consent of instructor required.

Prerequisite(s): ECED 115, ENGL 111G,.

Corequisite(s): ECED 225.

# ECED 235. Introduction to Language, Literacy and Reading 3 Credits

This course is designed to prepare early childhood professionals for promoting children's emergent literacy and reading development. Through a developmental approach, the course addresses ways in which early childhood professionals can foster young children's oral language development, phonemic awareness, and literacy problem solving skills, fluency, vocabulary, and comprehension.

Prerequisite(s): ECED 115 and ENGL 111G.

#### ECED 245. Professionalism

### 2 Credits

This course provides a broad-based orientation to the field of early care and education. Early childhood history, philosophy, ethics and advocacy are introduced. Basic principles of early childhood systems are explored. Multiple perspectives on early care and education are introduced. Professional responsibilities such as cultural responsiveness and reflective practice are examined.

# ECED 255. Assessment of Children and Evaluation of Programs 3 Credits

This basic course familiarizes students with a variety of culturally appropriate assessment methods and instruments, including systematic observation of typically and non-typically developing children. Crosslisted with: SPED 255

Prerequisite(s): ECED 115 and ENGL 111G.

#### ECED 265. Guiding Young Children

#### 3 Credits

This course explores various theories of child guidance and the practical applications of each. It provides developmentally appropriate methods for guiding children and effective strategies and suggestions for facilitating positive social interactions. Strategies for preventing challenging behaviors through the use of environment, routines and schedule will be presented.

#### ECED 270. Program Management

#### 3 Credits

Technical knowledge necessary to develop and maintain a quality early care and education program. The course will focus on sound financial management and vision, laws and legal issues that affect programs and state and national standards including accreditation requirements.

Prerequisite: consent of instructor.

# ECED 275. Curriculum for Diverse Learners and Their Families 3 Credits

Implementation of family-centered programming that includes developmentally appropriate and culturally responsive curriculum. The course will also cover the establishment and maintenance of healthy and safe learning environments. Consent of instructor required.

# ECED 276. Effective Program Development for Diverse Learners and Their Families

#### 2 Credits

Practical experience in observing and carrying out the role of the director/administrator in the implementation of family-centered programming that includes individually appropriate and culturally responsive curriculum in a healthy and safe learning environment. Consent of instructor required. Restricted to ECED majors.

Corequisite(s): ECED 275.

#### **ECED 280. Professional Relationships**

#### 3 Credits

Development of staff relationships that will foster strong professional relationships with and among families, communities and advisory boards. Issues of staff recruitment, retention, support and supervision will lay a foundation for positive personnel management. Working effectively with board, advisory groups and community members and agencies will be addressed. Consent of instructor required.

Corequisite(s): ECED 281.

### ECED 281. Professional Relationships Practicum

#### 2 Credits

Practical experience in the development of staff relationship that will foster professional relationships with families, communities and boards. Issues of staff recruitment, retention, support and supervision will lay a foundation for positive personnel management. Consent of instructor required. Restricted to ECED majors.

Corequisite(s): ECED 280.

# **ECON-ECONOMICS (ECON)**

### **ECON 201G. Introduction to Economics**

#### 3 Credits

Economic institutions and current issues with special emphasis on the American economy.

#### **ECON 251G. Principles of Macroeconomics**

#### 3 Credits

Macroeconomic theory and public policy: national income concepts, unemployment, inflation, economic growth, and international payment problems.

### ECON 252G. Principles of Microeconomics

#### 3 Credits

Microeconomic theory and public policy: supply and demand, theory of the firm, market allocation of resources, income distribution, competition and monopoly, governmental regulation of businesses and unions.

## **EDUC-EDUCATION (EDUC)**

#### **EDUC 101. Freshman Orientation**

#### 1 Credit

Introduction to the university and to the College of Education. Discussion of planning for individualized education program and field experience. Restricted to Las Cruces campus only.

#### EDUC 102. Internship I

#### 3 Credits

Supervised experience in elementary education settings.

# EDUC 103. Introduction with Internship in Bilingual Education/ESL 3 Credits

An overview of the American Education system with emphasis on organization, governance, law, demographics, and professional practice. Will include supervised experience in bilingual education/ESL elementary settings for prospective bilingual education/ESL teachers.

#### EDUC 150. Math for Paraprofessionals

#### 3 Credits

Applied math skills for paraprofessionals working with children.

Prerequisite: CCDM 103.

#### EDUC 151. Math for Paraprofessionals II

#### 3 Credits

Applied math skills for paraprofessionals working under the direction of a

teacher.

Prerequisite: EDUC 150.

EDUC 181. Field Experience I

### 1 Credit

Introduction to public school teaching, school visits, classroom observations and discussion seminar.

#### **EDUC 195. Individual Topics in Education**

#### 1-3 Credits

Supervised study in a specific area of interest. Each course shall be designated by a qualifying subtitle. May be repeated for a maximum of 9 credits.

### EDUC 202. Internship II

#### 3 Credits

Supervised experience in junior high settings.

Prerequisite: must be a co-op student.

### EDUC 204. Foundations of Bilingual/ESL Education

#### 3 Credits

Explore and review the historical, legal, philosophical, theoretical and pedagogical paradigms of bilingual/ESL education.

### EDUC 219. Pre-Teacher Preparation

#### 3 Credits

Assists students in developing the necessary competencies needed for acceptance to the Teacher Education Program. Course content includes basic skill development, test taking skills, and completion of teacher preparation packet. Maybe repeated for a maximum of 6 credits. Graded S/U. Community Colleges only.

### **EDUC 250. Introduction to Education**

#### 2 Credits

An overview of the American education system with emphasis on organization, governance, law, demographics, and professional practice. Restricted to Las Cruces campus only.

# EDUC 281. Introduction to Secondary Education and Youth 3 Credits

Introductory course for students considering a career in secondary education. Includes historical, philosophical, and sociological foundations, program organization, critical dispositions, and understanding the context of schools and youth. Practicum required. Restricted to: Secondary Ed majors. Traditional Grading with RR.

# ELA - EDUC LEADERSHIP & ADMIN (ELA)

### ELA 215. Multicultural Leadership in Education

#### 3 Credits

Introduction to the social and cultural constructions of gender, class, and race. Students will critically apply theoretical constructs to everyday life and discuss the intersection of gender and race with class inequality in national and global contexts. Using a social justice framework, readings, and assignments integrate a variety of racial/ethnic groups while considering the effects of historically uneven resource distribution, unearned privilege, forms of domination and subordination, immigration status, and cultural representation and ideologies. Participants will learn how to apply the change theories and concepts introduced in the course to practice through course readings, online discussions with the instructor and colleagues, group work, active examination of daily practice in schools, and personal reflection.

# ELA 255. Leadership and Change in Education 3 Credits

This course will introduce students to the challenges and key strategies in initiating, implementing, and sustaining educational change and reform. In the first part of the course, participants will learn about the challenges of educational change in the United States and the role that they as school leaders play in facilitating change and reform. The course continues with an examination of how culture, micro-politics, and power structures support or impede national and global change initiatives. The last part of the course offers suggestions for change agents including community organizing, culture building, and embracing sustainable leadership practices. Participants will learn how to apply the change theories and concepts introduced in the course to practice through course readings, online discussions with the instructor and colleagues, group work, active examination of daily practice in schools, and personal reflection.

#### **ELA 298. Special Topics in Education**

### 1-3 Credits (1-3)

Special topics course in education for undergraduate students. Course will be identified by a subtitle. May be repeated up to 12 credits. Restricted to Las Cruces campus only.

# ELT - ELECTRONICS TECHNOLOGY (ELT)

### ELT 103. Math Study Skills for Electronics

#### 1 Credit

Covers specific math study skills and critical thinking processes to reinforce practical applications of math and its use with electronics. The student will be introduced to electronic mathematical formulas during the problem-solving steps required for circuit analysis. May be repeated up to 4 credits.

**Prerequisite(s)/Corequisite(s):** ET 183 OR ET 184. Restricted to Community Colleges only.

# ELT 105. Basic Electricity and Electronics 3 Credits (2+2P)

Fundamentals of electricity and electronics, basic circuit devices, meters, transistors, integrated circuits and other solid state devices, computers, fiber optics, and industrial application topics. Minimum math proficiency of CCDM 103 or CCDM 104 required or math placement into CCDM 114 or higher. Restricted to: Community Colleges only. Crosslisted with: AERT 111

#### ELT 110. Electronics I

#### 4 Credits (3+3P)

Fundamentals of electronics including: components, schematics, Ohm's law, Thevenin's and Norton's theorems, and series/parallel circuits incorporating passive, active and magnetic elements. Introduction to AC circuits. Crosslisted with: AERT123. Restricted to: Community Colleges only.

### ELT 120. Mathematics for Electronics

#### 4 Credits

Includes fundamental mathematics, algebra, sine, cosine, and other elementary functions as they specifically apply to the operation, manipulation, and evaluation of direct current (DC) and alternating current (AC) circuits. Minimum math proficiency of CCDM 114 required or math placement into MATH 120 or higher. Restricted to: Community Colleges only. Crosslisted with: AERT 124

#### ELT 135. Electronics II

#### 4 Credits (3+3P)

Analysis of AC circuits, filters, and resonance. Introduction to solid state fundamentals including diodes and rectifier circuits, voltage regulators, various transistors and transistor characteristics, amplification and amplifiers, photoelectric effects, gates and timing circuits. Restricted to Community Colleges campuses only.

Prerequisite(s): ELT 110 and ELT 120.

### ELT 155. Electronics CAD and PCB Design

#### 3 Credits (2+2P)

Introduction to and the use of commercially available CAD software covering schematic representation of electronic components and circuits. Printed circuit board layout techniques including proper schematic capture, netlist generation, design rule checking and manual routing covered.

### ELT 160. Digital Electronics I

#### 4 Credits (3+3P)

Number systems, codes, Boolean algebra, logic gates, Karnaugh maps, combination circuits, flip-flops, and digital troubleshooting techniques. Restricted to: Community Colleges only.

Prerequisite(s): ELT 110 and (ELT 120 or MATH 120).

#### **ELT 175. Soldering Practices**

#### 3 Credits (2+2P)

Methods and techniques of hand soldering in the production of high quality and reliable soldering connections. Restricted to: Community Colleges only.

#### **ELT 205. Semiconductor Devices**

#### 4 Credits (3+3P)

Analysis and trouble shooting of linear electronic circuits including amplifiers, op-amps, power supplies, and oscillators. Restricted to: Community Colleges only.

Prerequisite(s): ELT 110 and ELT 135.

### ELT 215. Microprocessor Applications I

### 4 Credits (3+2P)

Fundamentals of microprocessor architecture and assembly language with an emphasis on hardware interfacing applications.

Prerequisite(s)/Corequisite(s): ELT 235. Prerequisite(s): ELT 160.

Restricted to: Community Colleges only.

### ELT 220. Electronic Communication Systems

#### 4 Credits (3+2P)

Principles and applications of circuits and devices used in the transmission, reception, and processing of RF, microwave, digital and telecommunications systems.

Prerequisite(s)/Corequisite(s): ELT 205. Prerequisite(s): ELT 135.

Restricted to: Community Colleges only.

#### ELT 221. Cooperative Experience I

#### 1-6 Credits

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U.

Prerequisite: consent of instructor.

#### ELT 222. Cooperative Experience II

### 1-6 Credits

Continuation of ELT 221. Maximum of 6 credits. Graded S/U.

Prerequisite: consent of instructor.

### ELT 225. Computer Applications for Technicians

#### 3 Credits (2+2P)

An overview of computer hardware, software applications, operating systems, high level programming languages and networking systems.

### ELT 230. Microprocessor Applications II

#### 4 Credits (3+2P)

Advanced microprocessor interfacing techniques. Topics in A/D and D/A conversion, I/O port address decoding, direct memory accessing, and peripheral device interfacing applications.

Prerequisite: ELT 215.

#### ELT 235. Digital Electronics II

### 3 Credits (2+2P)

Sequential logic circuits, latches, counters, shift-registers, fault analysis and troubleshooting of digital IC s, multiplexers, timers, encoders/ decoders, arithmetic circuits, pulse shaping, and memory devices.

Restricted to: Community Colleges only.

Prerequisite(s): ELT 160.

#### **ELT 240. Introduction to Photonics**

#### 4 Credits (3+2P)

Nature of light, light emitters, lasers, detectors, fiber optics communications systems, and other applications of light to electronics.

Prerequisite: ELT 135 or consent of instructor.

### ELT 250. Electronics Systems Analysis

#### 2 Credits (1+3P)

Capstone course emphasizing a systems approach to troubleshooting and maintaining complex electronics systems. Includes program review in preparation for technician certification.

Prerequisite: consent of instructor.

# ELT 260. Instrumentation Control and Signal Conditioning 4 Credits (3+2P)

Introduction to sensors and transducers, signal conditioning and transmission for measuring and process control systems. Includes AD, DA converter, small servos and actuators. Prerequisite:ELT 205.

#### **ELT 265. Special Topics**

#### 1-6 Credits

Topic to be announced in the Schedule of Classes.

# ELT 270. Biomedical Equipment Instrumentation 4 Credits (3+2P)

Principles and applications of electronic circuits and devices used in biomedical equipment. Skills taught to include evaluating, troubleshooting and repairing various types of medical equipment. **Prerequisite(s)/Corequisite(s):** ELT 260. Prerequisite(s): ELT 205. Restricted to: Community Colleges only.

### ELT 295. Professional Development/Leadership

As members and/or officers of student professional organizations, electronics technology students gain experience in leadership, team building, and community services. May be repeated for a maximum of 6 credit. Restricted to ELT and ET E majors.

# **ENGL-ENGLISH (ENGL)**

# ENGL 111 M. Rhetoric and Composition for International and Multilingual Students

#### 4 Credits

For international and multilingual students. Students will build on your prior knowledge of writing in English as a second or additional language by engaging in several genres of writing and reading, including reading responses, discussion posts, formal academic papers (Rhetorical Analysis and Documented Argument), and peer review. Your instructor and classmates will serve as your readers and will give you helpful and constructive criticism, which will in turn assist you in becoming a more fluent and engaging communicator in English. Fulfills English 111 Gen-ed requirement. Restricted to Las Cruces campus only.

**Prerequisite(s):** CBT/PB score of 500, or IBT score of 61, or SPCD 110, or consent of instructor.

### **ENGL 111G. Rhetoric and Composition**

#### 4 Credits

Skills and methods used in writing university-level essays.

**Prerequisite(s):** ACT standard score in English of 16 or higher or a Compass score 76 or higher; for those scoring 13-15 in English on the ACT or 35-75 on the Compass, successful completion of a developmental writing course; for those scoring 12 or below on the ACT standard score in English or 34 or below on the Compass, successful completion of two developmental writing courses.

# ENGL 111GH. Rhetoric and Composition Honors 4 Credits

Individualized assignments and independent study. Satisfies 4 credits of General Education English Composition requirement.

**Prerequisite:** ACT standard English score of 25 or higher and departmental approval.

# ENGL 112. Rhetoric and Composition II 2 Credits

A continuation of English 111G for those desiring more work in composition. Weekly themes based on outside reading.

Prerequisite: successful completion of ENGL 111G or the equivalent.

### ENGL 115G. Perspectives on Literature

#### 3 Credits

Examines literature by writers from culturally diverse backgrounds and from different cultural and historical contexts. Explores various strategies of critical reading.

# ENGL 116G. Perspectives on Film 3 Credits (3+3P)

Explores narrative and documentary film and examines significant developments in the history of cinema. Criticism of film as an art form, technical enterprise, business venture, and cultural phenomenon.

# ENGL 203G. Business and Professional Communication 3 Credits

Effective writing for courses and careers in business, law, government, and other professions. Strategies for researching and writing correspondence and reports, with an emphasis on understanding and responding to a variety of communication tasks with a strong purpose, clear organization, and vigorous professional style. May be repeated up to 3 credits.

**Prerequisite(s):** Grade of C- or better in ENGL 111G or SPCD 111G or ENGL 111 M.

# ENGL 211G. Writing in the Humanities and Social Sciences 3 Credits

Theory and practice in interpreting texts from various disciplines in the humanities and social sciences. Strategies for researching, evaluating, constructing, and writing researched arguments. Course subtitled in the Schedule of Classes. May be repeated up to 3 credits.

Prerequisite(s): Grade of C- or better in ENGL 111G or ENGL 111M.

# ENGL 218G. Technical and Scientific Communication 3 Credits

Effective writing for courses and careers in sciences, engineering, and agriculture. Strategies for understanding and presenting technical information for various purposes to various audiences. May be repeated up to 3 credits.

Prerequisite(s): Grade of C- or better in ENGL 111G or ENGL 111M.

# ENGL 220G. Introduction to Creative Writing 3 Credits

Examines classic and contemporary literature in three genres. Various forms, terminologies, methods and technical aspects of each genre, and the art and processes of creative writing. May be repeated up to 3 credits.

Prerequisite(s): ENGL 111G or SPCD 111G or ENGL 111 M.

# ENGL 232. Script Development and Storyboarding 3 Credits

Examines effective writing principles for creating storyboards that communicate the overall picture of a project, timing, scene complexity, emotion and resource requirements. Crosslisted with: CMI 232.

# ENGL 235. Narrative: Principles of Story Across the Media 3 Credits

Examines the various strategies of written and visual storytelling, narrative structure and its principal components (plot, theme, character, imagery, symbolism, point of view) with an attempt to connect them to elements of contemporary forms of media expression, including screenwriting, playwriting, writing for documentaries and animation, etc. Crosslisted with: CMI 235

### ENGL 243. The Bible as Literature

#### 3 Credits

Develops informed readings of Hebrew and Christian scriptures. Emphasizes understanding Biblical literary forms, techniques, themes; historical, cultural contexts for interpretation; authorship, composition, audience for individual books; development of Biblical canon.

#### **ENGL 244G. Literature and Culture**

#### 3 Credits

Intensive reading of and discussion and writing about selected masterpieces of world literature. Emphasizes cultural and historical contexts of readings to help students appreciate literary traditions. Core texts include works by Homer, Dante, and Shakespeare, a classic novel, an important non-Western work, and modern literature.

### ENGL 251. Survey of American Literature I

#### 3 Credits

From the colonial period to the transcendentalists.

#### **ENGL 252. Survey of American Literature II**

#### 3 Credits

From Whitman to the present.

#### **ENGL 263. History of Argument**

#### 3 Credits

Investigates the major figures and movements in rhetoric from the classical period to modern rhetorical theory, examining relations between rhetorical teaching and practice, culture, epistemology, and ideology. Main campus only.

Prerequisite(s): ENGL 111G.

### ENGL 271. Survey of English Literature I

#### 3 Credits

From Beowulf through the eighteenth century.

#### ENGL 272. Survey of English Literature II

#### 3 Credits

From the pre-Romantics to the present.

#### **ENGL 299. Special Topics**

#### 1-3 Credits

Emphasis on a literary and/or writing subject chosen for the semester. Repeatable for a unlimited credit under different subtitles.

## **ENGR-ENGINEERING (ENGR)**

### ENGR 100. Introduction to Engineering

#### 3 Credits (2+3P)

An introduction to the various engineering disciplines, the engineering approach to problem solving, and the design process. Projects emphasize the importance of teamwork, written & oral communication skills, as well as ethical responsibilities.

Prerequisite(s)/Corequisite(s): MATH 121G.

### ENGR 100H. Introduction to Engineering

### 3 Credits (2+3P)

An introduction to the various engineering disciplines, the engineering approach to problem solving, and the design process. Projects emphasize the importance of teamwork, written & oral communication skills, as well as ethical responsibilities. Pre/

Corequisite(s): MATH 190G.

# ENGR 111. Mathematics for Engineering Applications 3 Credits

An introduction to engineering mathematics and basic programming skills needed to perform elementary data manipulation and analysis. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): MATH 190G. Prerequisite(s): MATH 121G.

#### **ENGR 198. Special Topics in Engineering**

#### 1-3 Credits

Directed individual study of topics in engineering. Written reports covering work required. May be repeated for a maximum of 6 credits. Restricted to engineering majors. Graded S/U.

Prerequisite: consent of academic dean.

# EPWS-ETMLGY/PLNT PTHLGY/WD SCI (EPWS)

### **EPWS 100. Applied Biology**

#### 3 Credits

Introduction to applied biology and ecology focusing on insects, plants and pathogens in natural areas, crops and urban settings. EPWS 100L is strongly recommended to take in the same semester. May be repeated up to 3 credits. Restricted to Las Cruces campus only.

#### EPWS 100 L. Applied Biology Lab

#### 1 Credit

Study of applied biology and ecology of insects, plants and pathogens in natural areas, crops, and urban settings. EPWS 100 strongly recommended to take in the same semester. May be repeated up to 1 credits. Restricted to Las Cruces campus only.

#### EPWS 200. Special Topics

#### 1-4 Credits

Specific subjects and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester and a grand total of 9 credits.

# FCS-FAMILY AND CHILD SCIENCE (FCS)

# FCS 181. Interpersonal Skills in Intimate Relationships 3 Credits

Developing social skills within friendships, dating relationships, marriage, parenting, and families. May be repeated up to 3 credits. Restricted to Las Cruces and Dona Ana campuses.

# FCS 210. Infancy and Early Childhood in the Family 3 Credits

Research and theory relevant to prenatal development and the physical, mental, and socio-emotional development of the child from birth to age five. Attitudes, knowledge, and skills needed for working with young children and their families. Restricted to Las Cruces campus only.

#### FCS 211. Middle Childhood Development in the Family 3 Credits

Research and theory relevant to the physical, mental, social, and emotional development of the child from age five to age twelve. Attitudes, knowledge, and skills related to working with school-age children in the family system. Observation in a variety of settings may be required. Restricted to Las Cruces campus only.

# FCS 212. Adolescent Development and the Family 3 Credits

Research and theory relevant to the physical, mental, social, and emotional development of the children ages 12 to 18. Attitudes, knowledge, and skills related to working with adolescents in the family system. Observation in a variety of settings may be required. Restricted to Las Cruces campus only.

### FCS 213. Adult Development and Aging

#### 3 Credits

Research and theory related to the physical, mental, social, and emotional development of older adults. Attitudes, knowledge, and skills related to working with older adults in the family system, including normative, and nonnormative transitions. Restricted to Las Cruces campus only.

# FCSE-FAMILY & CONSUMER SCI EDU (FCSE)

### FCSE 235. Housing and Interior Design

#### 3 Credits

Investigation of types of housing and factors impacting housing decisions for families. Selection, planning, and arrangement of interior components of homes to meet the needs of the family. Restricted to Las Cruces campus only.

Prerequisite(s): No prerequisites.

# FCSE 245. Overview of Family and Consumer Sciences Teaching 3 Credits

Overview of planning and teaching skills. Supervised experiences in observing and directing the learning of secondary family and consumer sciences students. Philosophy and history of the profession.

# **FIN-FINANCE (FIN)**

#### FIN 206. Introduction to Finance

#### 3 Credits

Theory and techniques of financial management for business firms. Includes application of financial analysis tools and techniques needed for business financial administration and decision making. Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 106 or higher; BOT 120 or ACCT 221; ECON 201 or ECON 251.

### FIN 210. Financial Planning and Investments

#### 3 Credits

Individual financial planning and related financial markets and institutions. Community Colleges only.

## FIRE-FIRE INVESTIGATION (FIRE)

#### FIRE 101. Firefighter I

### 8 Credits (6+6P)

This course will train the student to the Firefighter I level as outlined in NFPA 1001, Standard for Firefighter Professional Qualifications. Firefighter I certification issued through the New Mexico Firefighter's Training Academy upon successful completion (IFSAC accredited). May be repeated up to 8 credits. Consent of Instructor required.

**Prerequisite(s)/Corequisite(s):** OEEM 103 and FIRE 115. Restricted to Community Colleges campuses only.

# FIRE 102. Fire Fighter I and II 12 Credits

This course will train the student as outlined in NFPA 1001, Fire Fighter Professional Qualifications. Firefighter I & II Certification issued through the New Mexico Firefighter's Training Academy (NMFTA) upon successful completion [International Fire Service Accreditation Congress (IFSAC) & Pro Board accredited]. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): FIRE 115, FIRE 252, OEEM 103. Restricted to Dona Ana campus only.

### FIRE 104. Firefighter II

### 8 Credits (6+6P)

This course will train the student to the Firefighter II level as outlined in NFPA 1001, Standard for Firefighter Professional Qualifications. Firefighter II certification issued through the New Mexico Firefighter's Training Academy upon successful completion (IFSAC accredited). May be repeated up to 8 credits. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): FIRE 252. Prerequisite(s): FIRE 101. Restricted to Community Colleges campuses only.

# FIRE 112. Principles of Emergency Services 3 Credits

This course provides an overview to fire protection and emergency services including career opportunities in fire protection and related fields. The organization and function of public and private fire protection services is studied including how fire departments fit as part of local government. An overview of laws and regulations affecting the fire service is explored along with specific fire protection functions and responsibilities including basic fire chemistry and physics, introduction to fire strategy and tactics and life safety initiatives. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

# FIRE 114. Fire Behavior and Combustion 3 Credits

This course explores the theories and fundamentals of how and why fires start, spread, and are controlled. Restricted to: Community colleges only.

# FIRE 115. Hazardous Materials Awareness and Operations 3 Credits

This course will train the student to the Hazardous Materials Awareness and Operations level as outlined in NFPA 472, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents and OSHA 29 CFR 1910.120. Hazardous Materials Awareness and Operations certification issued through the New Mexico Firefighter's Training Academy upon successful completion (IFSAC accredited). May be repeated up to 3 credits. Restricted to Community Colleges campuses only

# FIRE 120. Fire Protection Hydraulics and Water Supply 3 Credits

This course will train students on requirements for becoming a safe and effective fire apparatus driver/operator. The focus will be on pump operation, construction, testing, and mathematical calculation required for effective pump operation and fire control. Responsibilities of the driver/operator will be taught and assessed consistent with applicable NFPA standards and the New Mexico Firefighters' Training Academy (NMFTA) guidelines. Students who meet all course requirements will be eligible for International Fire Service Accreditation Congress (IFSAC) certification through the NMFTA. May be repeated up to 3 credits. Prerequisite(s)/Corequisite(s): FIRE 128. Restricted to Community Colleges campuses only.

# FIRE 126. Fire Prevention 3 Credits

This course will educate students about the principles and techniques of fire prevention and life-safety inspection and code compliance in accordance to NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner, Level I. Students who meet all course requirements will be eligible for International Fire Service Accreditation Congress (IFSAC) certification through the New Mexico Firefighters' Training Academy (NMFTA). Restricted to Community Colleges campuses only.

# FIRE 128. Apparatus and Equipment 2 Credits

This course is a pre/co-requisite to FIRE 120. The course will train students on attitude and skill requirements for becoming a safe and effective fire apparatus driver/operator. The focus will be on apparatus inspection, operation, maintenance, and specification. Responsibilities of the driver/operator will be taught and assessed consistent with applicable NFPA standards and the New Mexico Firefighters' Training Academy (NMFTA) guidelines. Students pursuing certification must posses a current and valid New Mexico driver's license. Students who meet all course requirements will be eligible for International Fire Service Accreditation Congress (IFSAC) certification through the NMFTA. Restricted to Community Colleges campuses only.

# FIRE 130. Principles of Fire and Emergency Services Safety and Survival 3 Credits

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services. Consent of instructor required. Restricted to: Community colleges only.

### FIRE 200. Special Topics 1-12 Credits (1-12)

Specific subjects to be announced in the Schedule of Classes. Course may be repeated for credit as topics change. May be repeated up to 12 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

### FIRE 201. Independent Study

1-3 Credits

Research on an approved topic to meet graduation requirements. Meets or exceeds NFPA standards. May be repeated for total of 9 credits. **Prerequisite:** consent of instructor.

### FIRE 202. Wildland Fire Control

#### 1-3 Credits

Focuses on factors affecting wildland fire control and prevention, fire behavior, control techniques, command structure and other operations including Standards for Survival I-100, S-130 and S-190 Meets or exceeds NWCG Training Curriculum and NFPA 1051 standards. Restricted to: Community Colleges Only.

# FIRE 203. Fire and Emergency Services Administration 3 Credits

This course will provide students entry-level training in company operations and administration at the first-line supervisory level. The student will learn how to effectively manage human resources and community/public relations. Students will learn about fire department organization and administration; including budgets, reports, and planning. Students will learn the process involved in fire inspection, investigation, public education, emergency service delivery, and safety, per NFPA Standard 1021, Fire Officer Professional Qualifications. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

# FIRE 210. Building Construction for Fire Protection 3 Credits

This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. Restricted to: Community colleges only.

#### FIRE 220. Cooperative Experience I

#### 1-3 Credits

Supervised cooperative work program. Student is employed in an approved occupation and rated by the employer and instructor. May be repeated for a maximum of 6 credits. Graded S/U.

Prerequisite: consent of instructor.

#### FIRE 221. Cooperative Experience II

#### 3 Credits

Apply advanced firefighting knowledge and skills while working with fire protection agencies. Meets or exceeds NFPA standards. Consent of instructor required. Graded: S/U. Restricted to: Community Colleges only. **Prerequisite(s)**: FIRE 220.

### FIRE 223. Fire Investigations I

#### 3 Credits

This course meets the requirements set forth in NFPA 1033 Professional Qualifications for Fire Investigator. This course will give a comprehensive understanding of the principles of fire investigation, scene examination, documentation, evidence collection/preservation, interview techniques, and post-incident investigations. Student who meet all course requirements are eligible for International Fire Service Accreditation Congress (IFSAC) certification through New Mexico Firefighters' Training Academy (NMFTA). Restricted to Community Colleges campuses only.

### FIRE 224. Strategy and Tactics

#### 3 Credits

Provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment and extinguishing agents on the fire ground. Covers the development of systematic action plans for emergency situations. Includes recognizing and prioritizing emergency scene needs and developing related strategies, tactics and contingencies. Educates students on how resources should be deployed to implement those plans. Restricted to Community Colleges campuses only.

### FIRE 225. Fire Protection Systems

#### 3 Credits

This course provides information relating to the features and 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. Restricted to: Community colleges only.

### FIRE 226. Fire Investigations II

#### 3 Credits

This course is intended to provide the student with advanced technical knowledge on the rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation and court-room testimony. Restricted to: Community colleges only.

#### FIRE 230. Fire Service Instructor

#### 3 Credits

Provides the instructor candidate with methods and techniques of instruction including oral communications, preparing lesson plans, writing performance objectives, use of audio and other training aids, and the selection, evaluation and preparation of performance tests. Meets and exceeds NFPA 1041 Level I standards. Restricted to: Community Colleges only.

### FIRE 232. Firefighter Internship

#### 3 Credits

Application of knowledge, skills and abilities in a fire service department, as a firefighter intern and integrated member of a fire affiliated agency. Restricted to majors.

**Prerequisites:** FIRE 101, FIRE 102, FIRE 115, FIRE 202 and EMT-B and consent of instructor.

### FIRE 233. Practical Approach to Terrorism

#### 3 Credits

Gives responder an overall safety approach in recognizing and responding to incidents involving terrorism. Presents an overview in types of harm, explosive weapons, chemical weapons, biological weapons and radiological weapons. Restricted to: Community Colleges only. Crosslisted with: LAWE 233

### FIRE 252. Vehicle Extrication

#### 2 Credits (1+2P)

This course will train the student to the Vehicle & Machinery Extrication level I as outlined in NFPA 1006, Standard for Technical Rescuer Professional Qualifications. Vehicle & Machinery Extrication certification issued through the New Mexico Firefighter's Training Academy upon successful completion (IFSAC accredited). May be repeated up to 2 credits. Restricted to Community Colleges campuses only.

# FREN-FRENCH (FREN)

#### FREN 111. Elementary French I

#### 4 Credits

French language for beginners.

#### FREN 112. Elementary French II

#### 4 Credits

French language for beginners.

Prerequisite: C or better in FREN 111.

#### FREN 211. Intermediate French I

#### 3 Credits

Speaking, reading and writing. **Prerequisite:** C or better in FREN 112.

### FREN 212. Intermediate French II

#### 3 Credits

Speaking, reading and writing. **Prerequisite:** C or better in FREN 211.

# FSTE-FOOD SCIENCE & TECHNOLOGY (FSTE)

# FSTE 164G. Introduction to Food Science and Technology 4 Credits (3+2P)

An introductory course in the scientific study of the nature and composition of foods and their behavior during all aspects of their conversion from raw materials to consumer food products.

#### FSTE 175. ACES in the Hole Foods I

#### 4 Credits

Food production activities related to operation of ACES in the Hole Foods, a student-run food company that will give FSTE majors hands-on experience in all aspects of developing, producing and marketing food products Restricted to Las Cruces campus only.

**Prerequisite(s):** Students enrolled in this class must possess A Food Handler Card.

#### **FSTE 200. Special Topics**

#### 1-4 Credits

Specific topics and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester and a grand total of 9 credits.

# FSTE 210G. Survey of Food and Agricultural Issues 3 Credits

Same as AG E 210G.

#### FSTE 263G. Food Science I

#### 4 Credits (3+2P)

The scientific study of the principles involved in the preparation and evaluation of foods. May be repeated up to 4 credits.

#### FSTE 275. ACES in the Hole Foods II

#### 4 Credits

Food production activities related to operation of ACES in the Hole Foods, a student-run food company that will give FSTE majors hands-on experience in all aspects of developing, producing and marketing food products. May be repeated up to 4 credits.

Prerequisite(s): FSTE 175 and Have a Food Handler Card.

# FWCE-FISH, WILDLF, CONSERV ECOL (FWCE)

### FWCE 109. Contemporary Issues in Wildlife and Natural Resources Management

#### 3 Credits

Ecological, socioeconomic, and political issues surrounding the management of our natural resources with an emphasis on fish and wildlife resources.

# FWCE 110G. Introduction to Natural Resources Management 4 Credits (3+2P)

This class covers historical and current issues affecting the management of renewable natural resources with an emphasis on water, soil, rangeland, forest, fish, and wildlife resources. An emphasis is placed on the scientific method and critical thinking. In the laboratory students collect and analyze field data on topics covered above and write up each unit as a laboratory report.

# FWCE 255. Principles of Fish and Wildlife Management 3 Credits

Basic principles of fish and wildlife management including history, ecology, economics, and policy. Emphasis on wildlife and fisheries. Uses an ecosystem approach integrating living and nonliving resources.

Prerequisite(s): FWCE 110.

# **GENE-GENETICS (GENE)**

# GENE 110. Experimental Systems in Genetics 1 Credit

Survey of molecular, biochemical, organismal, and computer science based approaches to investigate how genes determine important traits. Historical development and topics of current interest will be discussed.

# **GEOG-GEOGRAPHY (GEOG)**

# GEOG 111G. Geography of the Natural Environment 4 Credits (3+3P)

Introduction to the physical processes that shape the human environment: climate and weather, vegetation dynamics and distribution, soil development and classification, and geomorphic processes and landform development.

# GEOG 112G. World Regional Geography 3 Credits

Overview of the physical geography, natural resources, cultural landscapes, and current problems of the world's major regions. Students will also examine current events at a variety of geographic scales.

#### **GEOG 120G. Culture and Environment**

#### 3 Credits

Study of human-environmental relationships: how the earth works and how cultures impact or conserve nature. Introduction to relationships between people and natural resources, ecosystems, global climate change, pollution, and conservation.

# GEOG 257. Introduction to Weather Science 4 Credits (3+3P)

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. Crosslisted with: SOIL 257 and AGRO 257

Prerequisite(s): None.

# GEOG 259. Introduction to Oceanography 4 Credits (3+3P)

Introduces the origin and development of the ocean and marine ecological concepts. Examines physical processes such as waves, tides, and currents and their impact on shorelines, the ocean floor, and basins. Investigates physical processes as they relate to oceanographic concepts. Includes media via the Internet and laboratory examination of current oceanic data as an alternative to the actual oceanic experience. Students will gain a basic knowledge and appreciation of the ocean's impact on the world's ecology. Branch campuses only. Consent of Instructor required.

# GEOG 281. Map Use: Reading, Analysis and Interpretation 3 Credits (2+3P)

Exploration of the cartographic medium. Development of critical map analysis and interpretation skills, and map literacy. Comprised of traditional lecture, labs, and map use projects.

### **GEOG 291. Special Topics**

#### 1-3 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

# GEOG 295. Introduction to Climate Science 4 Credits (3+3P)

Examines fundamentals and related issues of Earth's climate system, climate variability, and climate change. Develops solid understandings of Earth's climate system framed in the dynamic, Earth system based approach to the science. Branch Campuses only. May be repeated up to 4 credits.

# **GEOL-GEOLOGY (GEOL)**

### **GEOL 111G. Introductory Geology**

#### 4 Credits (3+3P)

Covers the fundamental principles of physical geology, including the origin of minerals and rocks, geologic time, rock deformation, and plate tectonics. May be repeated up to 4 credits.

### **GEOL 212G. The Dynamic Earth**

#### 4 Credits (3+3P)

Introduction to earth systems. Geology and the solid earth, geologic time and earth history, water and the world oceans, atmosphere and weather, the solar system. Community Colleges only.

#### **GEOL 220. Special Topics**

#### 1-3 Credits

Specific subjects to be announced in the Schedule of Classes. Community Colleges only. May be repeated for a maximum of 12 credits. May be repeated up to 12 credits.

# **GER-GERMAN (GER)**

#### GER 111. Elementary German I

#### 4 Credits

German for beginners. Stress on speaking skills.

#### **GER 112. Elementary German II**

#### 4 Credits

German for beginners and students with one year of high school German. Stress on speaking skills.

Prerequisite: C or better in GER 111.

#### GER 211. Intermediate German I

#### 3 Credits

Speaking, reading and writing. **Prerequisite:** C or better in GER 112.

#### GER 212. Intermediate German II

#### 3 Credits

Speaking, reading and writing. **Prerequisite:** C or better in GER 211.

# **GOVT-GOVERNMENT (GOVT)**

#### **GOVT 100G. American National Government**

#### 3 Credits

Class critically explores political institutions and processes including: the U.S. constitutional system; legislative, executive and judicial processes; political parties, elections, media, policy making, civic participation, popular and group influence

### **GOVT 101. Introductory Government Seminar**

#### 1 Credit

Introduction to the government major. Designed to assist students in planning college experience and preparing for professional or advanced educational opportunities upon graduation. Graded: S/U. Restricted to: Main campus only.

#### **GOVT 110G. Introduction to Political Science**

#### 3 Credits

This class covers fundamental concepts such as justice, sovereignty and power; political theories and ideologies; and government systems that range from democratic to authoritarian.

#### **GOVT 150G. American Political Issues**

#### 3 Credit

Major contemporary problems of American society and their political implications.

#### **GOVT 160G. International Political Issues**

#### 3 Credits

Current developments and issues in world politics.

#### **GOVT 201. Special Topics**

#### 3 Credits

Specific topics to be announced in Schedule of Classes. Community Colleges only. May be repeated for a maximum of 12 credits.

# **HIST-HISTORY (HIST)**

#### HIST 101G. Roots of Modern Europe

#### 3 Credits

Economic, social, political, and cultural development from earliest times to about 1700.

#### HIST 102G. Modern Europe

#### 3 Credits

Economic, social, political, and cultural development from 1700 to the present.

#### HIST 110G. Making History

#### 3 Credits

General introduction to history: how historians carry out research and develop interpretations about the past.

#### HIST 111G. Global History to 1500

#### 3 Credits

Global economic, social, political and cultural developments to 1500. Thematic approach.

### HIST 112G. Global History Since 1500

#### 3 Credits

Global economic, social, political and cultural developments since 1500. Thematic approach.

### HIST 201G. Introduction to Early American History

#### 3 Credits

History of the United States to 1877, with varying emphasis on social, political, economic, diplomatic, and cultural development.

# HIST 202G. Introduction to Recent American History 3 Credits

History of the United States since 1877, with varying emphasis on social, political, economic, diplomatic, and cultural development.

#### HIST 211G. East Asia to 1600

#### 3 Credits

History of China, Korea, Vietnam, and Japan from earliest times through the sixteenth century. Emphasis on cultural and political developments and their social and economic contexts, and the interaction between East Asian societies.

### HIST 212G. East Asia since 1600

#### 3 Credits

History of China, Korea, Vietnam, and Japan from the sixteenth through the twentieth centuries. Emphasis on internal development of each country, as well as the social and political impact of Western Imperialism, and the emergence of each country's unique version of modern society.

### HIST 221G. Islamic Civilizations to 1800

#### 3 Credits

History of Islamic civilizations to 1800.

### HIST 222G. Islamic Civilizations since 1800

#### 3 Credits

History of Islamic civilizations since 1800.

### HIST 261. New Mexico History

#### 3 Credits

Economic, political, and social development of New Mexico from exploration to modern times. Community Colleges only.

### HIST 269. Special Topics

#### 1-3 Credits

Specific subjects to be announced in the Schedule of Classes. Community Colleges only. May be repeated for a maximum of 12 credits.

# **HIT-HEALTH INFO TECHNOLOGY (HIT)**

### HIT 110. Electronic Health Records

#### 3 Credits

Current electronic health record principles, methods and procedures, and computerized medical record concepts and software applications will be introduced. Restricted to: Community Colleges only.

Prerequisite(s): C S 110 or OECS 105.

# HIT 120. Health Information Introduction to Pharmacology 3 Credits

Introduction to the principles of pharmacology, including drug terminology; drug origins, forms, and actions; routes of administration; as well as the use of generic name drugs, trade name drugs and categories of drugs to treat multiple and specific body systems.

# HIT 130. Health Information Technology Anatomy & Physiology 3 Credits

An introductory course in the basics of human structure and function. Body systems are examined as to how they relate to proper code selection and as part of the functioning of the body as a whole. Restricted to Community Colleges campuses only.

# HIT 140. Health Information Introduction to Pathophysiology 3 Credits

Introduction to the nature of disease and its effect on body systems. Disease processes affecting the human body via an integrated approach to specific disease entities will be presented including a review of normal functions of the appropriate body systems. Diseases will be studied in relation to their etiology, pathology, physical signs and symptoms, diagnostic procedures, complications, treatment modalities and prognosis.

# HIT 150. Introduction to Medical Terminology 3 Credits

The study and understanding of medical terminology as it relates to diseases, their causes and effects, and the terminology used in various medical specialties. Emphasis will be placed on learning the basic elements of medical words, appropriate spelling and use of medical terms, and use of medical abbreviations. Restricted to: Community Colleges only.

# HIT 158. Advanced Medical Terminology 3 Credits

Builds upon the concepts covered in HIT 150 or AHS 120 providing greater understanding of how to properly use and apply medical terminology used in the various health fields. Medical terminology associated with the body system's anatomy and physiology, pathology, diagnostic and therapeutic procedures, pharmacology, and abbreviations will be emphasized. Restricted to Community Colleges campuses only. **Prerequisite(s):** HIT 150 or AHS 120.

### HIT 221. Internship I

#### 1-3 Credits (1-3)

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: HIT & BOT majors. S/U Grading (S/U, Audit). Restricted to Dona Ana campus only.

#### HIT 228. Medical Insurance Billing

#### 3 Credits

Comprehensive overview of the insurance specialist's roll and responsibilities. Concepts and applications that will assist the student in understanding the steps necessary for successfully completing the insurance claim filing and reimbursement processes for various insurance carriers, both private and government, will be emphasized. Restricted to Carlsbad campus only.

Prerequisite(s): HIT/NURS 150; BOT 208.

# HIT 240. Health Information Quality Management 3 Credits

Introduction to basic concepts of quality improvement and performance improvement as they apply to health record systems and the health care industry. Quality assessment and improvement standards and requirements of licensing, accrediting fiscal and other regulatory agencies will be presented.

#### HIT 248. Medical Coding I

#### 3 Credits (2+2P)

Comprehensive overview of the fundamentals, coding conventions, and principles of selecting the most appropriate ICD-10-CM/PCS diagnostic and procedure codes. The most recent version of ICD-10-CM/PCS and an in depth study of current Official Coding Guidelines for coding and reporting will be emphasized. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): BOT 228.

### HIT 255. Special Topics

#### 3 Credits

Specific topics to be announced in the Schedule of Classes. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

### HIT 258. Medical Coding II

#### 3 Credits (2+2P)

Continuation of Medical Coding I. Comprehensive overview of the coding and reporting guidelines, fundamentals, coding conventions, and principles of selecting the most appropriate CPT and HCPCS procedural codes for all medical specialties. The most recent version of CPT and a continued study of the ICD-10-CM/PCS coding conventions and principles will be emphasized. Designed as a medical coding capstone course. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): HIT 248.

### HIT 268. Health Information Systems

### 3 Credits

Overview of health data management, work planning, and organization principles; an introduction to health care information systems; and review of the fundamentals of information systems for managerial, clinical support, and information systems.

# HNDS-HUMAN NUTRITION & DIET (HNDS)

### HNDS 201. Seminar 1- The Field of Dietetics

#### 1 Credit

This course will introduce students to the field experience, careers, and professions in nutrition. This course is required for students pursuing a Didactic Program in Dietetics verification statement. May be repeated up to 1 credits. Consent of Instructor required. Restricted to: HNDS majors. Restricted to Las Cruces and Dona Ana campuses.

#### **HNDS 251. Human Nutrition**

#### 3 Credits

Principles of normal nutrition. Relation of nutrition to health. Course contains greater amounts of chemistry and biology than HNDS 163. Open to nonmajors.

# **HON-HONORS (HON)**

#### HON 115. Journeys of Discovery

#### 1 Credit

Weekly conversations among students and a faculty member; organized around a particular subject and a small selection of readings. The seminars illuminate the many paths of discovery explored by the New Mexico State University faculty.

Prerequisite(s): Honors eligible.

### HON 205G. Life, Energy, and Evolution

#### 4 Credits (3+3P)

Principles of modern biological science with discussion on the impact of this science in today's world. Selected topics include principles of metabolism, genetics, physiology, evolution, and ecology. Students who pass HON 205G will fulfill the same requirements fulfilled by BIOL 111G and BIOL 111GL.

### HON 208G. Music in Time and Space

#### 3 Credits

Survey of music as it interacts with art, mathematics, science (acoustics), and ideas from exotic cultures through the history of Western civilization.

#### HON 214. Successful Fellowship Writing

#### 1 Credit

Same as HON 314, for freshmen and sophomores.

### HON 216G. Encounters with Art

#### 3 Credits

A multicultural examination of the principles and philosophies of the visual arts and the ideas expressed through them.

### HON 218. Women Across Cultures

#### 3 Credits

Historical and critical examination of women's contributions worldwide with emphasis on the issues of representation that have contributed to exclusion and marginalization of women and their achievements. Restricted to: Main campus only. Crosslisted with: W S 202G

## HON 219G. Earth, Time, and Life

4 Credits (3+3P)

Covers how the earth's materials form, processes involved in changing the earth's configuration, and extent of people's dependence upon the earth's resources. Includes mineral and energy resources, development of landscapes, environmental problems, evolution of the earth and life forms. May be taken in place of GEOL 111G.

# HON 220G. The World of the Renaissance: Discovering the Modern 3 Credits

An introduction to the literature and thought of Renaissance Europe. Humanism and the Reformation will be approached through the intensive study of major writers such as Petrarch, Machiavelli, Luther, Erasmus, Montaigne, and Shakespeare. Restricted to Las Cruces campus only.

### HON 222G. Foundations of Western Culture

#### 3 Credits

Critical reading of seminal texts relating to the foundations of culture and values in Western civilization, from ancient Greece to about 1700. Focus on the development of concepts of nature, human nature, and the state.

# HON 227G. Plato and the Discovery of Philosophy 3 Credits

Examines arguments and theories found in the Platonic dialogues with a view to determining the nature and value of philosophy both from Plato's point of view and absolutely.

## HON 228G. Religion and the State

### 3 Credits

Moral and political questions that arise in connection with churchstate relations, including religious toleration, separation of church and state, the individual's moral duty to ignore religious convictions when performing functions of democratic citizenship, and the extent to which these ideas are embodied in our nation s traditions.

# HON 229G. The New Testament as Literature 3 Credits

Literature of the New Testament examined from a literary perspective. Emphasis on translation history of the New Testament, generic features of gospel, epistle and apocalypse, precedent literary models, problems of authorship, classification of New Testament texts.

# HON 230G. Bamboo and Silk: The Fabric of Chinese Literature 3 Credits

Introductory survey of traditional and modern Chinese prose and poetry in translation with emphasis on genre, theme, and social/historical context.

### HON 232G. The Human Mind

#### 3 Credits

Examination of the current understanding of the intricate relationship between mind and matter, with particular emphasis on the functional organization of the human brain. Evolutionary origins of this functional design and its implications for understanding human emotional and cognitive processes.

#### **HON 233. Social Problems**

#### 3 Credits

Introduction to contemporary social problems from multiple perspectives. Discussions of definition, impact, and prospective solutions to major social issues, such as crime, drug abuse, social inequality, family, population, environment, and social change.

### HON 234G. The Worlds of Arthur

#### 3 Credits

Arthurian texts and traditions from medieval chronicle histories to modern novels. Emphasis on both the continuities of the Arthurian tradition and the diversity of genres, media, and cultures that have given expression to the legend.

### HON 235G. Window on Humanity

### 3 Credits

Anthropology is the most humanistic of the sciences, and the most scientific of the humanities. This course will use anthropological perspectives to examine the human experience from our earliest origins, through the experiences of contemporary societies. We will gain insights into the influence of both culture and biology on shaping our shared human universals, and on the many ways in which human groups are diverse. Restricted to Las Cruces campus only.

# HON 237G. Archaeology: Search for the Past 3 Credits

A critical evaluation of various approaches to understanding prehistory and history. The methods and theories of legitimate archaeology are contrasted with fantastic claims that invoke extraterrestrials, global catastrophes, transoceanic voyages, and extra-sensory perception. May be repeated up to 3 credits. Restricted to Las Cruces campus only.

# HON 239G. Medieval Understandings: Literature and Culture in the Middle Ages

#### 3 Credits

Intensive, interdisciplinary introduction to the thought and culture of medieval Europe. Core texts will include works by St. Augustine, Marie de France, and Dante, as well as anonymous works such as Sir Gawain and the Green Knight, all supplemented by study of medieval art, architecture, philosophy, and social history.

# HON 242G. Claiming an American Past 3 Credits

Survey of history of the United States in the nineteenth and twentieth centuries, with an emphasis on multicultural social and cultural history. Focus on understanding American history from the point of view of dispossessed, impoverished, and disenfranchised Americans who have fought to claim both their rights as Americans and American past.

# HON 248G. The Citizen and the State: Great Political Issues 3 Credits

The fundamental questions of politics: why and how political societies are organized, what values they express, and how well they satisfy those normative goals and the differing conceptions of citizenship, representation, and freedom.

# HON 249G. American Politics in a Changing World 3 Credits

American politics and policies examined from a historical and global perspective. Philosophical underpinnings of American national government, the structure of government based on that philosophy, and the practical implications of both the philosophical and structural base. How American government influences and is influenced by the world community.

# HON 265G. Principles of Human Communication Honors 3 Credits

Study and practice of interpersonal, small group, and presentational skills essential to effective social, business, and professional interaction.

# HON 270G. Theatre: Beginnings to Broadway 3 Credits

Intercultural and historical overview of live theatre production and performance, including history, literature and professionals. Students attend and report on stage productions.

# **HORT-HORTICULTURE (HORT)**

# HORT 100G. Introductory Plant Science 4 Credits (3+2P)

Introduction to the physical, biological, and chemical principles underlying plant growth and development in managed ecosystems. In the laboratory portion of the class, students perform experiments demonstrating the principles covered in lecture. The course uses economic plants and agriculturally relevant ecosystems to demonstrate basic principles. Appropriate for nonscience majors. Same as AGRO 100G.

# HORT 110. Athletic Field and Golf Course Management 1 Credit

Survey of proper management of athletic fields, golf courses and other turfgrass stands. Career opportunities in athletic field and golf course management will be discussed. Course includes field trips to local and regional sports turf facilities.

#### **HORT 200. Special Topics**

#### 1-4 Credits

Specific subjects and credits as announced. Maximum of 4 credits per semester and a grand total of 9 credits. May be repeated up to 9 credits. Consent of Instructor required.

### **HORT 205. Introduction to Horticulture**

#### 3 Credits

Principles and practices of horticulture. Basic chemical, physical, and biological principles that govern plant growth in different environments. Economics of plant science as related to the field of horticulture. Online course entirely. Intended for non-majors.

#### **HORT 210. Ornamental Plants I**

#### 4 Credits (3+2P)

Covers identification, botanical characteristics, culture, and landscape uses of woody plants. Emphasis on deciduous trees, native shrubs, and evergreens.

#### **HORT 211. Ornamental Plants II**

#### 4 Credits (3+2P)

Identification, botanical characteristics, culture, and landscape uses of woody plants. Emphasis on flowering trees, cacti, and members of the pea and rose families.

### HORT 240. Floral Quality Evaluation and Design

#### 2 Credits (1+2P)

Critical hands-on evaluation of the quality of cut and potted floral and tropical foliage crops, their specific merits and faults, and fundamentals of floral design.

#### HORT 241. Floriculture Field Practicum

#### 1 Credit

Participation as team member in the National Intercollegiate Floral Quality Evaluation and Design Competition. Intensive week-long travel for competition, networking with industry, academia, and floriculture tours. May be repeated for a maximum of 3 credits.

Prerequisite(s): HORT 240 or consent of instructor.

### **HORT 250. Plant Propagation**

#### 3 Credits (2+2P)

Practical methods of propagating horticultural plants by seed, cuttings, layering, grafting, division and tissue culture. Examination of relevant physiological processes involved with successful plant propagation techniques. Same as AGRO 250.

# HOST-HOSPITALITY AND TOURISM (HOST)

### **HOST 155. Special Topics**

#### 1-3 Credits (1-3)

Specific subjects to be announced in the Schedule of Classes. Restricted to: Community Colleges only.

### **HOST 201. Introduction to Hospitality Industry**

#### 3 Credits

Overview of hospitality industry; organization and operation of lodging, food and beverage, and travel and tourism segments; focus on career opportunities and future trends of hospitality industry. Restricted to: Community College campuses only.

#### **HOST 202. Front Office Operations**

#### 3 Credits

Hotel/motel front office procedures detailing flow of business, beginning with reservations and extending to the night audit process. Restricted to: Community College campuses only.

### **HOST 203. Hospitality Operations Cost Control**

#### 3 Credits

Management of Food & Beverage facilities using cost control techniques. Functional training in menu analysis and development with all phases of product flow through a Food & Beverage organization explored. Restricted to: Community Colleges only.

### **HOST 204. Promotion of Hospitality Services**

#### 3 Credits

Organization of hotel marketing functions; developing a marketing plan to sell the varied services of the hotel/motel property. Restricted to: Community College campuses only.

# HOST 205. Housekeeping, Maintenance, and Security 3 Credits

Function of housekeeping departments, including personnel, sanitation, maintenance, and materials. A survey of security procedures to include guest protection and internal security of hotel/motel assets. Restricted to: Community College campuses only.

### **HOST 206. Travel and Tourism Operations**

#### 3 Credits

Transportation, wholesale and retail operations, attractions, the traveler, tourism development, and operational characteristics of tourism business. Restricted to: Community College campuses only.

# HOST 207. Customer Service for the Hospitality Industry 3 Credits

Concepts of service and the customer, integrating the need for service quality, and the continuing efforts to maximize returns for the operation. Classic service styles as well as more modern service techniques are covered. Students gain in-depth managerial knowledge, planning skills, and hands-on techniques for consistently delivering quality and service in a variety of operations. Restricted to: Community College campuses only.

#### **HOST 208. Hospitality Supervision**

#### 3 Credits

Strategies for directing, leading, managing change and resolving conflict. Prepares students to meet expectations of management, guests, employees, and governmental agencies. Restricted to: Community College campuses only.

# HOST 209. Managerial Accounting for Hospitality 3 Credits

Prepares students to make effective business decisions based on financial report information; forecasting, budgeting, cost analysis. Restricted to: Community College campuses only.

Prerequisite(s): BOT 120 or ACCT 252.

# HOST 210. Catering and Banquet Operations 3 Credits

Teaches the basics of catering and banquet operations, including computer coordination, planning, set up, service, and completion. Restricted to Community Colleges campuses only.

# HOST 214. Purchasing and Kitchen Management 3 Credits

Technical purchasing concepts, product selection, and specifications. Safety and sanitation as they relate to food service establishments. Prepares student for work with HACCP programs. Restricted to Community Colleges campuses only.

#### **HOST 216. Event, Conference and Convention Operations** 3 Credits

The ability to successfully plan, organize, arrange, and execute special events is critical to the success of many hospitality organizations. This course gives the student a grounding in the skills necessary to achieve success in this area. A variety of events are discussed and the similarities and differences with conferences and conventions are explored. Students are taught to organize and plan events of varying type and durations. Sales, logistics, and organizing skills are emphasized. Restricted to: Community College campuses only.

#### HOST 219. Safety, Security and Sanitation in Hospitality Operations 3 Credits

It is the responsibility of the manager to provide appropriate security, sanitation, and safety precautions in hospitality operations. Preparation for internal and external disasters is an important task for the Hospitality Manager. This course uses the National Restaurant Association ServSafe¬ training material. Restricted to: Community College campuses only.

### **HOST 220. Experiential Travel**

#### 1-3 Credits (1-3)

Course provides an opportunity for students to plan, prepare for and experience travel to destinations they might not otherwise have visited. Students experience local culture and peoples. May be repeated up to 9 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): HOST 201 or consent of instructor.

#### HOST 221. Internship I

#### 1-3 Credits (1-3)

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEHS, HOST majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

#### **HOST 222. Cooperative Experience II**

#### 3 Credits

Continuation of HOST 221. Restricted to majors. Graded: S/U. Restricted to: Community College campuses only. Restricted to HOST majors. Prerequisite(s): HOST 221.

#### **HOST 223. Travel Agency Principles**

#### 3 Credits

Travel agents are called upon to exhibit broad knowledge about many different tourism products. This course prepares students to undertake the challenging job of an agent in a travel agency. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

#### **HOST 224. Travel Agency Booking & Operations** 3 Credits

Course trains students to use the common electronic booking software that is found in travel agencies. Familiarization with operational procedures of travel agencies. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): HOST 223.

### **HOST 230. Wedding Events Management**

#### 3 Credits

This course will address various issues that could potentially arise in the preparation and management of a wedding or related event. All aspects of planning and attention to details that will ensure that students are prepared to provide services as a professional wedding planner. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

### **HOST 239. Introduction to Hotel Management** 3 Credits

This course covers basic management functions in hotels, resorts, Boutique Hotels, Bed & Breakfast establishments, and other lodging operations. All aspects of the operation are covered including guest management, operations, and sales and marketing. Restricted to: Branch campuses only.

#### **HOST 255. Special Topics**

#### 3 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated up to 9 credits. Restricted to Community Colleges campuses

#### **HOST 298. Independent Study**

#### 1-3 Credits (1-3)

Individual studies directed by consenting faculty with prior approval of department chair. May be repeated for a maximum of 3 credits.

Restricted to: Community College campuses only.

Prerequisite(s): Minimum 3.0 GPA and sophomore standing.

# HRTM-HOTEL/RESTRNT/TOURISM **MGT (HRTM)**

### **HRTM 111. Freshman Orientation**

#### 1 Credit

Orientation to university life, including available resources and methods to promote success at NMSU. Open to all freshmen and transfer students. Graded S/U.

### **HRTM 200. Special Topics**

#### 1-4 Credits

Specific subjects and credits to be assigned on a semester basis for both lecture and laboratory assignments. May be repeated for a maximum of 4 credits.

Prerequisite: consent of instructor.

#### **HRTM 201. Introduction to Tourism**

#### 3 Credits

Survey of travel and tourism development and operating characteristics.

# HRTM 221. Introduction to Hospitality Management

#### 3 Credits

Overview of the major segments of the hospitality industry, with a focus on basic management principles.

#### HRTM 231. Safety, Sanitation and Health in the Hospitality Industry 2 Credits

Addresses public health, HACCP, safety and culinary nutrition responsibilities in the hospitality industry. Sanitation certification test allows students to receive national credential.

# HRTM 263. Food Production and Service Fundamentals 3 Credits (1+4P)

Basic overview of food service systems including menu management, purchasing and production. The course includes basic principles of food fabrication and production. Topics include knife skills, culinary terminology, product identification, quality standards, nutritional cooking theory and application of food preparation techniques. The course includes laboratory aspects and demonstration of basic food production techniques, service styles, practices and procedures in food service operations including culinary math. This course provides students with an understanding of food service sanitation and culinary nutrition. Completion of a national certification examination is required. Restricted to Las Cruces campus only.

Prerequisite(s): HRTM 221 or FSTE 263G.

# HVAC-HEATING/AC/REFRIGERATION (HVAC)

### HVAC 100. EPA Clean Air Act: Section 608

#### 1 Credit

Refrigerant certification preparation to include basics of refrigerant bearing equipment, ozone depletion and the new legislation, technician categories covered and the certification examination.

### HVAC 101. Fundamentals of Refrigeration

### 4 Credits (3+2P)

Refrigeration cycle and the various mechanical components. Use of special tools, equipment, and safety precautions.

# HVAC 102. Fundamentals of Electricity 4 Credits (3+2P)

Introduction to electricity theory, OHM s Law, circuits, AC/DC, and practical applications.

# HVAC 103. Electrical and Mechanical Controls I 4 Credits (3+2P)

Applications of basic electrical and mechanical controls. Reading and drawing diagrams of simple refrigerating equipment. Safe use of testing equipment.

Prerequisites: HVAC 101 and HVAC 102, or consent of instructor.

# HVAC 110. Professional Development and Leadership 1 Credit

As members and/or officers of various student professional organizations, students gain experience in leadership, team building, and community service. Students competing in Skills USA are required to register for the course. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: HVAC majors. S/U Grading (S/U, Audit). Restricted to: Community Colleges only.

### **HVAC 113. Job Shadowing**

#### 1 Credit

Course will expose students to actual HVAC/R field work and provide them knowledge of the expectations of field work as they shadow an HVAC/R technician. Consent of instructor required. Restricted to: Community colleges only.

# HVAC 205. Commercial Refrigeration Systems 4 Credits (3+2P)

Service and maintenance of commercial refrigeration equipment to include evacuation and charging procedures, electrical diagrams, and compressors and accessories.

Prerequisites: HVAC 103 or consent of instructor.

# HVAC 207. Residential Air Conditioning Systems 4 Credits (3+2P)

Applications and types of equipment used in comfort cooling. Preventive maintenance, service, and repairs common to evaporative coolers and refrigerated air conditioning systems. Air properties and psychometrics. **Prerequisite:** HVAC 103 or consent of instructor.

# HVAC 209. Residential Heating Systems 4 Credits (3+2P)

Gas and electric systems used in comfort heating. Maintenance procedures, safety, troubleshooting, and servicing malfunctions in equipment.

Prerequisite: HVAC 103 or consent of instructor.

# HVAC 210. Commercial Air Conditioning and Heating Systems 4 Credits (3+3P)

Covers troubleshooting mechanical and electrical problems associated with HVAC equipment in commercial buildings. Includes gas, electric, and heat pump systems. Restricted to Community Colleges campuses only. **Prerequisite(s)**: HVAC 103 or consent of instructor.

#### **HVAC 211. Heat Pump Systems**

#### 4 Credits (3+2P)

Reverse cycle refrigeration systems utilized in comfort heating and cooling. Troubleshooting mechanical electrical problems associated with heat pumps. HVAC 103 or consent of instructor.

#### **HVAC 213. Practicum**

#### 3 Credits

Working in the field with journeymen service technicians. Develop and apply job skills. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: HVAC majors. Restricted to Community Colleges campuses only.

Prerequisite(s): HVAC 113 and Consent of instructor.

# HVAC 220. Introduction to Sheet Metal Fabrication 4 Credits (3+2P)

Introduction to sheet metal fabrication to include hands-on practical laboratory applications, cutting and forming procedures, identifying types and gauges. Design and layout techniques.

Prerequisite: OETS 118 or equivalent math or consent of instructor.

# HVAC 225. New Mexico Mechanical Codes: HVAC 1-4 Credits

Principles and regulations developed for HVAC, sheet metal, and plumbing occupations to include terminology, ventilation air supply, exhaust systems, duct systems, combustion air, chimneys and vents, boilers/water heaters, refrigeration, panel and hydronic panel heating, fuel gas piping, storage systems, solar systems, and workmanship standards. May be repeated for a maximum of 12 credits.

#### **HVAC 255. Special Topics**

#### 1-6 Credits

Topics to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

Prerequisite: consent of instructor.

### **HVAC 290. Special Problems**

#### 1-4 Credits

Individual studies related to heating, air conditioning, and refrigeration. **Prerequisites:** HVAC 101, HVAC 102, and consent of instructor.

# I E-INDUSTRIAL ENGINEERING (I E)

### I E 110. Industrial Engineering Orientation

#### 1 Credit

Introduction to Industrial Engineering Department, Facility Research and Resources. Overview of where industrial engineering fits into larger view of all of engineering. Introduction to university resources for industrial engineering students. Restricted to majors.

# I E 151. Computational Methods in Industrial Engineering 3 Credits

History, social implications, and application of computers and an introduction to computer programming, word processing, and database management systems. Satisfies General Education computer science requirement.

Prerequisite: MATH 121G.

### I E 152. Introduction to Industrial Engineering

#### 2 Credits

Historical development of industrial engineering, present practice and trends.

Prerequisite: MATH 120.

#### I E 200. Special Problems-Sophomore

#### 1-3 Credits

Directed individual projects. May be repeated for a total of 3 credits.

Prerequisite: consent of faculty member.

#### I E 217. Manufacturing Processes

#### 2 Credits

Manufacturing methods and industrial processes which include casting, forming and machining. May be repeated up to 2 credits. Crosslisted with: E T 217. M E 159.

Prerequisite(s): MATH 121G. Corequisite(s): I E 217 L.

#### I E 217 L. Manufacturing Processes Laboratory

#### 1 Credit

Laboratory associated with I E 217. May be repeated up to 1 credits. **Prerequisite(s):** M E 159.

# INMT - INDUSTRIAL MAINTENANCE (INMT)

### INMT 133. Process Technology and Systems

#### 4 Credits

Provides instruction in the use of common process equipment. Students will use appropriate terminology and identify process equipment components such as piping and tubing, valves, pumps, compressors, turbines, motors, engines, heat exchangers, heaters, furnaces, boilers, filters dryers and other miscellaneous vessels. Included are the basic functions, scientific principles and symbols. Students will identify components on typical Process Flow Diagrams and Process and Instrument Diagrams. Restricted to Carlsbad campus only.

### **INMT 134. Maintenance Principles**

#### 4 Credits

The course is an introduction to the maintenance of equipment utilizing mechanical, electrical and instrumentation concepts. Topics include: hand tools, bearing fundamentals, equipment lubrication, material handling, electrical safety, battery systems, diagrams, electrical production and distribution, transformers, breakers, switches, AC and DC motors, motor controllers and operations, and introduction to automation and instrumentation control. Restricted to Carlsbad campus only.

#### **INMT 165. Equipment Processes**

#### 4 Credits

This course introduces power transmission equipment and machinery components, including belt/chain driven equipment, speed reducers, variable speed drives, couplings, clutches, and conveying equipment. Students will learn the operation, maintenance, and troubleshooting for these types of equipment. The course also includes Overhead Crane Certification and Safety. Restricted to Carlsbad campus only.

# INMT 205. Programmable Logic Controllers and Applications 4 Credits

Students learn about programmable logic controllers; architecture; programming, interfacing, and applications. Hands-on experience on modern commercial PLC units is the main component. Restricted to Carlsbad campus only.

Prerequisite(s): Computer Literacy (CS 110).

#### **INMT 223. Electrical Repairs**

#### 4 Credits

This course outlines for students the types of problems that occur in electrical machinery and systems. The course covers trouble-shooting and diagnosis, preventative maintenance, and how to make necessary repairs. Restricted to Carlsbad campus only.

### INMT 235. Mechanical Drives I

#### 4 Credits

This course teaches the fundamentals of mechanical transmission systems used in industrial, agricultural, and mobile applications. Students will learn industrial relevant skills including how to: operate, install and analyze performance, and design basic transmission systems using chains, feed-belts, spur gears, bearings, and couplings. Vibration analysis will be used to determine when to perform maintenance of power transmission components. The course also covers power transmission safety, and introduction to belt and chain drives (applications, installations, and tensioning), and introduction to gear drives, coupling, and bearing, basic troubleshooting, blueprint and print reading, learning the basics of electrical drives and PDM and PM. Restricted to Carlsbad campus only.

### INMT 236. Lubrication Process

### 3 Credits

This course teaches the technical skills needed to operate, install, tune, maintain and troubleshoot automatic lubrication systems. Lubrication concepts, setup and tuning, pneumatic pumps, series-progressive valve systems and microprocessor based lubrication controllers will be covered. The course covers the principles of and importance of lubrication, oils and grease types and applications, lube management (storage, handling, and purity), and PDM and PM. Restricted to Carlsbad campus only.

### INMT 237. Hydraulics I

#### 2 Credits

This course teaches fundamentals of hydraulic systems used in industry mobile application. Students learn the basic theory of application of hydraulic and electricity as it applies to hydraulics. Covered in the course are basic systems, principles of flow, pressure, viscosity, filtration, and colling. Also covered are basic components such as motor, pumps, cylinders, piping and control and relief valves. Troubleshooting strategies are discussed, along with blueprint and print reading, and PDM and PM. Industry, relevant skills including how to operate, install, analyze performance, and design basic hydraulic systems, reviewing intermediate hydraulic components and system applications. Restricted to Carlsbad campus only.

#### INMT 261. Pump Operations I

#### 4 Credits

This course teaches how to select, operate, install, maintain and repair the many types of pumps used by industry. Students learn the theory and practical application of all types of processed pumps and pipe systems. It covers types, components, and systems operation. It also covers troubleshooting for flow loss and cavitation. Students learn how to select, operate, install, maintain and repair the many types of pumps used by industry. Other topics covered include: Net Positive Suction Head, pump flow/head measurement, pressure head conversion, pressure flow characteristics, cavitation, series/parallel pump operation, mechanical seal/stuffing box maintenance, multi stage operation and construction, positive displacement pumps, turbine, diaphragm, peristaltic, piston, gear, and magnetic pump systems. Restricted to Carlsbad campus only.

### INMT 262. Piping Systems

#### 2 Credits

This course teaches students how to install, maintain and troubleshoot fluid systems such as how to select, size, identify, install a variety of types of piping, fittings, and valves. Measurement techniques from basic to precision measurement, gauging, including the fundamentals of demonsioning and tolerancing will taught. Restricted to Carlsbad campus only.

#### **INMT 263. Mechanical Drives II**

#### 4 Credits

This course teaches the bearings and gears used in heavy duty mechanical transmission systems. This course will emphasize linear access drives, clutches, and brakes. In addition, this course teaches how to set up, operate and apply laser shaft alignment to a variety of industrial applications. This course is a study of the basic concepts and procedures for the maintenance and operations of pumps, turbines, seals, bearings, and compressors. The course will provide the student with the knowledge and skills necessary to perform proper maintenance, repair, replacement and selection of pumps, turbines, seals, bearings and compressors. Also covered are advanced gearbox, coupling and bearings, precision alignment (shaft, flange, and sheave), as well as basic vibration analysis and thermography as troubleshooting and RCA aids. Restricted to Carlsbad campus only.

### INMT 264. Rigging

### 2 Credits

This course teaches how to safely move loads of different shapes and sizes using a variety of different methods. Students will lift loads and demonstrate how to move it. Students will use hoists, slings, ropes and fittings to learn how to safely lift a wide variety of loads. Included are weight estimation, lifting rules, load ratings (sling, wire, ropes and hoists). Restricted to Carlsbad campus only.

#### INMT 265. Hydraulics II

### 2 Credits

This course teaches advanced hydraulics systems. The student will learn operation of advanced hydraulic systems applications, equipment installation, performance analysis of motors and pumps, accumulators, control, relief and check valve, equipment maintenance, and system design. The course covers accumulators, sequence valves, pilot circuits and unloader valves. Students learn more troubleshooting, hydraulic drives and other applications. Restricted to Carlsbad campus only.

#### INMT 267. Pump Operations II

#### 2 Credits

This course teaches the student the disassembly, inspection and reassembly of centrifugal and positive displacement pumps. This course allows the student to identify and replace worn or broken components of pumps, and learn predictive and preventive maintenance principles. Lockout of the pump will be performed in addition to measurements and alignment. Restricted to Carlsbad campus only.

# INTEGRATED NATURAL SCIENCES (NSC)

### **NSC 131. General Sciences**

#### 3 Credits (2+2P)

Designed for Allied Health students to explore the fundamentals of physical and life sciences.

# **JOUR-JOURNALISM (JOUR)**

#### JOUR 102. Grammar for Journalists

#### 2 Credits

Instruction of basic grammar, spelling and punctuation. Required for all journalism students with an ACT English score below 25, SAT Verbal below 570, or students who have not taken ACT/SAT tests. Restricted to Las Cruces campus only.

### JOUR 105G. Media and Society

#### 3 Credits

Functions and organization of the mass media system in the United States; power of the mass media to affect knowledge, opinions, and social values; and the impact of new technologies.

# JOUR 110. Introduction to Media Writing 3 Credits (2+2P)

Preparation of copy for broadcasting, print, advertising, and public relations. Introduction to Web applications. May be repeated up to 3 credits

**Prerequisite(s):** JOUR 102 or ACT score of 25 and above or SAT score of 570 and above.

#### JOUR 201. Introduction to Multimedia

#### 3 Credits

Provide students with the basic skills to produce multimedia packages using text, photos, audio and video, as well as social media for professional purposes. Intensive hands-on class using editing software such as Adobe Premiere. Adobe Audition and Photoshop. May be repeated up to 3 credits.

#### JOUR 210. Newswriting & Reporting

#### 3 Credits (2+2P)

Intensive laboratory practice in writing and field reporting news for print and Internet. May be repeated up to 3 credits. Restricted to Las Cruces campus only.

**Prerequisite(s):** JOUR 102 or ACT score of 25 and above or SAT score of 570 and above and JOUR 110.

# JPNS-JAPANESE (JPNS)

### JPNS 111. Elementary Japanese I

#### 4 Credits

Japanese language for beginners.

#### JPNS 112. Elementary Japanese II

#### 4 Credits

Japanese language for beginners.

Prerequisite: grade of C or better in JPNS 111 or consent of instructor.

### JPNS 211. Intermediate Japanese I

#### 3 Credits

Speaking, reading and writing the Japanese language.

Prerequisite: grade of C or better in JPNS 112 or consent of instructor.

### JPNS 212. Intermediate Japanese II

#### 3 Credits

Speaking, reading and writing the Japanese language.

Prerequisite: grade of C or better in JPNS 211 or consent of instructor.

# L SC-LIBRARY SCIENCE (L SC)

#### L SC 100. Introduction to Libraries

#### 3 Credits

Overview of libraries, including history and development, responsibilities of library personnel, types of libraries and services, and technology and trends. Restricted to Dona Ana campus only.

### L SC 110. Reference and Information Resources I

#### 3 Credits

Overview of reference services. Introduction to, and evaluation of, basic types of information resources (both print and electronic) and their application in libraries.

# L SC 111. Introduction to Information Literacy in an Electronic Environment

#### 3 Credits

Introduction to the basics of the research process; the organization, location and evaluation of information using print, non-print and electronic resources. Restricted to: Community Colleges only.

#### L SC 112. Introduction to Consumer Health Information Literacy in an Electronic Environment

#### 3 Credits

Introduction to consumer health information literacy; the process and organization, location, and evaluation of online information. Restricted to: Community Colleges only.

## L SC 120. Cataloging Basics I: Descriptive Cataloging

3 Credits

Introduction to descriptive cataloging. Restricted to: Dona Ana campus only.

# L SC 125. Cataloging Basics II: Classification and MARC Cataloging 3 Credits

Continuation of descriptive cataloging basics. Introduction to subject analysis, classification and MARC coding. Restricted to: Dona Ana campus only.

# L SC 130. Introduction to Technical Services in Libraries 3 Credits

Introduction to technical services in libraries, including acquisitions, bindery, cataloging, gifts, and serials. Restricted to Dona Ana campus only.

# L SC 140. Multimedia Materials and Presentations in Libraries 3 Credits

Overview of media formats and equipment. Introduction to desktop publishing, presentations, and web-page creation applications in libraries. Restricted to: Community Colleges only.

# L SC 150. Library Services for Children and Young Adults 3 Credits

Library services for children and young adults with an overview of materials, programs, and services for this population. Restricted to: Dona Ana campus only.

### L SC 153. Picture Books and Young Children

#### 1 Credit

If children are to enjoy reading they need to be exposed to books at an early age. This course will provide information to help guide librarians, preschool teachers, parents, and care givers in choosing appropriate books for those younger than six, and how to use books with this age group. Restricted to Dona Ana campus only.

#### L SC 154. State Children's Book Awards

#### 1 Credit

Students will explore the state book award offered by their state. Students will read some of the books and plan library programs to promote the award. Restricted to: Dona Ana campus only.

#### L SC 155. Award Winning Books for Children

### 1 Credit

A review of book awards and how to integrate award winning books into school curriculum or public school programming. Restricted to: Community Colleges only.

### L SC 156. Boys and Books

#### 1 Credit

This course looks at why, in general, boys are less interested in books than girls. Students will discover ways libraries can encourage boys to read and develop activities and programs which entice them to do so. Students will also be reading some books recommended for boy readers. Restricted to Dona Ana campus only.

# L SC 160. Introduction to Public Services in Libraries 3 Credits

Introduction to public services in libraries, including circulation, inter-library loan, reference, media services, special collections, and government documents. Restricted to Dona Ana campus only.

### L SC 175. Civic Involvement in Library Science

#### 1-3 Credits

Involvement in an organized community service project or group with a library or information technology component. Promotes awareness of volunteer and community service opportunities. May be repeated for a maximum of 6 credits. Graded: S/U. Restricted to: Dona Ana campus only.

# L SC 191. Children's Books and their Movie Adaptations 1 Credit

For almost as long as there have been popular books for children in the United States, there have been dramatic adaptations of them. What is gained, and lost, when children's books are adapted for the big screen? What is the relationship-or what should the connection be-between works of children's literature and their seemingly inevitable film adaptations? Students will be expected to read several children's books and view the movies based on them and make comparisons. Restricted to: Community Colleges only.

# L SC 192. Myths and Legends in Children's Literature 1 Credit

The student will explore myths and legends from diverse cultures; from European and Asian to those who have their roots in Africa and the Americas. Myths which are similar across several cultures will be compared.

#### L SC 193. Poetry for Children

#### 1 Credit

This course will explore the genre of poetry for children. In this class, participants will focus on reading and reviewing poetry for kids, exploring poetry on the Web, and trying interactive approaches for sharing poetry with children. Topics include: study and analysis of poetry, ways to use poetry in the classroom, writing poetry with children. Restricted to: Community Colleges only.

#### L SC 195. Mysteries for Children

#### 1 Credit

In this course the student will become familiar with a wide variety of mysteries for children. Ways to use mysteries in the classroom and school library will also be covered. Restricted to Community Colleges campuses only.

#### L SC 196. Historical Fiction for Children

#### 1 Credit

This course looks at historical fiction as a genre. Topics include: fiction vs. history, American history in children's literature, world history in children's literature, activities for using historical fiction in a school setting. Restricted to: Community Colleges only.

#### L SC 197. Fantasy and Speculative Fiction

#### 1 Credit

This course offers professionals serving school students the opportunity to increase your appreciation and knowledge of fantasy and speculative fiction through intense reading and discussion of representative works. The course will also investigate and consider options using fantasy and speculative fiction in a school setting. Restricted to: Community Colleges only.

# L SC 200. Collection Management and Development in Libraries 3 Credits

Principles of identifying, selecting, acquiring, managing, and evaluating resources for libraries. Restricted to Dona Ana campus only.

#### L SC 201. Public Libraries

### 3 Credits

A study of the American public library and its place in communities. Topics may include history, philosophy, and standards, operations and procedures, governance, funding, personnel materials, user services, outreach and advocacy. Restricted to: Dona Ana campus only.

### L SC 203. School Library Media Specialist

#### 3 Credits

Principles and practice of managing the school library media center, with an emphasis on its specific educational mission. Topics may include collection development, classes and lesson plans, public relations, administrative procedures, and use of technology. Restricted to Dona Ana campus only.

#### L SC 210. Technology Planning in Libraries

#### 3 Credits

Overview of computer applications in libraries. Topics may include automated systems and electronic resources, introduction to evaluation of technology, and writing a technology plan. Restricted to Dona Ana campus only.

# L SC 220. Innovative Technology Applications for Libraries 3 Credits

A look at uses for innovative technologies in libraries. Topics may include blogs, wikis, podcasting and virtual reality libraries. Restricted to Dona Ana campus only.

#### L SC 221. Experiential Learning I

#### 1-3 Credits

Student is employed (paid or non-paid) in an approved work site and evaluated by their supervisor. Each credit requires a specified number of hours of on-the job work experience. Consent of Instructor required. S/U Grading (S/U, Audit). Restricted to Dona Ana campus only.

Prerequisite(s): Consent of instructor.

### L SC 222. Experiential Learning II

#### 1-3 Credits

Continuation of L SC 221. Each credit requires specified number of hours of on-the-job work experience. Consent of Instructor required. S/U Grading (S/U, Audit). Restricted to Dona Ana campus only. **Prerequisite(s):** L SC 221 and consent of instructor.

#### L SC 230. Issues and Ethics in Libraries

#### 3 Credits

Discussions of current and continuing challenges to effective library service. Topics may include copyright, censorship, intellectual freedom, Internet filtering, problem patrons, security, or other current issues. Restricted to Dona Ana campus only.

#### L SC 234. Intellectual Freedom in Libraries

#### 1 Credit

Philosophical and practical information related to library policies about access to library materials. Restricted to: Dona Ana campus only.

#### L SC 236. Banned Books

#### 1 Credit

Banned books, selection policies, and responding to challenges. Restricted to: Dona Ana campus only.

# L SC 240. Internet Resources and Research Strategies 3 Credits

Introduction to retrieving and evaluating information found on the Internet and in selected Internet-accessible databases. Restricted to: Dona Ana campus only.

### L SC 250. Reference and Information Resources II

#### 3 Credits

Evaluation and use of specialized information resources to offer reference services. Emphasis is on virtual reference and other innovative techniques. Restricted to: Dona Ana campus only.

### L SC 255. Special Topics

#### 1-3 Credits

Special topics to be announced in Schedule of Classes. May be repeated for a maximum of 12 credits. Restricted to: Dona Ana campus only.

### L SC 260. Cataloging Non-Book Formats

### 3 Credits

Introduction to cataloging of various non-book formats and MARC coding. Restricted to: Dona Ana campus only.

### L SC 270. Library Science Capstone

#### 3 Credits

A culmination of all technical courses that are required to receive an Associate of Applied Science from the program centering around the completion of a library related project. Discussions on the role of paraprofessionals in libraries. Restricted to: Dona Ana campus only.

#### L SC 275. Fundamentals of Library Supervision

#### 3 Credit

An introduction to supervision of library employees, including student assistants, to create a productive workplace. Restricted to: Dona Ana campus only.

### L SC 281. Grant Writing for Libraries

#### 1 Credit

Introduction to grant writing for libraries. Restricted to: Dona Ana campus only.

# L SC 286. Children's Literature and the Primary Curriculum 3 Credits

The student will research the use of picture books and other children's literature across the curriculum with students in kindergarten through second grade. Topics include: using literature to teach writing, using literature to teach science, using literature to teach math, using literature to teach social studies. Restricted to: Community Colleges only.

# L SC 287. Children's Literature and the Intermediate Curriculm 3 Credits

The student will research the use of picture books and other children's literature across the curriculum with students in grades three through five. Topics include: using literature to teach writing, using literature to teach science, using literature to teach math, using literature to teach social studies. Restricted to: Community Colleges only.

# L SC 288. Children's Literature and the Middle School Curriculum 3 Credits

The student will research the use of picture books and other children's literature across the curriculum in grades six through eight. Topics include: using literature to teach writing, using literature to teach science, using literature to teach math, using literature to teach social studies. Restricted to: Community Colleges only.

# L SC 290. Introduction to Children's Literature for Libraries 3 Credits

This course will introduce current and potential library personnel to a wide variety of literature written for children. The course explores the history of children's literature and the path it has taken. Students will read many books from a variety of genre, explore the literary elements found in those books, and develop some evaluation criteria and ways for children to respond to the literature they read. Restricted to Dona Ana campus only.

#### L SC 291. Southwestern Children's Literature

#### 1 Credit

This course will introduce students to books which can teach the children visiting your library more about the people and places of the southwest. Restricted to: Dona Ana campus only.

#### L SC 292. Native American Children's Literature

#### 1 Credit

This course will introduce students to some children's and young adult books written by and about Native Americans. Restricted to: Dona Ana campus only.

# L SC 295. Introduction to Young Adult Literature 3 Credits

The course will expose students to quality adolescent literature available for reading and study in middle and high school classes. It provides a broad survey of young adult literature and focuses on building an appreciation of literature, encouraging student reading, developing lifelong readers, and developing activities for critical thinking. Restricted to: Community Colleges only.

# L SC 296. Multicultural Books for Children and Youth 3 Credits

This course explores a wide range of multicultural children's literature including: African American, Native American, Latino, Asian, Jewish, and Middle Eastern. Topics covered include: nonfiction of the cultures, historical fiction of the cultures, and contemporary literature of the cultures. Restricted to: Community Colleges only.

#### L SC 298. Independent Study

#### 1-3 Credits

Individual studies directed by consenting faculty with prior approval of department chair. May be repeated for a maximum of 12 credits. Restricted to: Dona Ana campus only.

# **LANG-LANGUAGE (LANG)**

### LANG 111. Beginning Language I

#### 4 Credits

Developing language skills through study abroad for languages not offered at NMSU main campus. Specific languages to be identified with course subtitles. Main campus only.

Prerequisite: Language placement exam or consent of the instructor.

### LANG 112. Beginning Language II

#### 4 Credits

Developing language skills through study abroad for languages not offered at NMSU main campus. Specific languages to be identified with course subtitles. Main campus only.

Prerequisite: Language placement exam or consent of instructor.

#### LANG 211. Intermediate Language I

#### 3 Credits

Developing language skills through study abroad for languages not offered at NMSU main campus. Specific languages to be identified with course subtitles.

### LANG 212. Intermediate Language II

#### 3 Credits

Developing language skills through study abroad for languages not offered at NMSU main campus. Specific languages to be identified with course subtitles.

Prerequisite: Language placement exam or consent of instructor.

# LAWE-LAW ENFORCEMENT (LAWE)

#### LAWE 201. Introduction to Juvenile Delinquency

### 3 Credits

An introductory overview of the juvenile justice system of due process, custody, detention and release. Note: course does not meet upper division requirements towards completion of Bachelor of Science in Criminal Justice. Restricted to: Community Colleges Only.

### **LAWE 202. Police Patrol Procedures**

#### 3 Credits

A critical review of police procedures and the influences on police behavior; policy development, including the police role; discretion; police community interaction and arrest, search and seizure. Restricted to: Community Colleges only.

### LAWE 203. Introduction to Police Supervision

#### 3 Credits

An introductory overview of police supervision and concerns as it applies to law enforcement. (Note: Course does not meet upper division requirements toward completion of Bachelor of Science in Criminal Justice.) Restricted to: Community Colleges only.

#### LAWE 204. Introduction to Homeland Security 3 Credits

A historical perspective of international and domestic terrorist threats and the need to develop cohesive response policies and practices in the interest of National Security. [Course does not meet requirements towards completion of Bachelor of Science in Criminal Justice.] Restricted to: Community Colleges only.

Prerequisite(s): C J 101.

### LAWE 205. Practical Field Investigations 4 Credits (3+3P)

Incorporates the current methods and techniques for the management of the crime scene, includes documentation, collection and preservation of evidence and case presentations. [Course does not meet requirements towards completion of Bachelor of Science in Criminal Justice.] Restricted to Community Colleges campuses only.

Prerequisite(s): C J 101 and C J 221.

# LAWE 206. Traffic Enforcement and Crash Investigations

History and development of traffic laws and regulations, including basic elements of traffic violations, detection, apprehension, impaired drivers and guidelines and procedures for effective crash investigations and reporting. Restricted to: Community Colleges only.

### LAWE 207. Legal Aspects of Law Enforcement 3 Credits

An evaluation of police authority including responsibilities, civil liability, liability implications, legal obligations, legal restraints, laws of arrest, and search and seizure. Retricted to: Community Colleges only.

### LAWE 221. Law Enforcement Internship

Application of knowledge, skills and abilities, in an agency as an intern and integrated member of a law enforcement affiliated agency. Prerequisite: consent of instructor.

#### LAWE 233. Practical Approach to Terrorism 3 Credits

Gives responders an overall safety approach in recognizing and responding to incidents involving terrorism. Presents and overview in types of harm, explosive weapons, chemical weapons, biological weapons and radiological weapons. [Course does not meet requirements towards completion of Bachelor of Science in Criminal Justice.] Restricted to: Dona Ana campus only. Crosslisted with: FIRE 233

# LIB-LIBRARY SCIENCE (LIB)

#### LIB 101. Introduction to Research

#### 1 Credit

A practical, hands-on, step-by-step introduction to the basics of university-level library research. Topics include the academic method, plagiarism, selection and use of information resources. (Eight-week

### LIB 111. Introduction to Information Literacy in an Electronic **Environment**

#### 3 Credits

Introduction to the basics of the research process; the organization, location and evaluation of information using print, non-print and electronic resources; and techniques of effective personal information management in a computerized setting. Uses a combination of active and hands-on learning methods as well as lectures.

# **LING-LINGUISTICS (LING)**

#### LING 200G. Introduction to Language 3 Credits

Traditional fields of language study (sound, grammar, meaning) and newer ones (language as social behavior, language and cognition, language variation, animal communication).

# M E-MECHANICAL ENGINEERING (M

### M E 102. Mechanical Engineering Orientation

Emphasis on tours of M E labs and NMSU facilities that illustrate possible career paths for mechanical engineers. Students are introduced to department faculty, student organizations, and support services at NMSU. Topics include role of good communication skills, using modern technology, team building, and intellectual property. Students are advised in planning balance of their academic program. Restricted to majors.

### M E 159. Graphical Communication and Design 2 Credits (1+3P)

Sketching and orthographic projection. Covers detail and assembly working drawings, dimensioning, tolerance specification, and design projects. Pre/

Corequisite(s): MATH 190G.

### M E 201. Supplemental Instruction to Dynamics 1 Credit

Optional workshop for students in M E 237. The workshop focuses on problem solving skills associated with M E 237. Course does not count toward departmental degree requirements. May be repeated up to 1 credits. Restricted to Las Cruces campus only.

Corequisite(s): M E 237.

# M E 202. Supplemental Instruction to Thermodynamics

Optional workshop for students in ME 240. The workshop focuses on problem solving skills associated with ME240. Course does not count toward departmental degree requirements. Restricted to Las Cruces

Corequisite(s): M E 240.

### M E 210. Electronics and System Engineering 3 Credits (2+3P)

Introduction to microcontrollers, measurement systems, motion actuators, sensors, electric circuits, and electronic devices and interfacing. Students required to work individually and in teams to design and test simple electromechanical systems. Restricted to Las Cruces campus only.

Prerequisite(s): MATH 192.

### M E 222. Introduction to Product Development 3 Credits (2+3P)

Introduction to modern methods used in the realization of products. Traditional manufacturing processes, such as metal stamping, turning, milling, and casting are reviewed. Modern methods of rapid prototyping and model making are discussed in context of computer-aided design. Techniques for joining metals, plastics, and composites are discussed. Role of quality control is introduced.

Prerequisite: M E 159.

#### M E 228. Engineering Analysis I

#### 3 Credits

Introduction to engineering analysis with emphasis on engineering applications. Topics include ordinary differential equations, linear algebra, and vector calculus with focus on analytical methods. Restricted to Las Cruces campus only.

Prerequisite(s): MATH 291.

#### M E 234. Mechanics-Dynamics

#### 3 Credits

Kinematics and dynamic behavior of solid bodies utilizing vector methods

Prerequisite(s)/Corequisite(s): MATH 291G. Prerequisite(s): C E 233.

#### M E 236. Engineering Mechanics I

#### 3 Credits

Force systems, resultants, equilibrium, distributed forces, area moments, friction, and kinematics of particles. Pre/ Restricted to: Main campus only.

Prerequisite(s): MATH 192G. Corequisite(s): PHYS 215G.

#### M E 237. Engineering Mechanics II

#### 3 Credits

Kinetics of particles, kinematics and kinetics rigid bodies, systems of particles, energy and momentum principles, and kinetics of rigid bodies in three dimensions. May be repeated up to 3 credits.

**Prerequisite(s)/Corequisite(s):** MATH 291. Prerequisite(s): M E 236 or C E 233.

### M E 240. Thermodynamics

#### 3 Credits

First and second laws of thermodynamics, irreversibility and availability, applications to pure substances and ideal gases.

Prerequisite: PHYS 215G.

# M E 261. Mechanical Engineering Problem Solving 3 Credits (2+3P)

Introduction to programming syntax, logic, and structure. Numerical techniques for root finding, solution of linear and nonlinear systems of equations, integration, differentiation, and solution of ordinary differential equations will be covered. Multi function computer algorithms will be developed to solve engineering problems.

Prerequisite(s): MATH 192.

# **M SC-MILITARY SCIENCE (M SC)**

#### M SC 110. Introduction to Military Science

#### 2 Credits (2+1P)

Concepts of leadership, including basic drill, fitness sessions, rappelling, first aid, map reading, and basic marksmanship. Optional physical fitness sessions and weekend exercises.

# M SC 111. Introduction to Leadership 2 Credits (2+1P)

Learning and application of leadership, as well as relating organizational ethics to effective leadership using communication skills to improve individual performance. Optional physical fitness sessions and weekend exercises.

## M SC 210. Self/Team Development

#### 3 Credits (3+1P)

Learning and application of leadership skills to building effective teams, using oral/written skills, planning, and coordination of group efforts. Include advanced first aid, land navigation, and basic military tactics. Leadership Lab and three physical fitness sessions per week required.

# M SC 211. Leadership in Action and Team Building 3 Credits (3+1P)

Individual and team aspects of military tactics in small unit operations. Use of radio, movement, planning for safety/security and pre-execution checks. Continued leadership development and techniques for training others. Leadership Lab and three physical fitness sessions per week required.

#### M SC 225. Directed Studies

#### 1-3 Credits

Individual directed studies under supervision of designated faculty. May be repeated for a maximum of 12 credits. No S/U option.

Prerequisite: GPA 2.5 or better.

# MAT-AUTOMATION & MANUFACTURING (MAT)

### MAT 102. Print Reading for Industry

3 Credits (2+2P)

Reading, interpretation, and revisions of industrial technical drawings common to manufacturing, Aerospace, machine parts, electrical, hydraulic, and Pneumatic drawings. Interpretation of engineering drawings and related shop calculations. Introduction Crosslisted with: AERT 113. Restricted to: Community Colleges only.

### MAT 105. Introduction to Manufacturing

#### 3 Credits

Introduction to manufacturing evolution from basic assembly process to modern automated processes. Covers history, employability, soft skills, quality measurements, teamwork concept, production requirements, and considerations in plan layout and design. Minimum math proficiency of CCDM 114 required or math placement into MATH 120 or higher. Restricted to: Community Colleges only. Crosslisted with: AERT 112

# MAT 106. Applied Manufacturing Practices 3 Credits (2+2P)

Course will illustrate how various products are manufactured along with associated process. Mechanical behavior such as bending, cold worked, strained, work hardened, and heat transfer will be emphasized as well. In lab, students will learn how to make selected products starting from prints to complete projects including quality control. Crosslisted with: AERT 114. Restricted to: Community Colleges only.

# MAT 107. Computer Integrated Manufacturing PLTW 3 Credits (2+2P)

Applies principles of robotics and automation to Computer Aided Design (CAD) design. The course builds on computer solid modeling skills developed in Introduction to Engineering Design, and Design and Drawing Production. Students use Computer Numerical Control (CNC) equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing, and design analysis are included. Restricted to: Community Colleges only.

# MAT 108. Metrology, Safety and Quality Control for Manufacturing 3 Credits (2+2P)

Use of measuring tools in manufacturing process and quality control. These tools include: vernier and digital micrometers, calipers, height gauges, hole gauges, pin gauges, electrical pressure/flow, temperature measuring, stress/strain measurements, and non-destructive testing (eddy currents, magnetic particle, ultrasonic, bubble emission, x-ray, Gamma ray, radiography, visual inspection, ring test, taping & Zyglo). Instruction to use of coordinate machine while covering the safety issues that pertains to these types of tools and equipment. Restricted to: Community Colleges only.

### MAT 110. Machine Operation and Safety

#### 3 Credits (2+2P)

Introduction to the operation and safety aspects of various types of machinery and equipment, including both mechanical and electrical machines, Rigid Tubing, and Flexible Lines. Maintenance and safety operation of industrial equipment will also be covered. Restricted to: Community Colleges only. Crosslisted with: AERT 115

# MAT 130. Applied Industrial Electricity I 4 Credits (3+2P)

Electrical safety, AC and DC circuits, use and care of common measuring instrumentation, schematic and wiring diagrams, electromagnetism, National Electric Code branch circuits. Restricted to: Community Colleges only.

Prerequisite(s): MATH 120 or ELT 120 or OETS 118.

# MAT 135. Applied Industrial Electricity II 4 Credits (3+2P)

Relationship between motor power, speed, and torque, basic application of relay circuits, motor control circuits, inductance and capacitance factors, transformers, solid state devices circuits and applications.

Restricted to: Community Colleges only.

Prerequisite(s): MAT 130.

# MAT 145. Electromechanical Systems for Non-Majors 4 Credits (3+3P)

Electromechanical system interfacing. Principles and applications of preventive and corrective maintenance procedures on automated industrial production machines using system technical and maintenance manuals to develop troubleshooting procedures using systems block and schematic diagrams.

Prerequisite: consent of instructor.

# MAT 149. Industrial Mechanical Elements 3 Credits (2+2P)

Introduction to mechanical systems, theory, characteristics and uses for the different types of mechanical power transmission systems used in the industry, and related industrial safety practices. Topics include: safety, drives, shafts, maintenance and lubrication. Restricted to: Community Colleges only.

# MAT 151. Introduction to Metalworking I 3 Credits (2+2P)

Measuring instruments, including steel rules, combination and transfer tools, micrometers, vernier instruments, bevel instruments, and indicators. Shop safety and first aid, introduction to cutting fluids, saws and sawing, and drill presses. Restricted to: Community Colleges only.

# MAT 205. Statistical Controls for Manufacturing Technicians 3 Credits (2+2P)

Use of hardware and software for quality assurance to include the design of experiments, sampling techniques, SPC, control chart application and development, and process reliability. Restricted to: Community Colleges only.

Prerequisite(s): ELT 120 or MATH 120.

#### MAT 221. Cooperative Experience I

### 1-6 Credits

Supervised cooperative work program. Student is employed in an approved occupation and rated by employer and instructor. Student meets in a weekly class. Graded S/U.

Prerequisite: consent of instructor.

# MAT 234. Industrial Electricity Maintenance 3 Credits (2+2P)

Introduction into electrical systems, theory and uses for the different types of motors used in the industry and related industrial safety practices. DC, AC stepper and servo motors, motor speed and torque, motor performance, and efficiency, motor control fundamentals using variable frequency drives, vector controls, servo and stepper drives. Restricted to: Community Colleges only.

# MAT 235. Programmable Logic Controllers Pneumatics 2 Credits (1+2P)

Introduction to theory and application of pneumatic power transfer and control. Programmable logic controllers (PLC s) introduced as controlling elements for electropneumatic systems. Restricted to: Community Colleges only.

# MAT 240. Electromechanical Devices 4 Credits (2+4P)

Theory and application of electromechanical devices and digital control circuits. Includes AD and DA converters, pneumatics, hydraulics, programmable logic controllers, DC, AC, and stepper motors, and servomechanisms. Crosslisted with: AERT 211

Prerequisite(s): MAT 160 and (MAT 105 or (MAT 110 & MAT 135)). Restricted to: Community Colleges only.

# MAT 245. Electromechanical Systems 3 Credits (2+2P)

Electromechanical system interfacing. Principles and applications of preventive and corrective maintenance procedures on industrial production machines using system technical and maintenance manuals to develop troubleshooting procedures using systems block and schematic diagrams. Crosslisted with: AERT222.

**Prerequisite(s)/Corequisite(s):** AERT 211 or MAT 240. Prerequisite(s): ELT 135 and ELT 160. Restricted to: Community Colleges only.

### MAT 265. Special Topics

### 1-6 Credits

Course subtitled in the Schedule of Classes. May be repeated for a maximum of 12 credits.

Prerequisite: consent of instructor.

# **MATH-MATHEMATICS (MATH)**

### MATH 101. General Supplemental Instruction I

#### 1 Credit

Collaborative workshop for students enrolled in Intermediate Algebra. S/U Grading (S/U, Audit).

Corequisite(s): MATH 120.

### MATH 102. General Supplemental Instruction II

#### 1 Credit

Collaborative workshop for students enrolled in College Algebra. S/U Grading (S/U, Audit).

Corequisite(s): MATH 121G.

#### MATH 107. Topics in Mathematics

#### 1-3 Credits

Topics to be announced in the Schedule of Classes. Maximum of 3 credits per semester. Total credit not to exceed 6 credits. Community Colleges only.

Prerequisite: consent of instructor.

# MATH 111. Fundamentals of Elementary Mathematics I 3 Credits

Numbers and the four operations of arithmetic. Understanding and comparing multiple representations of numbers and operations, in particular how these representations build from whole numbers to integers to fractions and decimals. Applying properties of numbers and operations in contextual situations. Reasoning, communicating, and problem solving with numbers and operations. Applications to ratio, and connections with algebra. Taught primarily through student activities and investigations. Restricted to: EDUC,EPAR,E ED,ECED majors.

Prerequisite(s): ENGL 111G and grade of C or better in MATH 120.

# MATH 112G. Fundamentals of Elementary Math II 3 Credits

Geometry and measurement. Multiple approaches to solving problems and understanding concepts in geometry. Analyzing and constructing two- and three-dimensional shapes. Measurable attributes, including angle, length, area, and volume. Understanding and applying units and unit conversions. Transformations, congruence, and symmetry. Scale factor and similarity. Coordinate geometry and connections with algebra. Reasoning and communicating about geometric concepts. Taught primarily through student activities and investigations.

Prerequisite(s): C or better in MATH 111.

### MATH 120. Intermediate Algebra

#### 3 Credits

Linear and algebraic functions as they arise in real world problems. Exponential and logarithmic functions. Equations and inequalities and their solutions considered symbolically, graphically and numerically. **Prerequisite:** adequate score on the Mathematics Placement Examination.

### MATH 121G. College Algebra

#### 3 Credits

Fundamental concepts of functions, including algebraic and graphical properties. Fitting functions to data. Finding zeroes and extreme values. Solving systems of equations.

**Prerequisites:** Adequate math placement score or C or better in MATH 120.

# MATH 142G. Calculus for the Biological and Management Sciences 3 Credits (2+2P)

Review of functions. Derivatives, exponential and logarithmic functions, antiderivatives and indefinite integrals, basic ordinary differential equations and growth models, with an emphasis on applications. Includes a significant writing component.

Prerequisite(s): C or better in MATH 121G.

#### MATH 190G. Trigonometry and Precalculus

#### 4 Credits (3+2P)

Elementary functions used in the sciences with emphasis on trigonometric functions and their inverses. Polar coordinates. Complex numbers and Euler's formula. Analytic geometry and vectors.

**Prerequisite:** adequate score on Mathematics placement exam or a C or better in MATH 121G.

### MATH 191G. Calculus and Analytic Geometry I

#### 4 Credits

Limits and continuity, theory and computation of derivatives, applications of derivatives, extreme values, critical points, derivative tests, L'Hopital's Rule.

Prerequisite(s): C or better in MATH 190G.

### MATH 192G. Calculus and Analytic Geometry II

#### 4 Credits

Riemann sums, the definite integral, antiderivatives, fundamental theorems, techniques of integration, applications of integrals, improper integrals, Taylor polynomials, sequences and series, power series and Taylor series.

Prerequisite(s): C or better in MATH 191G.

# MATH 192GH. Calculus and Analytic Geometry II Honors 4 Credits (3+1P)

A more advanced treatment of the material of MATH 192G with additional topics. Consent of Instructor required. Restricted to Las Cruces campus only.

Prerequisite(s): Consent of Department.

#### MATH 200. Directed Study

#### 1-3 Credits

May be repeated for a maximum of 6 credits. Graded S/U.

Prerequisite: consent of the instructor.

### MATH 210G. Mathematics Appreciation

#### 3 Credits

Mathematics and its role in the development and maintenance of civilization.

**Prerequisites:** High school algebra, and an adequate score on the Mathematics Placement Examination.

# MATH 215. Fundamentals of Elementary Mathematics III 3 Credits

Probability, statistics, ratios, and proportional relationships. Experimental and theoretical probability. Collecting, analyzing, and displaying data, including measurement data. Multiple approaches to solving problems involving proportional relationships, with connections to number and operation, geometry and measurement, and algebra. Understanding data in professional contexts of teaching. Taught primarily through student activities and investigations.

Prerequisite(s): C or better in MATH 112.

### MATH 235. Calculus for the Technical Student I

#### 3 Credits

Intuitive differential and integral calculus with applications to engineering.

Prerequisite: C or better in MATH 190G.

#### MATH 236. Calculus for the Technical Student II

#### 3 Credits

A continuation and extension of the material in MATH 235. **Prerequisites:** C or better in MATH 235 or in MATH 192G.

#### MATH 279. Introduction to Higher Mathematics

### 3 Credits

Logic; sets, relations, and functions; introduction to mathematical proofs. **Prerequisite(s):** C- or better in MATH 192.

### MATH 280. Introduction to Linear Algebra

#### 3 Credit

Systems of equations, matrices, vector spaces and linear transformations. Applications to computer science. **Prerequisite(s):** Grade of C- or better in MATH 192G.

# MATH 291G. Calculus and Analytic Geometry III 3 Credits

Vector algebra, directional derivatives, approximation, max-min problems, multiple integrals, applications, cylindrical and spherical coordinates, change of variables.

Prerequisite: grade of C or better in MATH 192G.

# **MGT-MANAGEMENT (MGT)**

### MGT 201. Introduction to Management

#### 3 Credits

Covers the functioning and administration of different types of complex organizations. Concepts and theories of management and organizational behavior

# **MKTG-MARKETING (MKTG)**

# MKTG 180. PGA Golf Management Freshman Orientation 3 Credits

Introduction to the Policies and Procedures of the PGA Golf Mgt. Program and the PGA of America Students will also be introduced to the Qualifying Level of the PGA's Educational Program, Rules of Golf, PGA Constitution and the History of the PAG. Additional course fee required. Consent of Instructor required. Restricted to: PGA Golf Management Students. MKTG/PGM majors.

# MKTG 181. Level 1, PGA's PGM Education Program (Part 1) 3 Credits

Introduction of Level 1 of the PGA's Educational Program. This class will focus on Business Planning and Operations, Customer Relations, and the corresponding PGA Work Experience Activities. Additional course fee required. Consent of Instructor required. Restricted to: MKTG/PGM majors.

### MKTG 203. Introduction to Marketing

#### 3 Credits

Covers processes, functions and principles in the current marketing system. Includes role of marketing in the economy, types of markets, product development, distribution channels, pricing and promotion strategies, market research and management of the processes. Community Colleges only.

# MKTG 280. Level 1, PGA's PGM Education Program (Part 2) 3 Credits

Continuation of Level 1 of the PGA's PGM Education Program. This class will focus on Tournament Operations, Golf Car Fleet Management and the corresponding PGA Work Experience Activities. Students will also be required to provide an internship evaluation report. Additional course fee required. Consent of Instructor required. Restricted to: MKTG/PGM majors.

# MKTG 281. Level 1, PGA's PGM Education Program (Part 3) 1.5 Credits

Completion of Level 1 of the PGA's PGM Education Program. This class will focus on Introduction to Teaching and Golf Club Performance and the corresponding PGA Work Experience Activities. Additional course fee required. Consent of Instructor required. Restricted to: MKTG/PGM majors.

# **MUS-MUSIC (MUS)**

# MUS 101G. An Introduction to Music 3 Credits

An introduction to music for the non-music major to encourage the enjoyment of listening to and understanding the world's great music from the past to the present.

#### MUS 102. Fundamentals of Music

#### 3 Credits

Introduction to music notation, meter and rhythm, scales, intervals, triads, seventh chords, fundamentals of harmonic progression, and aural skills. For students with little or no music theory background. Traditional Grading with RR.

#### MUS 103. Ear Training I

#### 1 Credit

To develop the ability to accurately hear, identify, sing and notate musical elements including rhythm, melody, intervals and harmony Traditional Grading with RR. Restricted to Las Cruces campus only.

**Prerequisite(s):** Passing the Theory Placement exam or making a C or better in MUS 102.

### MUS 104. Ear Training II

#### 1 Credit

To develop the ability to accurately hear, identify, sing and notate musical elements including rhythm, melody, intervals and harmony Restricted to Las Cruces campus only.

Prerequisite(s): Grade of C- or better in MUS 103.

### MUS 105. Music Theory I

#### 3 Credits

Introduction to vocabulary and syntax of 4-voice 18th c. chorale music through study and harmonic analysis.

**Prerequisite(s):** Passing the Theory Placement exam or making a C or better in MUS 102.

### MUS 106. Music Theory II

#### 3 Credits

Expansion of vocabulary and syntax of 4-voice 18th c. chorale music through study, harmonic analysis, and part writing.

Prerequisite(s): Grade of C or better in MUS 105.

#### MUS 121. Concert and Recital Laboratory

### 0.5 Credits

Serves as a resource and performance lab for all applied areas of musical study. Music majors are expected to perform during the weekly student recital and must attend a designated number of musical performances during the semester. May be repeated up to 4 credits. Restricted to: Music and Music Education majors. S/U Grading with RR. Restricted to Las Cruces campus only.

### MUS 130. Applied Music

#### 1-2 Credits

Private or group instruction for non-music majors, secondary instruments, and music majors preparing for 200-level applied music. May be taken for unlimited credit.

### MUS 141. Class Voice I

#### 1 Credi

Group instruction in voice and vocal pedagogy for instrumental Music Education majors, offering basic principles of healthy vocal production with particular attention to diction, development of vocal range, and the ability to impart that knowledge to elementary, junior and/or high school age students. Restricted to: Music Education majors. Traditional Grading with RR. Restricted to Las Cruces campus only.

#### MUS 145. Functional Piano I

#### 2 Credits

Scales, chords, memorization. Harmonization of simple melodies with the ability to play simple melodies and rhythms. May be taken for unlimited credit. Restricted to music majors. No S/U option.

#### MUS 146. Functional Piano II

#### 2 Credits

Scales, chords, memorization. Harmonization of simple melodies with the ability to play simple melodies and rhythms. May be taken for unlimited credit. Restricted to music majors. No S/U option.

Prerequisite: MUS 145 or consent of instructor.

#### MUS 147. Functional Piano III

#### 2 Credits

For music majors preparing for the Piano Proficiency Examination. May be taken for unlimited credit. Restricted to music majors. No S/U option. **Prerequisite:** MUS 146 or consent of instructor.

#### MUS 150. Orchestra

#### 1 Credit

Participation in the Las Cruces Symphony at NMSU. This is a full symphony orchestra concentrating on masterworks of the literature. May be taken for unlimited credit.

#### MUS 151. Philharmonic Orchestra

#### 1 Credit

The University Philharmonic Orchestra is open to all students and performs a wide variety of standard orchestral literature. The orchestra performs each semester and the objectives include refining technique, stylistic characteristics, intonation, balance, bowings, color, rhythmic integrity and dynamics. May be repeated up to 10 credits. Restricted to Las Cruces campus only.

Prerequisite(s): by audition only.

### MUS 160. University Singers

#### 1 Credit

Select concert and touring choir of undergraduate and graduate students performing a cappella and accompanied choral literature. May be repeated up to 10 credits. Restricted to Las Cruces campus only. **Prerequisite(s):** By audition only.

### MUS 161. Concert Choir

#### 1 Credit

Campus choir composed of both music and non-music majors. Emphasis on vocal techniques, sight-singing, and basics of choral musicianship. May be taken for unlimited credit.

### MUS 162. Master Works Chorus

#### 1 Credit

Combination campus and community chorus. This group will perform the major chorale compositions for orchestra and/or wind ensemble. May be taken for unlimited credit.

### MUS 163. Jazz Ensembles

#### 1 Credit

Performance ensemble that explore repertoire written for big band, including (but not limited to) dance band, swing, and contemporary compositions. May be repeated up to 10 credits. Restricted to Las Cruces campus only.

Prerequisite(s): By audition only.

### MUS 164. Chamber Ensembles

#### 1 Credit

Small groups of singers and/or instrumentalists that perform chamber music. May be repeated up to 16 credits. Restricted to Las Cruces campus only.

Prerequisite(s): by audition only.

#### MUS 170. Wind Symphony

#### 1 Credit

This elite ensemble of 50 highly qualified graduate and undergraduate students performs a varied repertoire of the highest quality literature for winds. Members will also perform concerts of chamber winds literature each semester. This ensemble is dedicated to professional level performance while fostering the musical growth of its members. Conducted by the Director of Bands, this group serves as the flagship for the entire university bands program. May be repeated up to 10 credits. Restricted to Las Cruces campus only.

Prerequisite(s): By audition only.

### MUS 171. Roadrunner Revue Pep Band

#### 1 Credit

For both music and nonmusic majors. Opportunity to perform a variety of music in a showband setting. May be taken for unlimited credit. **Prerequisite:** by audition only; contact band office for date and time.

#### MUS 172. Marching Band

#### 1 Cradit

For both music and nonmusic majors. Opportunity to perform all varieties of music in a contemporary styled marching unit. May be taken for unlimited credit.

### MUS 174. Percussion Ensemble

#### 1 Credit

Study and performance of contemporary percussion ensemble literature. May be repeated up to 5 credits. Restricted to Las Cruces campus only. **Prerequisite(s)**: by audition only.

### MUS 180. Symphonic Band

#### 1 Credit

This is a select large ensemble, chosen by audition. It provides a challenging musical environment for skilled performers by programming repertoire that ranges from works for chamber winds, to standards of the wind band literature, to cutting edge literature. Conducted by the Associate Director of Bands, this ensemble is comprised of music majors and non-music majors alike and provides the less experienced student an opportunity to hone and refine performance skills. May be repeated up to 10 credits. Restricted to Las Cruces campus only.

Prerequisite(s): By audition only.

#### MUS 181. Campus Band

### 1 Credit

This is a non-auditioned ensemble designed to meet the needs of students from all majors across campus. Music majors are encouraged to enroll while performing on a secondary instrument. Marching band members are also encouraged to take the course to build skills and leadership. This ensemble provides an educational experience and serves as an outlet for students who wish to remain musically active in a less intense setting. May be repeated up to 10 credits. Restricted to Las Cruces campus only.

# MUS 201G. History of Jazz in Popular Music: A Blending of Cultures 3 Credits

Jazz in popular music as it relates to music history and the development of world cultures.

# MUS 202. An Introduction to World Music, Jazz and Music Research 3 Credits

Introduces world music and jazz within a historical and cultural context, considering significant musical figures, forms, genres, styles, and representative works. A major component will be the development of effective research and scholarly writing skills for the music major or minor. May be repeated up to 3 credits. Restricted to: Music majors and minors. majors. Restricted to Las Cruces campus only.

#### MUS 203. Ear Training III

#### 1 Credit

Continuation of MUS 104, advanced sight singing, dictation. Restricted to Las Cruces campus only.

Prerequisite(s): Grade of C- or better in MUS 104.

#### MUS 204. Ear Training IV

#### 1 Credit

Continuation of MUS 203, advanced sight singing, dictation. Restricted to Las Cruces campus only.

Prerequisite(s): Grade of C or better in MUS 203 and MUS 205.

#### MUS 205. Music Theory III

#### 3 Cradite

Analysis of Baroque and Classical Music. Vocabulary and syntax of 18th and 19th c. Western art music through study, chordal/formal analysis, and composition. Restricted to Las Cruces campus only.

Prerequisite(s): Grade of C or better in MUS 106.

#### MUS 206. Music Theory IV

#### 3 Credits

Analysis of Romantic, Post-Romantic, Impressionist, and Twelve-Tone Music. Vocabulary and syntax of late 19th and early 20th c. Western art music through study, micro/macro analysis, and composition. Restricted to Las Cruces campus only.

Prerequisite(s): Grade of C or better in MUS 205.

# MUS 207. Music History and Literature: Antiquity thorugh Baroque 3 Credits

Surveys Western art music within a historical and cultural context, considering significant musical figures, forms, genres, styles, and representative works from antiquity through the end of the Baroque era. An additional emphasis will be given to effective research and scholarly writing skills. Restricted to: M ED,MUS majors.

Prerequisite(s): A grade of C- or better in MUS 103, 105, and 202.

### MUS 230. Applied Music I

#### 1-4 Credits

Individual instruction to develop technique, musicianship, performance and improvisational skills, as well as knowledge of significant repertoire. May be repeated up to 16 credits. Consent of Instructor required. Restricted to: Music and Music Education majors. Traditional Grading with RR. Restricted to Las Cruces campus only.

Prerequisite(s): Audition.

# MUS 250. Introduction to Music Education 2 Credits

Overview of the basic principals and practices of the music education profession in K-12 settings, emphasizing philosophy and history of music education, methodologies commonly utilized in school curricula, music in special education, classroom/rehearsal management and lesson planning. Explores many aspects of public school teaching through class discussions and directed observations. Restricted to Las Cruces campus only.

### MUS 251. Opera Workshop

#### 1 Credit

Study, translation, analysis, rehearsal and performance of opera. May be repeated up to 10 credits. Restricted to Las Cruces campus only. **Prerequisite(s)**: by audition only.

### MUS 260. Special Topics I

#### 1-3 Credits

Emphasis on special areas of music; designed for highly motivated students. May be taken for unlimited credit.

#### MUS 261. Functional Piano IV

#### 2 Credits

For music majors preparing for Piano Proficiency Examination. May be taken for unlimited credit. Restricted to music majors. No S/U option. **Prerequisite:** MUS 147 or consent of instructor.

#### MUS 262. Diction I

#### 2 Credits

Introduction to the international phonetic alphabet, and its application to English, Italian, Spanish, and Latin song literature. Main campus only. Restricted to Las Cruces campus only.

#### MUS 263. Diction II

#### 2 Credits

Advanced grammar and detailed study of Italian, German and French diction and song literature for vocal students. Restricted to music majors. Main campus only.

Prerequisite: MUS 262 or consent of instructor.

### MUS 273. Introduction to Music Technology

#### 1 Credit

Introduction to uses of technology in musical settings. Practical applications in digital music notation, MIDI sequencing, and digital audio recording. Restricted to: MUS,M ED majors. Traditional Grading with RR. Restricted to Las Cruces campus only.

Prerequisite(s): MUS 105.

## **NA - NURSING ASSISTANT (NA)**

# NA 101. Nursing Assistant Theory and Lab 6 Credits (5+3P)

Nurse aide skills with emphasis on a bio-psychosocial-cultural approach to client care. Practice of these skills is provided in the laboratory as well as at a clinical site. Successful completion of the course prepares and qualifies the student to take the NACES certification examination. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

**Prerequisite(s):** (CCDR 110N with C or better OR appropriate placement score) and (CCDE 110N with C or better OR appropriate placement score) and (CCDM 103N with C or better OR appropriate placement score).

# NA 104. Nursing Assistant Fundamentals 3 Credits

This course prepares students for employment as a Nursing Assistant in a Long Term Care Facility. Theory and basic nursing care skills will be taught with an emphasis being placed on the psychosocial-cultural approach to client care. Students will learn communication skills, basic anatomy and physiology, growth and development, infection control, body mechanics, basic nutrition, client/resident elimination needs, the client/resident unit, vital signs, range of motion exercises, bed making, rehabilitation and restorative care, client admission and discharge, common health problems, dealing with death and dying, and basic medical terminology. NA 104 and NA 104L (laboratory) must be successfully completed with a C- or better in order to continue to NA 105 Nursing Assistant Clinical. NA 105 must also be successfully completed with a C- or better to be eligible to take the state certification competency examination. Attendance is required to meet the federal requirements for training hours and content prior to direct contact with a patient/resident and the state competency examination. Restricted to Community Colleges campuses only.

**Prerequisite(s):** Test out of all CCDE and CCDR courses and eligible to take ENGL 111G.

Corequisite(s): NA 104 L.

#### NA 104 L. Nursing Assistant Fundamentals Lab 1 Credit

This course prepares students for employment as a Nursing Assistant in a Long Term Care Facility. Students will learn and demonstrate personal care skills including bathing, grooming, dressing, toileting, assisting with eating and hydration, skin care, transfers and positioning. Students will also learn and demonstrate the use of assistive devices, and how to maintain resident safety, dignity and privacy. NA 104 & NA 104L must be successfully completed with a C- or greater in order to continue to NA 105 Clinical. NA 105 must be successfully completed with a C- or greater to be eligible to take the state certification competency examination. Prerequisite(s)/Corequisite(s): NA 104. Prerequisite(s): English COMPASS score of 35 or greater or CCDE 110N, and reading COMPASS score of 55 or greater or CCDR 105N. Restricted to Community Colleges campuses only.

### NA 105. Nursing Assistant Clinicals 4 Credits (3+3P)

Extension of basic fundamentals of personal care, including theory, skills and clinical experience leading to the certified Nursing Assistant Examination at the conclusion of the semester. Continuation of NA 104. Requires a C or better to pass. Restricted to: Community Colleges only. Prerequisite(s): C or better in NA 104 or consent of instructor.

#### NA 108. Disabilities Support Services 4 Credits (3+2P)

Beginning level preservice preparation for providing in-home care for individuals with disabilities. Crosslisted with: AHS 108. Restricted to: Community Colleges only.

Prerequisite(s): NA 101 or NA 104 or Consent of Instructor.

### NA 109. Phlebotomist Basic 4 Credits (2+4P)

This course provides the latest information, techniques, skills, and equipment for blood and specimen collection based on the standards of the Clinical and Laboratory Standards Institute, Needlestick Prevention Act, Joint Commission 2008 National Patient Safety Goals, OSHA and CDC. An advanced skills lab is included in the course to provide a "hands-on" practice experience and a 30 hour practicum in a supervised work environment collecting blood and specimens on actual patients for laboratory tests. Attendance is mandatory. Prepares students for employment as a phlebotomist in health care settings. Requires a "C" or better to pass. Upon successful completion of the course, student has the opportunity to test for National Healthcareer Certification. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): BIOL 154 or BIOL 226. Restricted to Community Colleges campuses only.

### NA 110. Electrocardiogram Technician Basic 4 Credits (3+3P)

Prepares students for employment as an Electrocardiogram Technician. Includes basic theory of the cardiovascular system, cardiac rhythm interpretation, 12 lead ECG lead placement, and ECG equipment trouble shooting. The course includes an advanced skills laboratory for "handson" practice and 16 hours of supervised clinical in the work environment assisting with ECG testing. Attendance is mandatory. Course requires a grade of "C" or better to pass. Upon successful completion of course, student has the opportunity to test for National Healthcareer Certification. Restricted to Community Colleges campuses only. Prerequisite(s): BIOL 154 OR BIOL 225 & BIOL 226.

#### NA 111. Alzheimer/Dementia Care Focus

#### 3 Credits

Students will learn respectful care of Alzheimer/Dementia persons while ensuring their dignity, maximizing safe independence focusing on strengths and abilities. Pre/

Prerequisite(s)/Corequisite(s): NA 104 or NA 101. Restricted to: Community Colleges only.

### NA 112. Patient Care Assistant 4 Credits (2+4P)

This course prepares students to become patient care assistants (certified nursing assistant [CNA]). The course prepares students in the areas of critical thinking, collaboration with healthcare team members and performance of Certified Nursing Assistant skills within acute care units including: out-patient care unit (pre-operative), medical-surgical unit, orthopedic unit, mother-baby (obstetrics) and the mental health inpatient unit. Lab and clinical time will include learning skills in a practice setting with mannequins and in a hopsital for acute care skill learning and application. Must pass course with a C- or better.

Prerequisite(s): NA-101 or current State of New Mexico Certified Nursing Assistant (CNA) certificate (CNA certification must remain current through end of course).

Corequisite(s): Current Basic Life Support (BLS) for the Health Care Provider (American Heart Association) (BLS certification must remain current through end of course).

### NA 115. Phlebotomist Technician 6 Credits (3+6P)

Basic theory and skills of phlebotomy following OSHA and Center for Disease Control guidelines. Prepares students for the requirements of testing for the ASCP certification exam and employment in a healthcare organization as a phlebotomist in licensed settings. Laboratory hours include infection control skills & practice, patient assessment & teaching, and practice in venipuncture. Clinical time includes clinical laboratory processes and operations, patient assessment, venipuncture, and exposure to clinical policies and procedures. Upon successful completion students are workforce ready.

Prerequisite(s)/Corequisite(s): OEEM 101. Restricted to Community Colleges campuses only.

### NA 204. Patient Care Technician 4 Credits (3+3P)

This course will prepare Certified Nursing Assistants (CNAs) to work in the acute care setting through an expansion of their existing basic skill set. Students will acquire expanded acute care skills, critical thinking skills, and knowledge in caring for patients of all ages. Currently CNA certified. Restricted to Community Colleges campuses only.

Prerequisite(s): (NA 104, NA 105, NA 109, NA 110, AHS 120, and (BIOL 154 or (BIOL 225 & BIOL 226)).

Corequisite(s): NA 205.

### NA 205. Patient Care Technicians Practicum 4 Credits (1+9P)

This course will prepare Certified Nursing Assistants (CNAs) to work in the acute care setting through an expansion of their existing basic skill set. Students will acquire expanded acute care skills, critical thinking skills, and knowledge in caring for patients of all ages. Students will go to acute care settings to practice newly acquired skills. Must have a "C" or better to pass. Restricted to Community Colleges campuses only. Prerequisite(s): (NA 104, NA 105, NA 109, NA 110, AHS 120, & (BIOL 154 or (BIOL 225 & BIOL 226))) Currently CNA Certified.

Corequisite(s): NA 204.

### NA 212. Medical Assistant Capstone Course 5 Credits (4+3P)

This course provides the student with entry-level theory and limited "hands-on" training in basic and routine clinical office tasks. The course will equip the Medical Assistant (MA) student with the competencies required to perform in a medical office under the direct supervision of a physician. The graduate will be able to assist the physician with physical exams, ECGs, phlebotomy, and minor surgical procedures. May be repeated up to 5 credits. CNA Certification within the last 5 years. Prerequisite(s): NA 105, NA 110, NA 109, AHS 120, BIOL 154, HIT 110, BOT 208, HIT 228, HIT 248, HIT 258.

### NA 214. Medical Assistant Practicum 6 Credits (1+6P)

This course is the practicum for NA 212 Medical Assistant Fundamentals Capstone Course. Students will prepare for a career as a medical assistant in medical offices and clinics. During practicum students will observe and participate in 180 hours in a supervised work environment using knowledge and skills learned in NA 212. This course includes weekly post-practicum conferences with the instructor. The student will be evaluated by both the employer and the instructor. Requires a "C" or better to pass. Upon successful completion the student may be eligible to test for National Certification. May be repeated up to 6 credits. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): NA 212. Prerequisite(s): NA 105, NA 110, NA 109, AHS 120, BIOL 154, HIT 110, BOT 208, HIT 228, HIT 248, HIT 258. CNA Certified within the last 5 years. Restricted to Community Colleges campuses only.

# NAV-NAVAJO (NAV)

#### NAV 101. Introduction to Navajo Studies 3 Credits

Covers geography, demography, institutions of modern Navajo society with historical overview. Restricted to: Community Colleges only.

#### NAV 111. Elementary Navajo I

#### 4 Credits

Navajo for beginners with emphasis on speaking skills.

Prerequisite: not open to Navajo-speaking students except by consent of instructor.

# **NURS-NURSING (NURS)**

### **NURS 120. Introduction to Pharmacology** 3 Credits

General principles of pharmacology including methods of administration, effect on the body, interactions with other drugs, and classification of drugs. Focus on the health care provider's role in safe pharmacologic intervention. Restricted to Allied Health majors. Restricted to:Community Colleges only.

#### **NURS 130. Foundations of Pharmacology** 3 Credits

This course provides the nursing student with an introduction to the foundations of pharmacology including: science of drug action, principles of medication administration, accurate calculation of drug doses, medication therapy across the lifespan, application of medications to treat health alterations, normal and adverse responses by the client to medication therapy, medication safety, medication regulation, national patient safety goals, and appropriate nursing interventions to achieve the desired goals of medication therapy. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 147 & NURS 149.

#### NURS 134. Foundation of Nursing Skills and Assessment 3 Credits (1+6P)

This course provides nursing students with introductory nursing knowledge related to performance of nursing skills and assessment including: techniques of fundamental nursing care, basic and intermediate nursing skills, and foundational physical assessment techniques associated with care across the lifespan. Open to students who have been accepted into the nursing program. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 136 & NURS 137 or permission of the Program Director.

### NURS 136. Foundations of Nursing Practice 6 Credits (4+6P)

This course will introduce the nursing student to foundational theoretical concepts of professional nursing practice, the nursing process, and foundational nursing skills. It includes developmental concepts related to clients across the lifespan. Clinical experiences in the simulation lab, long-term care, the community, and rehabilitation settings will provide the student with the opportunity to apply learned skills to provide total care to meet needs of one adult client and to develop care planning skills related to actual problems. Students must be concurrently enrolled in both the lecture and lab sections of the course. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 134, NURS 136 lab & NURS 137 or permission of the Program Director.

### **NURS 137. Care of Geriatric Patient** 3 Credits

This course will introduce the nursing student to foundational concepts of age-appropriate/specific care of the older adult who represents the largest population of individuals placing demands on the healthcare system. It includes basic and complex concepts and issues related to care of the older client across the care continuum, provision of costeffective care in a resource sparse environment. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NURS majors. Restricted to Community Colleges campuses only.

**Prerequisite(s):** Admission into the nursing program.

Corequisite(s): NURS 134 & NURS 136 or permission of the Program Director.

### NURS 140. Pathophysiology for Allied Health Professionals 3 Credits

Introduction to the nature of disease and its effect on body systems. Deals with the disease processes affecting the human body via an integrated approach to specific disease entities. Includes a review of normal functions of the appropriate body systems. Diseases are studied in relationship to their etiology, pathology, physical signs and symptoms, diagnostic procedures, complication, treatment modalities, and prognosis. Restricted to Allied Health and Health Information Technology majors. Restricted to:Community Colleges only.

# NURS 146. Common Health Deviations 6 Credits (4+6P)

Common health deviations and the manner by which they alter various body functions are explored. The role of the licensed practical nurse in assisting clients with common health deviations is presented. Ethical and legal implications and the role of the practical nurse are also considered. The licensed practical nursing student will utilize the application of knowledge to client care situation both in the subacute and acute care settings. The nursing process is presented as guide for coordinating client care. Grade of C or better. May be repeated up to 6 credits. Restricted to: NURSING majors. Restricted to Carlsbad campus only. Prerequisite(s): NURS 153, NURS 156, NURS 154, NURS 157, and NURS 210 or consent of program director.

### NURS 147. Adult Health I 6 Credits (4+6P)

This course focuses on application of the nursing process and theoretical concepts of care for adults with commonly occurring health problems. Selected clinical learning experiences in the simulation lab, acute care, and community settings will allow the student to continue development of: prioritization skills, proficiency in performance of nursing skills, collaborative skills with clients, families, peers and health care team members, care planning skills related to patient actual, psychosocial, and potential problems in the delivery of total nursing care to meet needs of one adult client. Students must be concurrently enrolled in both the lecture and lab sections of the course. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NUR majors. Restricted to Community Colleges campuses only. Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 130, NURS 147 lab, & NURS 149, or permission of the Program Director.

# NURS 148. Physical Assessment 2 Credits (1+3P)

Introduction of concepts and techniques of interviewing, history taking, review of body systems, and physical assessment of an adult client. The student should be able to apply knowledge of anatomy and physiology, assessment skills, communication skills, cultural awareness, nursing process, critical thinking skills, teaching skills, and psychomotor skills. Restricted to: Community Colleges only.

# NURS 149. Mental Health Nursing 3 Credits (2+3P)

This course will allow the nursing student to develop skills necessary to provide nursing care for clients with mental health problems in various health care settings including: common mental health disorders, psychosocial dysfunction, psychosocial safety/substance abuse issues, violence, suicide, restraints, developmental age related pathophysiology, psychopharmacology, cultural/religious considerations, grief/loss, promotion of mental health, and therapeutic communication. Selected clinical learning experiences in the simulation lab, acute care, and community settings will allow the student to develop ability to develop: proficiency in performance of nursing skills, collaborative skills with clients, families, peers and health care team members, care planning skills related to patient actual, psychosocial, and potential problems in the delivery of total nursing care to meet needs of one client across the life span with acute/chronic mental health needs. Students must be concurrently enrolled in both the lecture and lab sections of this course. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 130, NURS 147, & NURS 149L, or permission of the Program Director.

### **NURS 150. Medical Terminology**

#### 3 Credits

Understanding of the basic elements of medical words. Use of medical abbreviations. Same as OEHO 120 and BOT 150.

### NURS 153. Medication and Dosage Calculation

#### 1 Credit

Techniques of dosage calculation for medication and fluid administration. RR applicable.

**Prerequisite(s)**: Meet NMSU basic skills requirement in mathematics or consent of program director.

Corequisite(s): NURS156 and NURS154.

### **NURS 154. Physical Assessment**

#### 2 Credits

Beginning techniques of physical assessment by systems will be presented using the nursing process as a guide for providing safe client centered care throughout the life span. Grade of C or better is required. May be repeated up to 2 credits. Restricted to: NURSING majors. Restricted to Carlsbad campus only.

Prerequisite(s): BIOL 154 or BIOL 225 or consent of program director. Corequisite(s): NURS 153,NURS 156.

### **NURS 155. Special Topics**

#### 1-4 Credits

Specific subjects to be announced in the Schedule of Classes.

# NURS 156. Basic Nursing Theory and Practice 6 Credits (4+6P)

Introduction to the nursing profession and the beginning skills of nursing practice as it relates to normalcy. The nursing process is presented as a means of guiding the student in providing safe client centered care. Ethical and legal aspects of nursing practice are also included. Basic clinical nursing skills will be presented and practiced in the nursing lab. The student will perform these skills with clients in an actual health care setting. May be repeated up to 6 credits. Restricted to: NURSING majors. Restricted to Carlsbad campus only.

Prerequisite(s): Consent of Program Director.

Corequisite(s): NURS 153,NURS 154.

# NURS 157. Maternal/Child Health Deviations 8 Credits (6+6P)

The concepts and principles of nursing care of the family from conception to adolescence. Utilizing the nursing process, the student provides safe client centered care to diverse clients and families. Theoretical instruction is applied to client care situation. Students collaborate with clients, families and the interdisciplinary team in meeting health care needs. Experiences may occur in any of the regional health care facilities. Grade of C or better required. May be repeated up to 8 credits. Restricted to: NURSING majors. Restricted to Carlsbad campus only.

**Prerequisite(s):** NURS 156, NURS 153, and NURS 154 or consent of program director.

Corequisite(s): NURS 210.

# NURS 182. Legal and Ethical Issues in Nursing Practice 2 Credits

Introduction to legal and ethical implications of nursing practice (through the holistic approach to wellness) as a registered nurse. Restricted to: Community Colleges only.

#### **NURS 201. Special Topics**

#### 1-4 Credits

Specific topics to be announced in the Schedule of Classes. May be repeated for a maximum of 10 credits. Restricted to: Community Colleges only.

Prerequisite: admission to the nursing program.

### NURS 209. Independent Study

#### 1-4 Credits

Individual studies to meet identified student needs. May be repeated for a maximum of 10 credits. Restricted to: Community Colleges only. **Prerequisite:** admission to the nursing program.

# NURS 210. Pharmacological Requisites of the Childbearing Family 1 Credit

Basic concepts of pharmacology including pharmacokinetics, pharmacodynamics, and pharmacotherapeutics, and their relationship to nursing care will be discussed focusing on medications commonly utilized with the childbearing family. Medication classes to be discussed include labor and delivery, analgesic, vitamins, respiratory, gynecological, endocrine, and anti-microbial/anti-infective drugs. Grade of C or better required. Restricted to: Carlsbad campus only.

**Prerequisite(s):** BIOL 225 and BIOL 226 or consent of instructor and NURS 153, NURS 154 and NURS 156.

Corequisite(s): NURS 157.

# NURS 211. Pharmacological Requisites of Simple Health Deviations 1 Credit

Basic concepts of pharmacology including pharmacokinetics, pharmacodynamics, and pharmacotherapeutics, and their relationship to nursing care are addressed focusing on medications related to the psychiatric, gastrointestinal, musculoskeletal, gynecological, hematological, and anti-neoplastic client. Grade of C or better required. Restricted to: Carlsbad campus only.

**Prerequisite(s):** BIOL 225 and BIOL 226 or consent of instructor and NURS 153,NURS 154, NURS 156, NURS 157 and NURS 210.

Corequisite(s): NURS 246 and NURS 258.

# NURS 212. Pharmacological Requisites of Complex Health Deviations 1 Credit

Basic concepts of pharmacology including pharmacokinetics, pharmacodynamics, and pharmacotherapeutics, and their relationship to nursing care is examined focusing on medications related to complex health deviations. Drug classes to be discussed include cardiovascular, renal, endocrine, and neurological. Grade of C or better required.

Restricted to: Carlsbad campus only.

Prerequisite(s): BIOL 225 and BIOL 226 or consent of instructor, and NURS 153, NURS 154, NURS 156, NURS 157, NURS 246, NURS 258, NURS 210 and NURS 211.

Corequisite(s): NURS 256 and NURS 260.

# NURS 224. Maternal Child Nursing 5 Credits (4+3P)

This course provides the intermediate nursing student with an in-depth review of care of the childbearing woman, family structures and roles, and nursing care of the child from birth through adolescence. Emphasis includes the care of pre-partum, intra-partum and postpartum clients, the neonate and health deviations in pediatric clients. Clinical experiences in the simulation lab, the community, and acute care settings will provide the student with the opportunity to apply learned skills to provide total care to meet needs of up to two adult, neonatal, or pediatric clients and to apply care planning skills related to actual, psychosocial and potential problems. Students must be concurrently enrolled in both the lecture and lab sections of the course. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 224 lab, NURS 235, & NURS 236, or permission of the Program Director.

### NURS 226. Adult Health II 6 Credits (4+6P)

This course focuses on application of nursing process and theoretical concepts of care for adults with complex health alterations. Selected clinical learning experiences in the simulation lab, acute care, and community settings will allow the student to apply: prioritization skills, maintain proficiency in performance of nursing skills, collaborative skills with clients, families, peers and health care team members, and care planning skills related to patient actual, psychosocial, and potential problems in the delivery of nursing care to meet needs of three adult clients. Students must be concurrently enrolled in both the lecture and lab sections of the course. Only students who have been admitted to the nursing program may enroll in this course. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 224, NURS 226 lab, & NURS 235 or permission of the Program Director.

# NURS 234. Community Health Nursing 1 Credit

This course provides an introduction to community health, focusing on health care systems, epidemiology, and nursing care of individuals, families and aggregates of varied cultural backgrounds. Primary, secondary, and tertiary prevention are emphasized. Diverse roles of the community health nurse are examined. Educational theories and their applications are explored. Restricted to: Community Colleges only.

### NURS 235. Nursing Leadership and Management 1 Credit

This course introduces the intermediate nursing student to professional practice principles of nursing leadership and management including: health policy and politics, fiscal management & budgeting, conflict management, decision making, interdisciplinary practice, working with teams, roles in disaster planning and management, application of standards of care to risk management, organization of care delivery, health care systems, processes, and practice environments. May be repeated up to 1 credits. Restricted to: NUR majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 224, NURS 226 & Clinical Or Permission of the

Program Director.

### NURS 236. Nursing Preceptorship - Adult Health III 6 Credits (2+12P)

This course is the final course involving care of the patient with acute or chronic illness. It focuses on care of patients with complex or multisystem problems allowing the graduating nursing student to discuss and apply all the skills learned in previous nursing courses. After successfully passing the HESI exam, students have clinical practice with preceptor in various health care settings. Selected clinical learning experiences in the simulation lab, acute care, and community settings will allow the student to: organize care of a group of clients, maintain proficiency in performance of nursing skills, collaborate with clients, families, peers and health care team members, and support care planning skills related to patient actual, psychosocial, and potential problems in the delivery of nursing care to meet needs of the preceptors group of clients. Students must be concurrently enrolled in both the lecture and lab sections of the course. Only students who have been admitted to the nursing program and have successfully completed all level 1, 2 and 3 nursing courses may enroll in this course. Clinical may include inpatient or outpatient care, days, evenings, nights, or weekend experiences. Students are required to work the preceptors assigned schedule. Restricted to: NUR majors. Restricted to: Community Colleges only.

Prerequisite(s): Admission into the Nursing Program.

Corequisite(s): NURS 201, NCLEX Review or permission of the Program

Director.

### NURS 246. Health Deviations I 7 Credits (4+9P)

Introduction to medical/surgical clients, whose health care needs are routine and predictable. Focus is on simple health deviations, including concepts relative to health promotion and maintenance. The nursing process is utilized to provide evidenced based, safe client centered care. Students are expected to apply clinical judgment, communicate and collaborate with clients and the interdisciplinary team in providing care for a group of two to three clients. Grade of C or better required. May be repeated up to 7 credits. Restricted to: Nursing majors. Restricted to Carlsbad campus only.

Prerequisite(s): NURS 153, NURS 156, NURS 154, NURS 157 and

NURS 210 or consent of program director. Corequisite(s): NURS 211, NURS 258.

### NURS 256. Health Deviations II 8 Credits (4+12P)

Concepts and principles applied to clients with complex health deviations. Building upon knowledge gained in NURS 246, focus will be on acutely ill clients. The nursing process continues to serve as a guide to provide safe, client centered care. The student collaborates with the interdisciplinary team in all aspects of client care. Student experiences the role of the staff nurse under the guidance and direction of the nursing instructor. Grade of C or better required. May be repeated up to 8 credits. Restricted to: Nursing majors. Restricted to Carlsbad campus only. Prerequisite(s): NURS 153, 154, 156, 157, 210, 211, 246, and 258 or consent of program director.

Corequisite(s): NURS 212, NURS 260.

### NURS 258. Psychosocial Requisites: A Deficit Approach 3 Credits (2+3P)

Nursing theory and practice as it relates to the care of the client experiencing psychosocial health deviations. The role of the nurse is discussed along with the ethical and legal aspects of care for the client with psychosocial disorders. Building upon the communication skills of listening and responding, the student develops the therapeutic skills of interpersonal relationships. Grade of C or better is required. May be repeated up to 3 credits. Restricted to: Nursing majors. Restricted to Carlsbad campus only.

Prerequisite(s): NURS 153, 154, 156, 157, 210, and 246 or consent of program director.

Corequisite(s): NURS 211, NURS 246.

### NURS 260. Management of Patients with Health Deviations 2 Credits (2)

A capstone course to the nursing program in which principles in management and delegation to less prepared personnel is explored. A review of leadership roles, legal issues, quality initiatives, informatics and scope of practice is included. Preparation for the NCLEX is an integral portion of the course. Grade of C or better is required. May be repeated up to 2 credits. Restricted to: Nursing majors. Restricted to Carlsbad campus only.

Prerequisite(s): NURS 153, 154, 156, 157, 210, 211, 246, and 258 or consent of program director.

Corequisite(s): NURS 212, NURS 256.

### NURS 270. The Adult Client II 5 Credits (2+9P)

Care of adult clients experiencing chronic, life-threatening, and end-oflife health alterations with emphasis on the geriatric population using a holistic approach to wellness. Nursing process, pathophysiology, pharmacology, diet therapy, and alternative therapies are stressed throughout the course. Clinical component will provide an opportunity to apply the nursing process in both the hospital and community setting. Restricted to: Community Colleges only.

Prerequisite(s): NURS 170, NURS 172, NURS 173L, NURS 180, and NURS 185.

Corequisite(s): NURS 285.

# NURS 272. Care for the Aging Client

1 Credit

Normal physiological changes of aging and nursing implications related to safety and wellness. Restricted to: Community Colleges only. Restricted to NURS majors.

# NURS 275. Holistic Approach to Pharmacotherapeutic Interventions II 2 Credits

Level II. Holistic approach to the study of basic pharmacology concepts. Includes pharmacodynamic phases of drug interaction. Nursing process is discussed in relation to medication administration. Special emphasis on the role of the nurse and basic concepts related to specific drug categories. Restricted to majors. Community Colleges only.

Prerequisite: NURS 185.

Corequisites: NURS 280 and NURS 283. NURS 280. Women's Health Issues 4 Credits (2+6P)

Consists of lecture and associated clinical/laboratory experiences that focus on the holistic health concerns for women and the care of families expecting birth. Emphasis placed on the wellness of normal and high-risk women's health, including maternal and newborn care. The nursing process will be utilized to develop caring interventions and effective community communication through teaching healthy strategies. Restricted to: Community Colleges only.

Prerequisite(s): NURS 170 and NURS 180. Corequisite(s): NURS 275 and NURS 283.

# NURS 282 L. Practicum: Management of Client Care 1 Credit

Organization and delivery of wellness care services for groups of clients based on the nursing process. Restricted to: Community Colleges only. **Prerequisite(s):** NURS 170, NURS 172, NURS 173L, NURS 180, and NURS 185

Corequisite(s): NURS 284L.

NURS 283. Pediatric Nursing

4 Credits (2+6P)

Consists of lecture and associated clinical and laboratory experiences which focus on the care of children from infancy through adolescence including acute and chronic health care problems. Employs nursing process, pathophysiology, pharmacology, and diet therapy through the holistic approach to wellness. Restricted to: Community Colleges only.

Prerequisite(s): NURS 170 and NURS 180. Corequisite(s): NURS 275, NURS 280.

NURS 284 L. Practicum: Preceptorship

Clinical experience in a leadership role in specific practice areas enhancing the transition from student to practitioner utilizing the holistic approach to wellness. Restricted to: Community Colleges only.

Prerequisite(s): NURS 182. Corequisite(s): NURS 282L.

### NURS 285. Holistic Approach to Pharmacotherapeutic Intervention III 1 Credit

Level III. Holistic approach to the study of basic pharmacology concepts. Includes pharmacodynamic phases of drug interaction. Nursing process is discussed in relation to medication administration. Special emphasis on the role of the nurse and basic concepts related to specific drug categories. Restricted to: Community Colleges only.

Prerequisite(s): NURS 185 and NURS 275.

Corequisite(s): NURS 270.

# **NURS 293. Introduction to Nursing Concepts**

#### 3 Credits

This course introduces the nursing student to the concepts of nursing practice and conceptual learning. Same as NMNEC course no.: NMNEC101. Restricted to: BSN,BSNP,BSNR,NURS majors. Restricted to Las Cruces campus only.

Prerequisite(s): Admission to Nursing Program.

Corequisite(s): NURS 294, NURS 362.

# NURS 294. Principals of Nursing Practice 4 Credits

This course introduces the nursing student to the application of concepts through clinical skills in seminar, laboratory, and/or clinical settings. Principles of communication, assessments, safety, and interventions including accurate calculation, measurement, and administration of medications will be included. Same as NMNEC course no.: NMNEC102. Restricted to: NURS majors. Restricted to Las Cruces campus only.

Prerequisite(s): Admission to the nursing program.

Corequisite(s): NURS 293, NURS 362.

# OEBM-BIOMEDICAL TECHNOLOGY (OEBM)

# OEBM 140. Applied Human Biology for Biomedical Technology 3 Credits

Essential human biology, anatomy, physiology and medical terminology for biomedical equipment technicians. Focus on the vocabulary necessary for effective communication in the hospital environment as part of the health care team. Restricted to: Community Colleges only.

# OEBM 141. Medical Electronics and Safety in Healthcare 3 Credits

Introduction to the biomedical equipment technology field. Operation of common biomedical equipment to include pressure and temperature systems, infusion devices, patient monitors, and other physiologic and patient systems. Hospital safety and health regulations explained. Restricted to Community Colleges campuses only.

Prerequisite(s): OEBM 140.

### **OEBM 200. Biomedical Internship**

### 3 Credits

Practice working in industry as a biomedical electronics technologist. Students work on a variety of medical equipment and job tasks. An employer evaluation, student report, and a minimum of 100 work hours are required. May be repeated up to 9 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

Prerequisite(s): OEBM 140 and OEBM 141.

### **OEBM 210. Biomedical Clinical**

### 4 Credits (1+9P)

Clinical experiences to include advanced biomedical equipment maintenance, inventory control, and medical facility and industry standards. Restricted to Biomedical majors.

Prerequisite(s): OEBM 200.

### **OEBM 211. CBET Exam Preparation**

### 1 Credit

An overview of the Certified Biomedical Equipment Technician exam. Topics include anatomy and physiology, electronics principles, safety issues, equipment operation, and equipment troubleshooting.

Prerequisite(s)/Corequisite(s): OEBM 241 AND OEBM 240. Restricted to Community Colleges campuses only.

### **OEBM 240. Medical Imaging Systems**

#### 3 Credits

The fundamentals of diagnostic radiography equipment will be explored. Principles of an x-ray system will be explained including the x-ray generation, image formation and film processing. Focus will be on both safety and quality. Restricted to Community Colleges campuses only. **Prerequisite(s):** OEBM 140.

# **OEBM 241. Advanced Medical Electronics**

#### 3 Credits (3+1P)

Advanced study in biomedical equipment to include cardiovascular, pulmonary, telemetry and other critical life support systems. Restricted to Community Colleges campuses only.

Prerequisite(s): OEBM 141.

# OECS-COMPUTER TECHNOLOGY (OECS)

### **OECS 101. Computer Basics**

#### 1 Credit

Hands-on instruction to introduce computer use and commonly used software. Graded S/U.

# OECS 105. Introduction to Information Technology

### 3 Credits

Examination of information systems and their impact on commerce, education, and personal activities. Utilization of productivity tools for communication, data analysis, information management and decision-making. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

# **OECS 110. Introduction to Power Point**

### 1-3 Credits (1-3)

An introduction to Power Point software to develop business presentations. Includes concepts of basic presentation methods and graphic design principles. Students will create and deliver presentations using text, charts, digitized images, and sound. Restricted to Community Colleges campuses only.

### **OECS 125. Operating Systems**

### 1-3 Credits

Installation, configuration and optimization of current operating systems. Restricted to: Community Colleges only.

# OECS 128. Operating Systems Linux/Unix

### 3 Credits

Installation, configuration, and use of Linux/Unix operating system software and utilities including hardware management, file management, use of command line, and scripting. Restricted to: Community Colleges only.

# OECS 140. Introduction to Game Production Industry 1-3 Credits (1-3)

Students explore the business behind game production, understanding how game companies are organized and funded, positions within the game industry, and what skills game producers need. Restricted to Community Colleges campuses only.

# OECS 141. Introduction to Interactive Game Programming 1-3 Credits (1-3)

This introductory programming class reviews the basics of programming, including the object-oriented approach. Students will de-construct existing games, develop their own code, and gain an appreciation for coding strategies. May be repeated for a maximum of 6 credits. Restricted to Community Colleges campuses only.

### **OECS 145. Mobile Application Development**

### 1-3 Credits (1-3)

Introduction to elements of mobile application coding including concepts, design strategies, tools needed to create, test and deploy applications for mobile devices. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

# **OECS 150. Visual Basic Programming**

### 3-4 Credits (3-4)

Introduction to algorithmic problem-solving concepts, structured programming design-oriented application programing interface development. Solutions to problems are implemented using the Visual Basic programming language in the Windows environment, with connection to Access databases as applicable.

Prerequisite(s)/Corequisite(s): OECS 220. Restricted to Community Colleges campuses only.

# OECS 155. Special Topics - Introductory Computer Technology 0.5-4 Credits (.5-4)

Topics to be announced in the Schedule of Classes. May be repeated up to 8 credits.

# OECS 185. PC Maintenance and Repair I

#### 1-3 Credits

Introduction to most common types of PC configurations, installations, and failures. This course will explore troubleshooting skills for maintaining and repairing common hardware and software related problems. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

### OECS 192. C++ Programming I

### 3 Credits

Development of skills in programming using the C++ programming language. Restricted to: Community Colleges only.

### OECS 195. Java Programming I

### 1-3 Credits

Developing of skills in programming using the Java programming language. Restricted to: Community Colleges only.

# OECS 200. Accounting on Microcomputers

### 3 Credits

Fundamental accounting principles using popular microcomputer soft ware to include G/L, A/R, A/P, purchase order, billing, inventory, and forecasting modules.

Prerequisite: ACCT 221 or BOT 121.

### **OECS 203. UNIX Operating System**

### 1-3 Credits

Introduction to the UNIX operating system using Telnet to access a remote UNIX system. Basic UNIX commands and file system concepts.

Prerequisite: C S 110, BCIS 110 or OECS 105.

# OECS 204. Linux Operating System

# 1-3 Credits

Install and configure the Linux operating system on X86 systems. Covers issues involved in maintaining operating system, networking, creating and managing users, and installing and updating software. General procedures for working with operating system includes maintaining disk space, preserving system security, and other related topics. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

# OECS 205. Advanced Operating Systems: Administration 3 Credits

Examines operating systems designed for PC, minicomputers and mainframes. Covers maintaining operating systems, creating and managing users, and installing and updating software. General procedures for working with operating systems will include maintaining disk space, preserving system security, providing mail services, among other topics. May be repeated for a maximum of 6 credits.

Prerequisite: OECS 128.

OECS 207. Windows

#### 0.5-3 Credits

Covers local installation, configuration of core local services, managing users, and the general local management and maintenance of Windows workstations. May be repeated up to 6 credits.

**Prerequisite(s)/Corequisite(s):** OECS 185. Prerequisite(s): . Restricted to Community Colleges campuses only.

### **OECS 208. Internet Applications**

#### 1-3 Credits

Survey of the Internet to include e-mail, file transfer, current search techniques, the World Wide Web and basic Web page development. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

### **OECS 209. Computer Graphic Arts**

#### 1-3 Credits

Basic graphics composition using computer programs to include editing and manipulating graphic images, clip-art, and printing of pictures. May be repeated for a maximum of 6 credits under different subtitles listed in the Schedule of Classes.

Prerequisite: OECS 105, C S 110, or OECS 101.

### **OECS 211. Word Processing Applications**

# 1-3 Credits

Basic word processing to include composing, editing, formatting, and printing of documents. May be repeated under different subtitles listed in the Schedule of Classes for a maximum of 6 credits.

Prerequisites: C S 110, BCIS 110 or OECS 105.

### **OECS 213. Image Processing**

### 1 Credit

Introduction to digital imaging acquisition and editing. Use of digital cameras and computer graphic software for business and personal use. Graded S/U.

Prerequisites: C S 110, BCIS 110 or OECS 105.

### OECS 214. Creating a Web Page

### 1 Credit

Introduction to creating Web pages for business and personal use. Graded  $\mbox{S/U}.$ 

Prerequisites: C S 110, BCIS 110 or OECS 105.

# **OECS 215. Spreadsheet Applications**

### 1-3 Credits

Use of spreadsheets to include graphics and business applications. May be repeated for a maximum of 6 credits.

Prerequisites: C S 110, BCIS 110 or OECS 105.

# OECS 216. Programming for the Web

### 3 Credits

Designing web-based applications using appropriate programming language(s) such as, but not limited to HTML, PHP, MySQL, SQL, Java, Perl, C or C++. May be repeated up to 6 credits. Restricted to: Community Colleges only.

Prerequisite(s): One semester of any programming course.

# OECS 220. Database Application and Design

#### 1-3 Credits

Creating, sorting, and searching of single and multifile databases to include report generation and programming database commands. May be repeated for a maximum of 6 credits under different subtitles listed in the Schedule of Classes. Restricted to: Community Colleges only.

Prerequisite(s): C S 110 OR BCIS 110 OR E T 120 OR E T 122 OR OECS 105.

#### OECS 221. Internship I

#### 1-3 Credits

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OECS majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

Prerequisite(s): Consent of instructor.

### OECS 222. Internship II

#### 1-3 Credits

Continuation of OECS 221. Each credit requires specified number of hours of on-the-job work experience. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OECS majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 221 and consent of instructor.

# OECS 227. Computer Applications for Technicians

### 3 Credits

Computer applications for service technicians in various disciplines. Hardware and software applications explored. Includes operating systems, high level programming, and networking hardware and software.

### OECS 230. Data Communications and Networks I

### 1-3 Credits

Definition of data communication; survey of hardware applications and teleprocessor software; examination and design of networks. May be repeated for a maximum of 6 credits.

Prerequisite: OECS 185.

### **OECS 231. Data Communications and Networks II**

### 1-3 Credits

Installation and application of popular microcomputer network software. May be repeated for a maximum of 6 credits.

Prerequisite: OECS 230.

# OECS 232. Implementing and Supporting Networks I

### 3 Credits

Knowledge and skills relating to post-installation and day-to-day administration tasks in a single-domain or multiple-domain network.

Prerequisite: OECS 230 or OECS 261.

# OECS 234. Linux Server

### 3 Credits

This course addresses the implementation and support needs of IT professionals that are planning to deploy and support Linux Server(s). It provides in-depth, hands-on training for planning, implementation, management and support of Linux networking services. May be repeated up to 6 credits.

Prerequisite(s): OECS 128, OECS 203 or OECS 204.

### OECS 235. Structured Query Language (SQL)

#### 1-3 Credits

Installation, configuration, administration, and troubleshooting of SQL client/server database management system. May be repeated up to 3 credits

Prerequisite(s)/Corequisite(s): OECS 220. Restricted to Community Colleges campuses only.

# OECS 237. Windows Server

#### 3 Credits

This course addresses the implementation and support needs of IT professionals that are planning to deploy and support Microsoft Windows Server Active Directory Domain Services in medium to large businesses. It provides in-depth, hands-on training for Information Technology (IT) professionals responsible for the planning, implementation, management, and support of Windows Active Directory services. Restricted to: Community Colleges only.

Prerequisite(s): OECS 207.

### OECS 245. Game Programming I

#### 3 Credits

Development of programming skills for games and animation using current programming languages and tools. May be repeated for a maximum of 6 credits.

Prerequisite: consent of instructor.

### **OECS 246. Game Programming II**

### 3 Credits

Continuation of OECS 245. May be repeated for a maximum of 6 credits. **Prerequisite:** OECS 245.

### OECS 250. Systems Analysis and Design I

### 3 Credits

Analysis, configuration, design and testing of organizations' work flow as it relates to hardware, software, data, procedures and personnel. Systems Life Cycle approach matching end users' needs to feasible financial, technical and operational solutions. Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 220.

### **OECS 255. Special Topics**

### 1-4 Credits

Topics to be announced in the Schedule of Classes.

# OECS 260. Hypertext Markup Language (HTML)

### 1-3 Credits

Coverage of HTML as used for web-page development for Internet and Intranet. Text manipulation, graphics, hypertext links, lists, and tables. May be repeated for a maximum or 3 credits.

Prerequisite: C S 110, BCIS 110 or OECS 105.

# OECS 261. Introduction to Networks

### 3-4 Credits (3-4)

Introduction to networking principles including the practical and conceptual skills for understanding basic networking, planning and designing networks, implementing IP addressing schemes, examining the OSI and TCP/IP layers, and performing basic configurations for routers and switches. Aligns to the first course of the Cisco Networking Academy CCNA curriculum. Restricted to Community Colleges campuses only.

### OECS 262. Essentials of Routing and Switching

### 3-4 Credits (3-4)

Examination of the architecture, components, and operations of routers and switches in a small network. Student will learn how to configure, verify and troubleshoot: routers and switches, static routing, default routing, VLANs, and ACLs. Aligns to the second course of the Cisco Networking Academy CCNA curriculum. May be repeated up to 4 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 261.

#### **OECS 263. Network Fundamentals**

### 3-4 Credits (3-4)

Fundamentals of networking architecture, components, and operations including practical and conceptual skills using routers and switches. Student will learn how to configure, verify and troubleshoot static routing, default routing, VLANs, and ACLs. This course aligns to the third course of the Cisco Networking Academy CCNA curriculum. May be repeated up to 4 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 262.

# **OECS 264. Network Routing Protocols**

### 3-4 Credits (3-4)

Fundamentals of routing protocols for troubleshooting advanced network operations. Covers common networking issues such as RIP, OSPF, and EIGRP for IPv4 and IPv6 networks. This course aligns to the fourth course of the Cisco Networking Academy CCNA curriculum. May be repeated up to 4 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 263.

# **OECS 269. Network Security**

### 3-4 Credits (3-4)

Fundamentals of design and implementation of network security solutions that will reduce the risk of system vulnerability. May be repeated up to 8 credits. Restricted to Community Colleges campuses only

Prerequisite(s): OECS 204 or OECS 207 or OECS 261 or consent of instructor.

### OECS 275. PC Maintenance and Repair II

### 1-3 Credit

Continuation of OECS 185. May be repeated up to 6 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): OECS 185.

# OECS 280. Desktop Publishing I

### 3 Credits

Design and production of publication materials to fill the needs of business communities, using a microcomputer. May be repeated for a maximum of 6 credits. Same as BOT 280.

Prerequisites: either BCIS 110, C S 110, OECS 105.

# **OECS 290. Computer Technology Capstone**

### 1-3 Credits

Refines skills learned in the OECS program. Culminates in a review and practice of advanced software applications. May be repeated up to 3 credits. Restricted to: OECS & OECT majors. Restricted to Community Colleges campuses only.

**Prerequisite(s):** (OECS 125, OECS 128, OECS 207, OR OECS 203) AND (OECS 185 OR E T 283).

# OECS 299. Independent Study

# 1-3 Credits

Specific subjects to be determined based on need. DAS Occupational Education, Dental Assisting. Restricted to: Community Colleges only.

# **OEEM- PARAMEDIC (OEEM)**

# OEEM 101. CPR for the Health Care Professional 1 Credit

Students learn identification and response to airway and circulation emergencies, including use of a SAED and accessing the EMS system. This course is taught using the American Heart Association guidelines for course completion. Required: grade of C or better.

### **OEEM 103. Heartsaver First Aid/CPR**

#### 1 Credit

Students learn how to identify and respond to airway, circulation and basic first aid emergencies, to include using a SAED and accessing the EMS system. This course is intended for students who are not Allied Health Majors and utilizes the American Heart Association guidelines for course completion. Restricted to: Community Colleges only.

### **OEEM 106. Advanced First Aid**

#### 2 Credits

Theory and advanced first aid skills taught emphasizing recognition and providing care for injury or sudden illness until professional medical help arrives. Course meets and/or exceeds the Red Cross or National Safety Council standards.

Corequisite: OEEM 101 or consent of instructor.

# OEEM 115. First Responder Prehospital Professional 3 Credits (2+3P)

Provides training in prehospital medical and traumatic emergencies. Requires a C or better to pass. Restricted to majors.

Prerequisite: consent of instructor.

Corequisite: OEEM 101.

# OEEM 116. Emergency Medical Technician Bridge 5 Credits (3+6P)

Enhanced skill instruction and didactic integration designed to meet the requirements for an EMT-Basic certificate. Requires a "C" or better to pass. May be repeated up to 5 credits. Consent of Instructor required. **Corequisite(s):** OEEM 121.

Prerequisite(s)/Corequisite(s): OEEM 153. Prerequisite(s): OEEM 101, OEEM 115. Restricted to: OEMS,OEEM majors. Restricted to Community Colleges campuses only.

# OEEM 120. Emergency Medical Technician Basic 6 Credits

EMT-Basic skills to include care of soft tissue and muscular/skeletal injuries, circulatory, nervous, general medical and respiratory emergencies. Requires a "C" or better to pass. May be repeated up to 6 credits. Consent of Instructor required.

Corequisite(s): OEEM 101,0EEM 120L,0EEM 121.

**Prerequisite(s)/Corequisite(s):** OEEM 153. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

# OEEM 120 L. Emergency Medical Technician Basic Lab 2 Credits

EMT-Basic skills development with emphasis on assessment, skills competency and team-work in patient care in the prehospital setting. May be repeated up to 2 credits.

Corequisite(s): OEEM 101, OEEM 120, OEEM 121.

**Prerequisite(s)/Corequisite(s):** OEEM 153. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

### OEEM 121. Emergency Medical Technician Basic Field/Clinical 1 Credit

Covers the patient care experience provided through assigned shifts in the hospital and/or ambulance setting. Requires a "C" or better to pass. May be repeated up to 1 credits. Consent of Instructor required.

Prerequisite(s)/Corequisite(s): OEEM 101, OEEM 120, OEEM 120L

OEEM 153. Restricted to: OEEM majors. Restricted to Community

Colleges campuses only.

### OEEM 122. Emergency Medical Technician Basic Advanced Field/ Internship

#### 2 Credits

Expanded patient care experience provided through assigned shifts in the hospital and/or ambulance setting. May be repeated up to 2 credits. Consent of Instructor required. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): Current EMT-basic license and consent of instructor.

# OEEM 150. Emergency Medical Technician Intermediate 5 Credits

Theory of the roles, responsibilities and scope of practice of the EMT-Intermediate. Assessment and management of respiratory, cardiac, trauma, environmental, behavior, reproduction, and childhood emergencies. May be repeated up to 5 credits. Consent of Instructor required. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

**Prerequisite(s):** Current EMT-basic license, pretest and consent of instructor.

# OEEM 150 L. Emergency Medical Technician Intermediate Lab 2 Credits

EMT-Intermediate skills development with an emphasis on assessment, skills competency, and team work in patient care in the prehospital setting. Requires a C or better to pass.

**Prerequisite(s)/Corequisite(s):** OEEM 150,0EEM 151. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

# OEEM 151. Emergency Medical Technician Intermediate Field/Clinical 2 Credits

Patient care experience provided through assigned shifts in the hospital and/or ambulance setting.

**Prerequisite(s)/Corequisite(s):** OEEM 150, OEEM 150 L. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

# OEEM 153. Introduction to Anatomy and Physiology for the EMS Provider 3 Credits

To properly assess and manage a patient, a prehospital provider must have a solid foundation in human anatomy and physiology. This course provides a systematic approach to building this foundation. Grade of "C" or better is required to pass the course. Consent of Instructor required. Restricted to Community Colleges campuses only.

### **OEEM 155. Special Topics**

# 1-6 Credits

Specific topics to be listed in Schedule of Classes. May be repeated for a maximum of 10 credits.

# OEEM 158. Emergency Medical Technician-Combination Refresher 2 Credits

A comprehensive review of prehospital medicine for the prehospital care provider from the first responder level through the EMT Intermediate. New material relevant to recertification of the New Mexico First Responder, EMT Basic and EMT Intermediate licensure included. Graded S/U.

# OEEM 177. Emergency Medical Services Instructor 4 Credits

Theory of student learning, methodology, instructional components, evaluation, and course coordination for the EMS profession. May be repeated up to 4 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

Prerequisite(s): Minimum of an EMT-Basic License required.

# **OEEM 201. Human Pathophysiology**

#### 3 Credits (2+3P)

Overview of anatomy and physiology. Emphasis on human body pathophysiology including a medical illness component. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEMS, OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 120, OEEM 120 L.

# OEEM 202. EMT-Paramedic Respiratory Emergencies 3 Credits (2+3P)

Review anatomy, physiology and pathophysiology of the respiratory system. Assessment and management of respiratory emergencies and acute respiratory failure in the prehospital setting. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEMS,OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 212.

# OEEM 203. EMT-Paramedic Trauma Emergencies 3 Credits (2+3P)

Study of the effects of trauma on the human body. Assessment and management of trauma patients and scenes, including vehicular extrication. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 216.

# OEEM 206. Introduction to Advanced Prehospital Care 3 Credits (2+3P)

Overview of prehospital care including roles and responsibilities of EMT-P, EMS systems, medical, legal, ethical issues, stress management, medical terminology, medical report writing and communication. Includes ridealong with ambulance and dispatch observation. Requires a C or better to pass. Restricted to majors. Consent of instructor required. Restricted to: Community Colleges only. Restricted to OEEM majors.

Prerequisite(s): OEEM 120.

# OEEM 207. Introduction to Pharmacology 3 Credits (2+3P)

Drug actions, factors modifying drugs and dosages: characteristics of drug effects, and drug history and dosages. Prehospital protocol, transport, and common patient prescription medications. Restricted to majors. Requires a C or better to pass. Restricted to: Community Colleges only. Restricted to OEEM majors.

Prerequisite(s): OEEM 120.

# OEEM 210. Cardiac Rhythm Interpretation 3 Credits (2+3P)

Cardiac conduction system: electrophysiology, electrocardiogram, monitor, atrial, sinus, ventricular and junctional dysrhythmias, multiple lead EKG and 12 lead EKG interpretation. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEEM, OEMS majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 201, OEEM 206, OEEM 207.

# OEEM 212. EMT-Paramedic Cardiovascular Emergencies 3 Credits (2+3P)

Review anatomy, physiology, and pathophysiology of cardiovascular system. Assessment and management of cardiovascular emergencies in the prehospital setting. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEMS,OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 210.

### OEEM 213. EMT-Paramedic: Medical Emergencies I 3 Credits (2+3P)

Study of the disease process; assessment and management of neurological, endocrine, gastrointestinal, renal emergencies and infectious disease. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEEM, OEMS majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 212.

# OEEM 214. EMT--Paramedic: Medical Environmental Emergencies II 3 Credits (2+3P)

Study of disease process, assessment, and management of poisoning, drug and alcohol abuse, environmental, behavioral and geriatric emergencies. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required. Restricted to: OEMS, OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 213.

# OEEM 216. EMT-Paramedic: Reproductive and Childhood Emergencies 3 Credits (2+3P)

Covers anatomy, physiology, disease processes, assessment and management of male and female reproductive system emergencies, childhood emergencies and growth and development. Restricted to majors. Requires a C or better to pass. Restricted to: Community Colleges only.

Prerequisite(s): OEEM 214 and consent of instructor.

# OEEM 218. Pediatric Advance Life Support for the Healthcare Professional

# 1 Credit

Identify and respond to life threatening pediatric emergencies. Taught using the American Heart Association guidelines for course completion. Graded S/U.

Prerequisite: OEEM 101.

# OEEM 219. Advance Cardiac Life Support for the Healthcare Provider

Identify and respond to life threatening cardiac emergencies. Taught using the American Heart Association guidelines for course completion. Graded S/U.

Prerequisite: OEEM 101.

# OEEM 230. EMT-Paramedic Clinical Experience I 3 Credits

Assigned clinical experiences in patient assessment and specific management techniques. Successful completion includes minimum required hours and completion of course objectives. Restricted to majors. Requires a C or better to pass.

Prerequisite: consent of instructor.

# OEEM 231. EMT-Paramedic Clinical Experience II 3 Credits

Assigned clinical experiences in patient assessment and specific management techniques. Successful completion includes minimum required hours and completion of course objectives. Requires a "C" or better to pass. May be repeated up to 3 credits. Consent of Instructor required.

**Prerequisite(s)/Corequisite(s):** OEEM 230. Restricted to: OEMS,OEEM majors. Restricted to Community Colleges campuses only.

# OEEM 240. EMT-Paramedic Field Experience I

#### 3 Credits

Advanced prehospital skills and knowledge. Successful completion of at least the minimum required hours and course objectives. Restricted to majors. Requires a C or better to pass.

Prerequisite: consent of instructor.

# OEEM 241. EMT-Paramedic Field Experience II

3 Credits

Continued focus on advanced prehospital skills and knowledge, with increasing responsibility for patient care. Successful completion includes meeting at least the minimum required hours and course objectives. Pre/Requires a C- or better to pass.

Corequisites: OEEM 240 Restricted to majors.

# **OEEM 242. EMT-Paramedic Field Internship**

### 3 Credits

Emphasis on total patient care responsibility and team leadership skills. Successful completion includes meeting the minimum hours required and course objectives. Pre/ Consent of Instructor required. Restricted to: OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 231, OEEM 241.

# OEEM 243. EMT-Paramedic Preparation for Practice 2 Credits

Comprehensive final program testing to prepare for licensing examination. Requires a "C" or better to pass. May be repeated up to 2 credits. Consent of Instructor required. Restricted to: OEMS, OEEM majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OEEM 242.

# OEEM 247. Emergency Medical Technician - Paramedic Refresher 2 Credits (1+3P)

A comprehensive review of prehospital emergency medicine for the EMT Paramedic. New material relevant to recertification of the New Mexico and Nationally Registered Paramedic licensure. Graded S/U.

# OEEM 253. Critical Care Emergency Medical Transport Program 6 Credits (5+6P)

This course will provide further education to Paramedics, Registered Nurses and Registered Respiratory Therapists who wish to function as part of a critical care transport team. Consent of instructor required. Restricted to: Community Colleges only.

**Prerequisite(s):** Licensed Paramedic, Registered Nurse or Registered Respiratory Therapist with one or more years experience.

# **OEET- ELECTRICAL TRADES (OEET)**

# OEET 110. Basic Electricity and Electronics 4 Credits (3+3P)

An introduction to electricity theory and practice, including electron theory, Ohm s law, construction of electrical circuits, direct and alternating currents, magnetism, transformers, and practical applications. Same as HVAC 102, ELT 105, OEPB 102.

### **OEET 112. Math Study Skills for Electrical**

#### 1 Credit

Covers specific math study skills and critical thinking processes to reinforce practical uses of math relating to electrical apprenticeship applications. The student will be introduced to electrical mathematical formulas during the problem-solving steps required for electrical circuit design and analysis. May be repeated up to 4 credits.

**Prerequisite(s)/Corequisite(s):** OEET 151 OR OEET 152. Restricted to: Community Colleges only.

# **OEET 115. Wiring Methods and Materials**

### 5 Credits (2+6P)

Application of electrical code in selection of wiring materials; proper methods of installation.

Corequisite: OEET 110 or consent of instructor.

### **OEET 120. Basic Motor Controls**

#### 5 Credits (2+6P)

Developing schematics and wiring simple manual and electromechanical control devices.

Prerequisite: OEET 110 or consent of instructor.

# **OEET 130. Introduction to Electrical Power Systems**

#### 2 Credits

An overview of electrical power systems, equipment, safety practices, first aid and CPR. Restricted to majors.

Prerequisite: acceptance into the electrical lineworker program.

Corequisite: OEET 110 and OEET 131.

### OEET 131. Electrical Lineworker Lab I

### 6 Credits

Climbing and work on utility poles using ropes and rigging, pole setting and an introduction to transmission and distribution line construction. Maintenance and troubleshooting to include the use of hot sticks. Restricted to majors.

Prerequisite: acceptance into the electrical lineworker program.

Corequisite: OEET 110 and OEET 130.

# OEET 140. Electrical Power Systems II

### 3 Credits (2+2P)

Theory of power generation and distribution with emphasis on three phase systems to include transformers, voltage regulators, surge arrestors. Includes troubleshooting. Restricted to majors.

**Prerequisites:** acceptance into the electrical lineworker program and OEET 130.

Corequisite: OEET 141.

### **OEET 141. Electrical Lineworker II**

### 6 Credits

Practice in the installation of electrical power lines including transformers, voltage regulators, and surge arrestors. Also advanced hot sticking procedures, troubleshooting, underground systems procedures, and pole-top rescue. Restricted to: Community Colleges only.

 $\label{eq:precedence} \textbf{Prerequisites:} \ \textbf{Acceptance into the lineworker program and OEET 131}.$ 

Corequisite: OEET 140.

# OEET 151. Electrical Apprenticeship I

### 6 Credits

Apprenticeship responsibilities and benefits as well as first aid and CPR will be covered. Hand tools, electrical theory, and the regulations imposed by national codes and OSHA. Students will apply theory taught in their jobs.

Prerequisite: consent of instructor.

### **OEET 152. Electrical Apprenticeship II**

#### 6 Credits

OHM s law circuit sizing and service panel sizing will be covered in detail. Other topics include low voltage systems, heating and air conditioning circuits, alarm systems and smoke detectors.

Prerequisites: OEET 151 and consent of instructor.

### **OEET 153. Electrical Apprenticeship III**

#### **6 Credits**

Various electrical measuring devices will be covered in detail. Inductance, transformers, capacitance, and simple motors will be studied.

Prerequisites: OEET 152 and consent of instructor.

### **OEET 154. Electrical Apprenticeship IV**

#### 6 Credits

Theory and application of three-phase transformers and autotransformers. Electrical distribution using switchboards, panelboards, and circuit breakers.

Prerequisites: OEET 153 and consent of instructor.

### **OEET 205. National Electric Code**

#### 3 Credits

Interpretation and application of the National Electric Code.

Prerequisite: OEET 110.

### **OEET 210. Intermediate Electricity**

### 5 Credits (3+4P)

Introduction to inductance, capacitance, reactances, and power factor correction.

Prerequisite: OEET 110.

#### **OEET 221. Cooperative Experience I**

#### 1-4 Credits

Supervised cooperative work program. Student is employed in an approved occupation and is supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U.

Prerequisite: consent of instructor.

OEET 251. Electrical Apprenticeship V

### 6 Credits

Commercial/industrial applications for electricians. Blueprint interpretation, commercial construction types and processes, wiring methods, wiring materials, and motor controls.

Prerequisites: OEET 154 and consent of instructor.

### **OEET 252. Electrical Apprenticeship VI**

### 6 Credits

In-depth commercial applications to include commercial/industrial service calculations, mobile home parks, multi-family dwellings, and commercial fire/security systems.

Prerequisites: OEET 251 and consent of instructor.

# **OEET 253. Electrical Apprenticeship VII**

### 6 Credits

Control devices in commercial/industrial applications; emphasis on logic in-line diagrams, time delay starters, reversing starters, and manual/magnetic solenoids.

Prerequisites: OEET 252 and consent of instructor.

### **OEET 254. Electrical Apprenticeship VIII**

### 6 Credits

Miscellaneous topics for the journeyperson electrician to include power distribution/transmission, solid state controls and relays, photoelectric and proximity controls and programmable controllers.

Prerequisites: OEET 253 and consent of instructor.

### **OEET 295. Special Topics**

#### 1-6 Credits

Topics to be announced in the Schedule of Classes.

# OEGR-DIGITAL GRAPHIC TECH (OEGR)

### **OEGR 221. Cooperative Experience I**

#### 1-3 Credits

Student employed in approved work site; supervised and rated by employer and instructor. Each credit requires specified number of hours of on-the-job work experience. Restricted to majors. Graded S/U. **Prerequisite:** consent of instructor.

# OEGS-GEOGRAPHIC INFO SYS (OEGS)

# OEGS 181. Introduction to Principles of Geographic Information Systems 4 Credits (3+3P)

This course will introduce students to fundamental software capabilities of geographic information systems (GIS), along with the underlying conceptual framework. Topics include origins, development, and methods of cartography, components of a GIS, the nature and characteristics of spatial data, methods of data capture and sources of data, review of typical GIS operations and applications. Producing useful, aesthetically pleasing maps will be an intergral part of the course. ArcGIS software will be used for this course. May be repeated up to 4 credits.

# OEGS 187. GIS Data Acquisition and Management 4 Credits (3+3P)

An introduction to defining data needs and evaluating whether a given dataset matches those needs. Students will explore some common geographic data formats used in ArcGIS and learn about sources of data and maps that can be incorporated into a GIS project. The student will learn the advanced functionality and versatility of using geodatabases. The student will demonstrate how to design and build a geodatabase, migrate exisiting data to a geodatabase and edit data stored in a geodatabase. Methods for georeferencing scanned maps, aerial photos and computer aided drafting files will be explored and discussed. May be repeated up to 4 credits.

Prerequisite(s): OEGS 181.

# OEGS 231. Introduction to GIS Spatial Analysis 4 Credits (3+3P)

This course aims to provide students with the knowledge and skills necessary to investigate the spatial patterns which result from social and physical processes operating on or near the Earth's surface. Essential theoretical concepts of quantitative geography are examined, including measures of geographical distribution (including point and areal pattern analysis) and spatial autocorrelation, interpolation and network connectivity. Students will also be introduced to ArcView (online GIS) and the open source programs such as QGIS and GRASS. May be repeated up to 4 credits.

Prerequisite(s): OEGS 181.

# OEGS 291. Special Topics in Geographic Information Systems 1-3 Credits (1-3)

Topics to be announced in the Schedule of Classes. May be repeated up to 12 credits. Restricted to Community Colleges campuses only.

# **OEPS-PUBLIC SAFETY (OEPS)**

### OEPS 150. Correctional Officer Training I 4 Credits (2+4P)

Introduction to corrections, departmental policies and procedures, report writing, officer safety, and physical conditioning. Restricted to majors. **Prerequisite:** consent of instructor.

# OEPS 180. Correctional Officer Training II 4 Credits (2+4P)

Criminal justice system, communications, ethics, correctional law and responsibilities, search procedures, hostage situations, institutional gangs. Restricted to majors OEPS 195.

Prerequisite: consent of instructor.

# OEPS 250. Correctional Officer Training III 4 Credits (2+4P)

Use of force, firearms, baton, chemical agents, standard first aid, and CPR. Restricted to majors.

Prerequisite: consent of instructor.

# **OEPS 280. Correctional Officer Training IV**

### 4 Credits (2+4P)

Stress management, supervision of special needs offender, defensive driving, preparation for certifying exams. Restricted to majors.

Prerequisite: consent of instructor.

# OEPT-PHOTOGRAPHIC TRADES (OEPT)

# OEPT 100. Photographics I

### 3 Credits (2+2P)

Covers basic black and white photographic techniques. Emphasizes black and white film and paper handling, film processing, proof printing, projection print, and print finishing. Adjustable camera required. Same as ART 270.

# OEPT 120. Photo Finishing and Presentation

### 2 Credits (1+2P)

Use of visual language for personal expression. Freelance photography; care of original photos; preparation of portfolios, photographic markets, exhibitions and judging, galleries and copyrights. Students will prepare a photographic portfolio. Restricted to: Community Colleges only.

# Prerequisite(s): CMT 115. OEPT 155. Portraiture

### 3 Credits (2+2P)

Hands-on study of professional photography involving people. Studio and environmental portraits, fashion/glamour, and wedding photography. Studio and exterior lighting techniques, selecting lighting equipment, film and supplies. Restricted to: Community Colleges only.

Prerequisite(s): ART 270 or CMT 115.

# **OETS-TECHNICAL STUDIES (OETS)**

# **OETS 100. Industrial/Construction Safety**

### 2 Credits

Covers safety issues such as PPE, BBP, ladder safety, RTK, HazCom, MSDS and information about safety organizations such as OSHA, NIOSH, NFPA, National Safety Council. Community Colleges only. Restricted to Dona Ana and Carlsbad campuses.

# OETS 102. Career Readiness Certification Preparation

#### 1 Credit

This course is designed to prepare students to successfully obtain Career Readiness Certifications in all areas and at the appropriate levels for their program of study. Graded: S/U. May be repeated up to 3 credits. S/U Grading (S/U, Audit).

#### **OETS 103. Technical Career Skills**

#### 4 Credits

This course will be project-based and will encompass writing, presentation, math, reading, and critical thinking skills applied in a technical environment. Restricted to: Community Colleges only.

# **OETS 104. Basic Mathematics for Technicians**

#### 4 Credits

Fundamental mathematical concepts and computations including measurement, ratio and proportions, and pre-algebra as it relates to technical programs.

Prerequisite: appropriate placement test score.

# **OETS 110. Photovoltaic Application**

### 4 Credits (3+2P)

This course will provide an introduction to Photovoltaic (PV) installation. The course will provide instruction on site selection, prep, installation, and maintenance for photovoltaic applications. Students that complete the course and have the opportunity to take the entry level exam with the North American Board of Certified Energy Practitioners (NABCEP) en route to becoming Certified Installers. Restricted to: Community Colleges only.

Prerequisite(s): OETS 101.

# **OETS 117. Writing for Technicians**

### 3 Credits

Instruction in the skills for developing clear, written descriptions of processes and procedures used by technicians in various fields. Emphasis on correct grammar, logical organization, and receiving audience. Focuses on clarity, structure, and concise writing methods. Does not substitute for ENGL 111G. Restricted to: Community Colleges only.

# OETS 118. Mathematics for Technicians 3 Credits (2+2P)

Analysis and problem solving of technical problems using measuring instruments and techniques of arithmetic, algebra, geometry, and trigonometry. Restricted to: Community Colleges only.

**Prerequisite(s):** OETS 104 or CCDM 103N or appropriate placement test score.

### **OETS 120. Business Fundamentals**

### 3 Credits

Instruction in the skills for basic business concepts used by technicians in various fields. Emphasis placed on basic business concepts; business ownership including marketing, management, accounting, and customer services; interpersonal communication; and basic computer concepts including word processing, spreadsheets, and presentation software. Restricted to Community Colleges campuses only.

# **OETS 255. Special Topics Technical Studies**

### 1-6 Credits

Topics to be announced in the Schedule of Classes. Restricted to: Community Colleges only.

Prerequisite(s): Consent of instructor.

# P E-PHYSICAL EDUCATION (P E)

### P E 102. Beginning Weight Training

#### 1 Credit

Introduction to basic principles and techniques of weight training.

# P E 103. Beginning Weight Training for Women

#### 1 Credit

Introduction to basic principles and techniques of weight training as related to women.

### P E 104. Military Physical Fitness

#### 1 Credit

Directed physical fitness activities designed to develop and maintain muscular strength/endurance, cardiopulmonary efficiency, flexibility, and coordination required for leadership roles after graduation.

#### P E 109. Pilates

### 1 Credit

Designed exercise program involves the entire body while focusing on strengthening the core muscles of the torso. Exercises promote coordination, balance, and strength.

### P E 112. Beginning Volleyball for Men

1 Credit

### P E 113. Beginning Volleyball for Women

1 Credit

### P E 114. Basketball for Women

1 Credit

#### P E 115. Basketball for Men

1 Credit

### P E 117. Beginning Soccer

### 1 Credit

Introduction to the basic techniques and skills of soccer.

# P E 127. Cardio-Kickboxing

### 1 Credit

Activities that mimic punches, blocks, and kicks which have been modified to serve the purpose of providing a cardiovascular workout.

### P E 128. Aerobic Dance

### 1 Credit

Designed to increase knowledge of the human body's responses to exercise, enhance the level of muscular development, and cardiovascular endurance with the use of music.

### P E 129. Step Aerobics

### 1 Credit

Designed to increase knowledge of the human body's responses to exercise, enhance the level of muscular development, and cardiovascular endurance with the use of music and steps.

# P E 130. Beginning Swimming

# 1 Credit

## P E 131. Aqua Aerobics

### 1 Credit

Designed to increase knowledge of the human body's responses to exercise, enhance the level of muscular development, and cardiovascular endurance through exercise in water.

### P E 132. Intermediate Swimming

### 1 Credi

Development of fitness through participation in aquatics activities. **Prerequisite(s):** Ability to swim 200 yards.

### P E 134. Lifeguard Training

#### 2 Credits

Skills training for a nonsurf lifeguard. Course will include Standard First Aid and CPR certification.

**Prerequisites:** swim 500 yards, dive to 9-foot depth and retrieve a 10-pound brick, surface dive to 5 feet then swim under water 15 yards, tread water one minute.

### P E 147. Beginning Tennis

1 Credit

### P E 148. Beginning Racquetball

1 Credit

### P E 150. Beginning Golf

1 Credit

#### P E 154. Personal Defense

#### 1 Credit

Physical conditioning and defense skills for men and women.

#### P E 159. Introduction to Brazilian Jiu-Jitsu

### 1 Credit

Brazilian Jiu-Jitsu is primarily a ground fighting art. This course will place heavy emphasis on positional strategy and focus on the sportive aspect of the sport. A Judo/Jiu-Jitsu Gi (uniform) is required.

### P E 166. Futsal (Five-A-Side Soccer)

#### 1 Credit

Futsal, official form of indoor soccer, approved by FIFA.

### P E 173. Running Fitness

#### 1 Credit

Basic fitness knowledge techniques and training methods of fitness running are practiced and refined.

# P E 199. Yoga

### 1 Credit

A holistic approach to exercise benefiting the body, mind, and spirit. Practices focus on alignment, strength, breath relaxation, and restoration.

### P E 202. Intermediate Weight Training

### 1 Credit

Intermediate training and skill techniques in weight lifting. **Prerequisites:** P E 102 or consent of department head.

# $\ensuremath{\mathsf{P}}$ E 203. Weight Training for Olympic and Powerlifting

### 1 Credit

Designed to teach the Olympic form-the clean, jerk and snatch. Class format is a preprogrammed style of instruction with preset programs. Emphasis placed on developing sound lifting techniques.

Prerequisite(s): P E 103 or consent of department head.

### P E 204. Cross Training

### 1 Credit

Intensive training program that incorporates both aerobic and resistive overload approaches to training.

### P E 205. Walking Fitness

### 1 Credit

Basic fitness knowledge techniques and training methods of fitness walking are practiced and refined.

### P E 206. Beginning Physical Fitness

### 1 Credit

Progressive exposure to steady state exercise tailored to individual needs for the purpose of determining, improving, and maintaining physical fitness.

### P E 209. Intermediate Pilates

#### 1 Credit

Intermediate training and skill techniques in Pilates. **Prerequisite(s):** PE 109 or consent of instructor.

### P E 212. Intermediate Volleyball-Men

#### 1 Credit

Prerequisite: P E 112 or consent of department head.

#### P E 213. Intermediate Volleyball-Women

#### 1 Credit

Prerequisite: P E 113 or consent of department head.

### P E 215. Intermediate Walking

#### 1 Credit

A continuation of basic fitness knowledge techniques and training methods of fitness walking are practiced and refined. **Prerequisite:** P E 205 or consent of department head.

# P E 216. Advanced Walking

### 1 Credit

Advanced walking fitness and training techniques are presented, practiced, and refined.

#### P E 228. Intermediate Aerobic Dance

#### 1 Credit

Aerobic dance at a high intensity level with a more in-depth study of the body's physiological response to exercise.

Prerequisite: P E 128 or consent of department head.

### P E 229. Intermediate Step Aerobics

#### 1 Credit

Step aerobic dance at a high intensity level with a more in-depth study of the body's physiological response to exercise.

Prerequisite: PE 129 or consent of department head.

### P E 230. Advanced Swimming

### 1 Credit

Perfection of basic strokes, survival swimming, and physical fitness. **Prerequisite(s):** P E 130 or ability to swim 100 yards.

### P E 263. Outdoor Recreation Skills

### 1 Credit

Selected outdoor activities. Appropriate subtitles, such as hiking and backpacking, camping and survival, hunting and gun safety, casting and angling skills. May be repeated for maximum of 4 credits.

### P E 270. Special Topics

### 1-3 Credits

Specific subjects to be announced in the Schedule of Classes. Each offering will carry appropriate subtitle. May be repeated for a maximum of 4 credits.

# P E 299. Intermediate Yoga

### 1 Credit

Intermediate training and skill techniques in Yoga. **Prerequisite(s)**: PE 199 or consent of instructor.

# PE-P-PHYSICAL EDUCATION (PE P)

### PE P 185. Introduction and Foundations

### 3 Credits

Historical and cultural foundations and vocational, scientific, and educational data on careers in health education, physical education, and recreation. Restricted to: Main campus only.

### PE P 208. Fitness for Health and Sport

#### 3 Credits

A study of the fitness needs for health enhancement and sport participation. Restricted to: P E,SP M,KIN,S ED majors.

### PE P 210. Theory and Technique of Aquatics

#### 2 Credits

Introduction to fundamental aquatics knowledge and skills.

Prerequisite(s): Ability to swim 100 yards.

# PHIL-PHILOSOPHY (PHIL)

### PHIL 100G. Philosophy, Law and Ethics

#### 3 Credits

An introduction to practical problems in moral, social, political, and legal philosophy. Topics to be discussed may include ecology, animal rights, pornography, hate speech on campus, same-sex marriage, justice, abortion, terrorism, treatment of illegal immigrants, and New Mexican Aboriginal Peoples' land claims.

### PHIL 101G. The Art of Wondering

#### 3 Credits

Introduction to some of the main problems of philosophy, with an emphasis on critical thinking. Philosophy conceived as an aid to living in this world with oneself and with others.

# PHIL 124G. Philosophy of Music

#### 3 Credits

This is an introductory course in the philosophy of music. This course will survey three questions: What is music? Why is music important? How can we distinguish good music from bad music? We will draw examples from a wide variety of musical genres, from classical music, jazz and blues to punk and rap. Students will be encouraged to apply philosophical theorizing to think about their preferred musical form.

### PHIL 136G. The Quest for God

### 3 Credits

An effort to understand the religious life; a consideration of some of the traditional approaches to God and what it means to be religious.

### PHIL 201G. Introduction to Philosophy

### 3 Credits

Selected problems within the main branches of philosophy: metaphysics, theory of knowledge, ethics. Practice given in critical thinking.

### PHIL 211G. Informal Logic

### 3 Credits

Logical analysis of ordinary language, construction of definitions, argumentation, analysis of fallacious modes of thought and basic rhetorical considerations.

## PHIL 223G. Ethics

### 3 Credits

The philosophical explication of morality. Significant ethical systems developed in the history of Western thought.

# PHLS-PUBLIC HEALTH SCIENCES (PHLS)

### PHLS 100. Introduction to Health Science

### 1 Credit

An overview of professional career opportunities in the realm of health science as well as the functional roles of practice, education, administration, and research. Some field trips will be required.

### PHLS 150G. Personal Health and Wellness

#### 3 Credits

A holistic and multi-disciplinary approach towards promoting positive lifestyles. Special emphasis is placed on major problems that have greatest significance to personal and community health. Topics to include nutrition, stress management, fitness, aging, sexuality, drug education, and others.

#### PHLS 275. Foundations of Health Education

#### 3 Credits

Role and responsibility of the health educator with emphasis on small group dynamics, oral and written communication skills, building community coalitions and an introduction to grant writing. Taught with PHLS 375. Cannot receive credit for both PHLS 275 and PHLS 375. May be repeated up to 3 credits.

Prerequisite(s): PHLS 150G, or consent of instructor.

#### PHLS 295. Essentials of Public Health

### 3 Credits

The course will focus on principles and major areas if public health, including ecological and total personal concept of health care system, epidemiological approaches to disease prevention and control . Consent of Instructor required.

# PHYS-PHYSICS (PHYS)

# PHYS 110G. The Great Ideas of Physics

### 4 Credits (3+3P)

Conceptual, quantitative, and laboratory treatments of the great ideas and discoveries that have influenced lives and changed perceptions of nature, from Johannes Kepler's laws of planetary motion and Isaac Newton's and Albert Einstein's laws of motion and gravity to the modern concepts of the quantal structure of nature and the big bang universe.

# PHYS 120G. Introduction to Acoustics

### 4 Credits (3+2P)

Lecture, demonstration, and laboratory treatment of the general properties of waves, the production, transmission, and reception of sound waves, including musical and vocal sounds, and characteristics of the human ear and several kinds of sources.

# PHYS 150. Elementary Computational Physics 3 Credits (2+2P)

Introduction to computational techniques for the solution of physics-related problems. May be repeated up to 3 credits.

**Prerequisite(s):** a C- or better in MATH 121G or MATH 190G or MATH 191G.

# PHYS 203. Supplemental Instruction to PHYS 213 0.5-1 Credits (.5-1)

Optional workshop as a supplement to PHYS 213. The tutorial sessions focus on reasoning and hands-on problem solving. May be repeated up to 1 credits.

Corequisite(s): PHYS 213.

# PHYS 204. Supplemental Instruction to PHYS 214 0.5-1 Credits (.5-1)

Optional workshop as a supplement to PHYS 214. The tutorial sessions focus on reasoning and hands-on problem solving. May be repeated up to 1 credits.

Corequisite(s): PHYS 214.

# PHYS 205. Supplemental Instruction to PHYS 215G

### 0.5-1 Credits (.5-1)

Optional workshop as a supplement to PHYS 215G. The tutorial sessions focus on reasoning and hands-on problem solving. May be repeated up to 1 credits

Corequisite(s): PHYS 215G.

### PHYS 206. Supplemental Instruction to PHYS 216G

### 0.5-1 Credits (.5-1)

Optional workshop as a supplement to PHYS 216G. The tutorial sessions focus on reasoning and hands-on problem solving. May be repeated up to 1 credits.

Corequisite(s): PHYS 216G.

# PHYS 210. Introductory Physics for the Health Sciences

Algebra-level introduction to topics required for the Health Sciences including basic mechanics (including sound, mechanical waves and fluids), heat and thermodynamics, electricity and magnetism, optics and electromagnetic waves, atomic and nuclear physics and applications to medical imaging. Restricted to Community Colleges campuses only.

Prerequisite(s): MATH 120 or Equivalent.

### PHYS 211G. General Physics I

#### 3 Credits

Non-calculus treatment of mechanics, waves, sound, and heat. Knowledge of simple algebra and trigonometry is required.

### PHYS 211GL. General Physics I Laboratory

#### 1 Credit

Laboratory experiments in topics associated with material presented in PHYS 211G.

Prerequisite(s)/Corequisite(s): PHYS 211G.

# PHYS 212G. General Physics II

### 3 Credits

Non-calculus treatment of electricity, magnetism, and light. May be repeated up to 3 credits.

Prerequisite(s): a C- or better in PHYS 211G or PHYS 221G.

# PHYS 212GL. General Physics II Laboratory

### 1 Credit

Laboratory experiments in topics associated with material presented in PHYS 212G.

Prerequisite(s)/Corequisite(s): PHYS 212G.

# PHYS 213. Mechanics

### 3 Credits

Newtonian mechanics. Pre/ **Corequisite(s):** MATH 191G.

### PHYS 213 L. Experimental Mechanics

### 1 Credit

Laboratory experiments associated with the material presented in PHYS 213. Science majors. Pre/

Corequisite(s): PHYS 213.

### PHYS 214. Electricity and Magnetism

### 3 Credit

Charges and matter, the electric field, Gauss law, the electric potential, the magnetic field, Ampere's law, Faraday's law, electric circuits, alternating currents, Maxwell's equations, and electromagnetic waves. May be repeated up to 3 credits.

**Prerequisite(s)/Corequisite(s):** MATH 192G. Prerequisite(s): a C- or better in PHYS 213 or PHYS 215G, and MATH 191G.

### PHYS 214 L. Electricity and Magnetism Laboratory

#### 1 Credit

Laboratory experiments associated with the material presented in PHYS 214.

**Prerequisite(s)/Corequisite(s):** PHYS 214. Prerequisite(s): a C- or better in PHYS 213L or PHYS 215GL.

### PHYS 215G. Engineering Physics I

#### 3 Credits

Calculus-level treatment of kinematics, work and energy, particle dynamics, conservation principles, simple harmonic motion. May be repeated up to 3 credits.

Prerequisite(s): a C- or better in MATH 191G.

### PHYS 215GL. Engineering Physics I Laboratory

#### 1 Credit

Laboratory experiments associated with the material presented in PHYS 215G. Students wishing to use the PHYS 215G-216G sequence to satisfy the basic natural science general education requirement must register for either PHYS 215GL or PHYS 216GL. Pre/

Corequisite(s): PHYS 215G.

# PHYS 216G. Engineering Physics II

#### 3 Credits

A calculus-level treatment of topics in electricity, magnetism, and optics. May be repeated up to 3 credits.

**Prerequisite(s):** a C- or better in PHYS 213 or PHYS 215G and MATH 192G.

# PHYS 216GL. Engineering Physics II Laboratory

#### 1 Credit

Laboratory experiments associated with the material presented in PHYS 216G.

Prerequisite(s)/Corequisite(s): PHYS 216G. Prerequisite(s): A C- or better in PHYS 213L or PHYS 215GL.

### PHYS 217. Heat, Light, and Sound

### 3 Credits

Calculus-level treatment of thermodynamics, geometrical and physical optics, and sound. May be repeated up to 3 credits.

**Prerequisite(s):** a C- or better in PHYS 213 or PHYS 215G, and MATH 191G.

### PHYS 217 L. Experimental Heat, Light and Sound

### 1 Credit

Laboratory experiments associated with the material presented in PHYS 217. Science majors.

**Prerequisite(s)/Corequisite(s):** PHYS 217. Prerequisite(s): a C- or better in PHYS 213L or PHYS 215GL.

# PHYS 218. Supplemental Instruction to PHYS 217 0.5-1 Credits (.5-1)

This optional workshop supplements PHYS 217 "Heat, Light, and Sound". Students actively apply concepts and methods introduced in PHYS 217 to problem solving and quantitative analysis. May be repeated up to 1 credits.

Corequisite(s): PHYS 217.

# PHYS 221G. General Physics for Life Sciences I

This algebra-based introduction to general physics covers mechanics, waves, sound, and heat. Special emphasis is given to applications in the life sciences. This course is recommended for students in the life sciences and those preparing for the physics part of the MCAT.

Prerequisites: a C or better in MATH 120 or higher.

### PHYS 221GL. Laboratory to General Physics for Life Science I 1 Credit

Laboratory experiments in topics associated with material presented in PHYS 221G.

**Prerequisite(s)/Corequisite(s):** PHYS 221G. Restricted to Las Cruces campus only.

# PHYS 222G. General Physics for Life Sciences II

#### 3 Credits

This algebra-based course covers electricity, magnetism, light, atomic physics, and radioactivity. Special emphasis is given to applications in the life sciences This course is recommended for students in the life sciences and those preparing for the physics part of the MCAT. May be repeated up to 3 credits.

**Prerequisite(s):** a C- or better in PHYS 211G or PHYS 221G, and MATH 121G.

### PHYS 222GL. Laboratory to General Physics for Life Sciences II 1 Credit

Laboratory experiments in topics associated with material presented in PHYS 222G.

**Prerequisite(s)/Corequisite(s):** PHYS 222G. Restricted to Las Cruces campus only.

# PHYS 223. Supplemental Instruction to PHYS 221

### 1 Credit

This optional workshop supplements Physics for Life Sciences I. The tutorial sessions focus on reasoning and hands-on problem solving. **Corequisite(s):** PHYS 221G.

# PHYS 224. Supplemental Instruction to PHYS 222

#### 1 Credit

This optional workshop is a supplement to Physics for Life Science II. The tutorial sessions focus on reasoning and hands-on problem solving. **Corequisite(s):** PHYS 222G.

# PHYS 280. Independent Study

### 1-3 Credits

Individual analytical or laboratory studies directed by a faculty member. May be repeated for a maximum of 6 credits.

Prerequisite: consent of instructor.

# PHYS 290. Special Topics

### 1-3 Credits

Topics to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

# PL-S-PARALEGAL SERVICES (PL S)

### PL S 160. Legal System for the Paralegal

### 3 Credits

Introduction to the court system, administrative agencies, functions of law offices, and professional conduct and legal ethics. Restricted to: Community Colleges only.

Prerequisite(s): ACT standard score in English of 16 or higher or a Compass score 76 or higher; for those scoring 13-15 in English on ACT or 35-75 on Compass, successful complete of CCDE 105N or CCDE 110N; for those scoring 12 or below on the ACT standard score in English or 34 or below on the Compass, successful completion of CCDE 105N & CCDE 110N.

# PL S 161. Legal Terminology

### 3 Credits

Survey of the language of the law that will serve either as an introductory course or as a review course to prepare students for the certification test.

### PL S 162. The Virtual Law Office

#### 3 Credits

The Virtual Law Office class is a 'hands-on', project oriented course designated to provide the student with the basic law office skills needed to function successfully in a law office setting. The student will gain a practical, working knowledge of the procedures necessary to work in a law office. The skills learned in the class will directly translate to real life situations. Restricted to: Community Colleges only.

Prerequisite(s): PL S 160.

# PL S 180. Constitutional Law for the Paralegal

#### 3 Credits

Case standing of the law of the Constitution and Bill of Rights with regard to day-to-day applications in the law practice. Documents dealing with constitutional problems in both civil and criminal areas of law will be drafted and discussed.

Prerequisite: PL S 160.

### PL S 190. Criminal Law for the Paralegal

#### 3 Credits

Introduction to federal and state criminal law; criminal proceedings, prosecution and defense, sentencing and appeal.

Prerequisite: PL S 160.

# PL S 200. Legal Ethics for the Paralegal

### 3 Credits

Introduction to ethical dilemmas faced in the workforce and the rules of ethics developed by the American Bar Association, various national paralegal organizations, and the Supreme Court of New Mexico.

Restricted to: Community Colleges only.

Prerequisite(s): PL S 160.
PL S 203. Immigration Law

### 3 Credits

Survey of the basics of immigration law including the rights and obligations of citizenship and the naturalization process.

Prerequisite: PL S 160.
PL S 221. Internship I

### 2-4 Credits

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships can be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. Restricted to Community Colleges campuses only.

Prerequisite(s): PLS 274.

### PL S 222. Internship II

### 1-3 Credits

Continuation of PL S 221. Each credit requires specified number of hours of on-the-job work experience. Restricted to Community Colleges campuses only.

Prerequisite(s): PL S 221.

# PL S 231. The Law of Commerce for the Paralegal 3 Credits

Law of contracts, negotiable instruments, bank transfers, secured transactions, debtor-creditor relations, agency, and business types and their formation. Students will study the relevant statutes as well as draft documents associated with these types of legal practice. Restricted to: Community Colleges only.

Prerequisite(s): PL S 160.

### PL S 272. Bankruptcy Law for the Paralegal

#### 3 Credits

Individual and corporate bankruptcy; the basic principles and processes of bankruptcy law as a system of debtor relief and debt collection.

Prerequisite: PL S 160.

# PL S 274. Legal Research and Writing for the Paralegal I 3 Credits

Legal memoranda, briefs, and pleadings will be prepared and written based on the student s original research. Research materials and techniques will be identified and studied; introduction of computer usage in legal research.

Prerequisite: PL S 160 and ENGL 111G.

# PL S 275. Tort and Insurance for the Paralegal 3 Credits

Primary legal principles of tort and insurance law and means of establishing insurance plans, types of torts and insurance, as well as use of specific forms and procedures relating to these areas.

Prerequisite: PL S 160.

# PL S 276. Wills, Trusts, and Probate for the Paralegal 3 Credits

Cases and statutes dealing with wills, trusts, and probate. Emphasis on preparation and drafting of documents and the application of the law and documents to the client s problems.

Prerequisite: PL S 160.

### PL S 277. Family Law for the Paralegal

#### 3 Credits

Methods of conducting client interviews and drafting of pleadings and research relative to families. Laws relating to marriage, divorce, custody, support, adoption, name change, guardianship, and paternity.

Prerequisite: PL S 160.

### PL S 278. Litigation for the Paralegal

### 3 Credits

The law of procedure and evidence will be considered through rules and cases. Case situations will be used to identify and solve problems.

Prerequisite: PL S 160.

# PL S 279. Legal Research and Writing for the Paralegal II 3 Credits

Continuation of PL S 274. Advanced training in legal research problems with a focus on analysis, writing, and preparation of sophisticated legal memoranda and documents.

Prerequisite: PL S 274.

# PL S 280. Interviewing and Investigation for the Paralegal 3 Credits

Techniques of legal interviewing and investigation with emphasis on development of human relations and communication skills.

Prerequisite: PL S 160.

# PL S 298. Independent Study

### 1-3 Credits (1-3)

Individual studies directed by consenting faculty with prior approval by department head. Restricted to Community Colleges campuses only. **Prerequisite(s)**: PL S 160.

# **PORT-PORTUGUESE (PORT)**

# PORT 213. Portuguese for Romance Language Students I 3 Credits

Introduction to the Portuguese language, Brazilian culture and civilization. Taught in Portuguese. Open to students with any previous Romance language study (French, Italian, Portuguese, Romanian, Spanish).

# PORT 214. Portuguese for Romance Language Students II 3 Credits

Continuation of PORT 213.

Prerequisite: C or better in PORT 213 or consent of instructor.

# PSY-PSYCHOLOGY (PSY)

# PSY 201G. Introduction to Psychology

### 3 Credits

Methods and principles of behavior. Topics include human evolution and development, biopsychology, perception, learning, thinking, motivation, social interaction, and the diagnosis and treatment of abnormal behavior.

### PSY 266. Applied Psychology

#### 3 Credits

Explanation of the psychological principles of everyday living. Emphasizes motivation, learning of intelligent behavior, and applications of psychology to social issues. Community Colleges only.

# PSY 274. A Study of Substance Abuse through Service Learning 3 Credits

Physiological and psychological impact of drug use on human behavior. Emphasizes practical applications of intervention and prevention in the community. Community Colleges only.

### PSY 290. Psychology of Adjustment

### 3 Credits

Analyzes the responses people have to conflict, emotional stress, and frustration. It focuses on adapting to these problems and examines both normal and neurotic responses. Community College campus only.

# RADT-RADIOLOGIC TECHNOLOGY (RADT)

# RADT 100. Introduction to Radiologic Technology and Patient Care 2 Credits

Overview of the profession, including ethics, terminology, and basic radiation protection. Addresses basic and specialized procedures and topics related to the care of the patient. Restricted to: Community Colleges only. Restricted to Majors.

# RADT 101. Radiographic Positioning I 4 Credits (2+6P)

Covers radiographic procedure and positioning concepts, techniques, terminology, and mechanics related to the thorax, abdomen, extremities, spine and pelvis. Includes positioning lab and clinical observation.

# RADT 102. Radiographic Positioning II 4 Credits (2+6P)

Continuation of RADT 101. Includes skull, gastrointestinal, urinary, reproductive, biliary systems, and more advanced skeletal positions. Includes positioning lab and clinical observation. Restricted to: Community Colleges only. Restricted to Majors.

Prerequisite: RADT 101.

# RADT 103. Introduction to Radiographic Imaging 3 Credits (2+2P)

Provides the student with an in-depth knowledge of radiographic exposure technique and the factors affecting radiographic film quality. Includes lab experiments. Restricted to majors.

### **RADT 104. Special Radiologic Modalities**

#### 2 Credits

Discussion of various special procedures used in medical imaging such as, angiography, ultrasound, computerized tomography, magnetic resonance imaging, digital imaging, nuclear medicine, radiation therapy, etc. Includes guest lectures and field trips.

Prerequisite: RADT 103.

# RADT 105. Radiographic Physics and Equipment 3 Credits

Fundamentals of rad physics. Includes electromagnetism, x-ray production and interactions, x-ray circuitry, tubes, grids, screens, AES, fluoroscopic and portable units, beam restricting devices, calibration and quality assurance/control. Overview of mammography, US, CT, MRI, and digital radiography. Restricted to: Community Colleges only. Restricted to Majors.

Prerequisite: RADT 103 or consent of instructor.

### RADT 110. Radiographic Pathology

#### 1 Credit

Overview of pathology demonstrated by radiographic procedures.

Restricted to majors. **Prerequisite:** RADT 154.

# RADT 154. Radiographic Anatomy and Physiology

#### 3 Credits

Basic A&P for radiographic application. Includes a systems approach to body structures and organs as they relate to anatomical projections, radiographic identification, and various imaging modalities. Restricted to: RADT majors. Restricted to: Community Colleges only.

**Prerequisite(s)**: AHS 153 or AHS 140 or BIOL 225 or BIOL 154, or consent of instructor.

### **RADT 156. Independent Study**

### 1-6 Credits

Individual studies/research on topics related to the radiological sciences. May be repeated for a maximum of 6 credits. Restricted to: Community Colleges only.

# RADT 190. CT Equipment and Methodology

### 3 Credits

Skill development in the operation of computed tomographic equipment, focusing on routine protocols, image quality, and quality assurance and radiation protection. May be repeated up to 3 credits. Restricted to: CTOM or RADT majors. Restricted to Community Colleges campuses only.

# RADT 200. Radiation Biology and Protection 2 Credits

Biological effects of ionizing radiation on cells and tissues. Includes radiation measurements, policies and protection measures for self, patients, and others. Restricted to majors. Restricted to: Community Colleges only.

Prerequisite(s): RADT 103.

### **RADT 201. Clinical Education I**

#### 9 Credits

Supervised practice in a radiology department under direct supervision of a registered technician. Includes film critiques. Community Colleges Only. Restricted to: RADT,OERT majors. Restricted to Community Colleges campuses only.

Prerequisite(s): RADT 105.

### **RADT 202. Clinical Education II**

#### 12 Credits

Continuation of RADT 201. Student will work under indirect supervision of registered personnel. Restricted to: RADT,OERT majors. Restricted to Community Colleges campuses only.

Prerequisite(s): OERT 201.

#### **RADT 203. Clinical Education III**

#### 11 Credits

Continuation of RADT 202. May be repeated up to 11 credits. Restricted to: RADT,OERT majors. Restricted to Community Colleges campuses only. **Prerequisite(s):** RADT 202.

### **RADT 205. Radiographic Image Critique**

#### 1 Credit

Review of radiographs produced in clinical settings to evaluate anatomy and technical issues. Restricted to majors.

Prerequisite: RADT 201.

# RADT 206. Applied Radiographic Procedures 2 Credits (1+3P)

Advanced course which integrates the principles and techniques of radiologic technology. Restricted to majors.

Prerequisite: RADT 202.

### RADT 207. Cross Sectional Anatomy for Medical Imaging 3 Credits

Anatomic relationships that are present under various sectional orientations as depicted by computed tomography or magnetic resonance imaging. May be repeated up to 3 credits. Restricted to: CTOM or RADT majors. Restricted to Community Colleges campuses only.

# RADT 208. Clinical I (Computed Tomography)

### 3 Credits

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinic professional. May be repeated up to 3 credits. Restricted to: RADT or CTOM majors. Restricted to Community Colleges campuses only.

# RADT 209. Clinical II (Computed Tomography)

### 3 Credits

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinic professional. (Capstone Course). May be repeated up to 3 credits. Restricted to: CTOM or RADT majors. Restricted to Community Colleges campuses only.

# **RESP - RESPIRATORY THERAPY** (RESP)

### RESP 110. Respiratory Therapy I

### 3 Credits

Introduction to basic respiratory care techniques. Includes history, professional organizations, medical gas administration, oxygen therapy, cardiopulmonary AP, patient assessments, and medical terminology. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

### RESP 110 L. Respiratory Therapy I Lab

#### 2 Credits

Laboratory practice of basic respiratory care procedures. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

### **RESP 115. Respiratory Therapy Pharmacology**

### 3 Credits

Concepts of physics as they apply to the physiology of the lungs. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

# RESP 120. Respiratory Therapy II

#### 4 Credits

Advanced respiratory care techniques. Emphasis on airway management, aerosol treatment, chest physiotherapy, pharmacology, posture pressure breathing, and pulmonary rehabilitation. Requires a C or better to remain in program. May be repeated up to 4 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): Admission to program and RESP 110.

Corequisite(s): RESP 120 L.

### RESP 120 L. Respiratory Therapy II Lab

### 2 Credits

Continuation of lab practices and procedures learned in RESP 120, Respiratory Care II, using equipment and simulations. Requires a C or better to remain in program. Corequisite(s):RESP 120. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, RESP 110, RESP 110L and RESP 112

### **RESP 124. Respiratory Therapy II Clinical**

### 3 Credits

Supervised practice and application in a hospital setting. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, RESP 110, RESP 110L and RESP 112

Corequisite(s): RESP 120 and RESP 120L.

### **RESP 155. Respiratory Therapy Special Topics**

### 1-4 Credits

Topics to be announced in the Schedule of Classes. May be repeated for a maximum of 10 credits. Consent of instructor required. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program.

### **RESP 210. Respiratory Therapy III**

#### 2 Credits

Introduction to adult, mechanical, neonatal ventilator theory and concepts of critical care medicine. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, and RESP 115, RESP 120, RESP

120L, and RESP 124. **Corequisite(s):** RESP 210L.

### RESP 210 L. Respiratory Therapy III Lab

#### 2 Credits

Advanced practice procedures using mechanical ventilation devices. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, and RESP 115, RESP 120,

RESP 120 L, and RESP 124. Corequisite(s): RESP 210.

### RESP 224. Respiratory Therapy IV Clinical

#### 3 Credits

Continuation of RESP 124. Emphasis on mechanical ventilators. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, and RESP 115, RESP 120,

RESP 120 L, and RESP 124.

### RESP 230. Respiratory Therapy V

#### 3 Credits

Continuation of RESP 215. Emphasis on special modalities. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

# RESP 230 L. Respiratory Therapy V Lab

# 2 Credits

Advanced practice and procedures of respiratory care. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

# RESP 233. Respiratory Therapy Cardiopulmonary 2 Credits

Concepts of physics as they apply to the physiology of the lung. Emphasis on laws pertaining to gas flow, humidity, and the mechanics of the breathing process. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

### RESP 234. Respiratory Therapy V Clinical

### 3 Credits

Continuation of RESP 214. Emphasis on special modalities. Restricted to: Community Colleges only. Restricted to DA-RESP-AA majors.

### **RESP 240. Respiratory Therapy VI**

### 3 Credits

Advanced theory of hemodynamics, neonate, pediatric, and new specialties that apply to respiratory care. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, and RESP 230, RESP 230L,

RESP 233 and RESP 234. Corequisite(s): RESP 240L.

### RESP 240 L. Respiratory Therapy VI Lab

#### 2 Credits

Advanced laboratory practice and procedures. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program, and RESP 230, RESP 230L,

RESP 233 and RESP 234. Corequisite(s): RESP 240.

### RESP 242. Pediatric Advanced Life Support (PALS)

#### 1 Credit

Etiology, diagnosis, clinical manifestations, and management of cardiopulmonary disorders related to respiratory care. Restricted to majors.

Corequisite: RESP 230.

# RESP 243. Respiratory Therapy Neonatal Resuscitation

### 1 Credit

Advanced practice of the neonatal resuscitation and certification. Restricted to: Community Colleges only. Restricted to RESP majors. **Prerequisite(s)**: Admission to program and RESP 230, RESP 230L, RESP 233, and RESP 234.

Corequisite(s): RESP 240 and RESP 244.

### **RESP 244. Respiratory Therapy VI Clinical**

#### 3 Credits

Clinical experience on special modalities. Requires a C or better to remain in program. Restricted to: Community Colleges only. Restricted to RESP majors

Prerequisite(s): Admission to program, and RESP 230, RESP 230L,

RESP 233 and RESP 234. Corequisite(s): RESP 240.

### **RESP 255. Respiratory Therapy Special Topics**

### 1-4 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 4 credits. Consent of instructor required. Restricted to: Community Colleges only. Restricted to RESP majors.

Prerequisite(s): Admission to program.

# RGSC-RANGE SCIENCE (RGSC)

### **RGSC 150. Rangeland Science Profession**

### 1 Credit

Introduction to scientific disciplines and career opportunities in rangeland science and management.

### **RGSC 250. Special Topics**

### 1-4 Credits

Specific subjects and credits announced in the Schedule of Classes. Maximum of 4 credits per semester and a grand total of 9 credits.

### **RGSC 294. Rangeland Resource Management**

### 3 Credits

Overview of arid and semi-arid ecosystems in the US and abroad, rangeland plant physiology, ecology of rangeland plant communities and ecosystems, sustainable management for multiple uses including grazing livestock production, wildlife habitat, recreation and ecosystem services, and economics of rangeland-based enterprises. Restricted to: Main campus only.

# S WK-SOCIAL WORK (S WK)

#### S WK 221G. Introduction to Social Welfare

#### 3 Credits

A broad overview of current social problems and the role of social agencies and community members in addressing these problems.

#### S WK 251. Women s Issues in Social Work

#### 3 Credits

Examines gender-specific social problems and their identification and resolution through the use of social agencies and community resources. Community Colleges only.

### S WK 253. Case Management

### 3 Credits

Introduction to case management for social- and human-services workers. Overview of typical duties and responsibilities of a case manager, including setting goals, performing assessments, writing progress notes, and linking clients with other resources in the community. Recommended for students considering a career in social work or human services. Community Colleges only.

Prerequisites: PSY 201G and S WK 221G.

# SMET-SCIENCE/MATH/ENG/TECH (SMET)

### SMET 102. Introduction to Engineering Design.

Fundamental concepts of engineering design developed through analysis of case studies and hands-on design projects. Consent of instructor required.

### SMET 201. Research for Visiting Community College Students 1 Credit

Research experience for visiting community college students. Consent of instructor required. Restricted to: Main campus only.

# SOC-SOCIOLOGY (SOC)

### SOC 101G. Introductory Sociology

Introduction to social theory, research, methods of analysis, contemporary issues in historical and cross-cultural contexts. Covers groups, deviance, inequality, family, gender, social change, and collective behavior.

### SOC 201G. Contemporary Social Problems

### 3 Credits

Introduction to the fundamentals of social analysis through the analysis of contemporary American social problems. Emphasis on methods of analysis and cross-national comparisons showing that the social problems studied are common to all societies. Covers racism, violence. poverty, crime, health care, and substance abuse.

# SOC 258. Current Issues in Marriage and Family

### 3 Credits

Examination of contemporary American family life, including courtship, marriage, divorce, and child rearing. Community Colleges only.

# SOC 262. Issues in Death and Dying

### 3 Credits

Major personal and social issues related to the process of dying in our culture. Community Colleges only.

### SOC 263. Human Sexuality

#### 3 Credits

Introduction to cultural and personal aspects of human intimacy, sexuality and the life cycle, sexual variation, and sexually transmitted diseases. Community Colleges only.

### SOC 269. Sexualities and Society

#### 3 Credits

Examines various sexualities from a sociological perspective. Topics include sexual identity, intimate relationships, sexual desire, sexual behavior, the sex industry, and the politics of sexuality. Discussion of selected topics is grounded in both macro and micro sociological viewpoints. Restricted to: Main campus only.

#### SOC 273. Sex and Gender

#### 3 Credits

Analysis of changes, behaviors, and stereotypes of women and men in contemporary Western societies. Same as W S 273.

# SOIL-SOIL (SOIL)

### SOIL 200. Special Topics

### 1-4 Credits

Specific subjects and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester. No more than 9 credits toward a degree. May be repeated up to 9 credits. Consent of Instructor required.

### SOIL 252. Soils

#### 3 Credits

Origin, classification, morphology, and physical, chemical, and biological properties of soils.

Prerequisite: CHEM 111G and CHEM 112G.

### SOIL 252 L. Soils Laboratory

Morphological, chemical, physical and biological properties of soil in the laboratory and field.

# Corequisite: SOIL 252.

# SP M-SPORTS MEDICINE (SP M)

# SP M 190. Introduction to Athletic Training

### 3 Credits

Introduction to the principles of athletic training.

### SP M 191. Medical Terminology

Study of the structure of medical language with emphasis on sports medicine-related terminology. To include analysis and interpretation of medical documentation. Restricted to: Las Cruces campus only.

### SP M 200. Career Preparation

From concept to implementation: Career exploration, setting up degree plans, finding graduate programs, developing professional resumes, writing letters of application, seeking letters of recommendation, and interview preparation May be repeated up to 3 credits. Consent of Instructor required. Restricted to Las Cruces campus only.

# SP M 223. Exploring Extreme Human Performance

A reading, writing and documentary based course studying human's quest and the related sacrifices associated with participating in extreme performance activities such as the Olympics, wakeboarding, snowboarding, military special forces, ultra-run events, marathons, etc. Consent of Instructor required. Restricted to Las Cruces campus only.

# SP M 250. Emergency Response in Sports Medicine 2 Credits

Designed to provide knowledge and experience in emergency care procedures, blood borne pathogens, and first aid. Students will receive certification in CPR/AED for the Professional Rescuer and in First Aid, upon successful completion of course. May be repeated up to 2 credits. Restricted to Las Cruces campus only.

Prerequisite(s): Consent of Instructor.

### SP M 271. Anatomy & Physiology I

#### 3 Credits

Detailed study of the structure and function of the human musculoskeletal, cardiovascular, respiratory, and peripheral nervous systems. Designed specifically for students interested in allied health professions. Restricted to Las Cruces campus only.

# SP M 271 L. Anatomy and Physiology Laboratory

Compliment to SP M 271. Students will engage in activities designed to enhance appreciation of the anatomical structures related to the content areas for SP M 271. Restricted to Las Cruces campus only.

### SP M 272. Clinical Practicum I

#### 2 Credits

Introduction to the clinical aspects of the athletic training education program. Must maintain at least 3.0 GPA. May be repeated up to 4 credits. Consent of Instructor required. Restricted to: SP M majors. Restricted to Las Cruces campus only.

### SP M 273. Clinical Practicum II

### 3 Credits

Athletic training psycho-motor skills are enhanced and assessed by a preceptor during clinical rotations. Emphasis is on competencies and proficiencies previously instructed in didactic courses. Must maintain a 3.0 GPA. Consent of Instructor required. Restricted to: SP M majors. Restricted to Las Cruces campus only.

### SP M 275 L. A & P Lab PE/Dance

### 1 Credit

Practical laboratory involving the kinematic and kinesthetic aspects of Human Anatomy and Physiology as it applied to Physical Education and Dance Restricted to: Physical Education and Dance. Not acceptable for Kinesiology Majors majors. Restricted to Las Cruces campus only.

Prerequisite(s): SP M 271.

### SP M 290. General Medical Conditions

### 3 Credits

Study of the recognition, evaluation, management, and treatment of non-orthopedic medical conditions that affect the physically active population. Consent of Instructor required. Restricted to: SP M and Kines Majors majors. Restricted to Las Cruces campus only.

Prerequisite(s): SP M 190, 191 and 271/271L.

# **SPAN-SPANISH (SPAN)**

# SPAN 111. Elementary Spanish I

### 4 Credits (4)

Spanish for beginners. Speaking and writing common interactions in predictable settings using basic vocabulary and verb tenses. Communicate in Spanish both orally and in writing sufficiently well so as to be able to make yourself understood by native speakers accustomed to dealing with non-native speakers. In spontaneous conversation and in writing, students will be able to produce a few sentences. Prerequisite(s): Not open to Spanish-speaking students except by consent of instructor. Prerequisite: language placement and/or assessment by departmental examination.

# SPAN 112. Elementary Spanish II

### 4 Credits (4)

Spanish for beginners. Speaking and writing common interactions in predictable settings using basic vocabulary and verb tenses, including talking about events in the past and possible recommendations for the future. Communicate in Spanish both orally and in writing sufficiently well so as to be able to make yourself understood by native speakers accustomed to dealing with non-native speakers. In spontaneous conversation and in writing, students will be able to produce a variety of sentences and form context appropriate to open-ended questions Prerequisite(s): Not open to Spanish-speaking students except by consent of instructor.

**Prerequisite:** language placement and/or assessment by departmental examination or a C- or better in SPAN 111.

### SPAN 113. Spanish for Heritage Learners I

### 3 Credits

Emphasis on development of heritage Spanish language skills learned at home and/or in the community. Covers listening comprehension, development of vocabulary and cultural activities to help strengthen heritage language and culture. Students who have previously earned a C or better in SPAN 111 or SPAN 112 may not recieve credit for this course.

# SPAN 115. Elementary Spanish I for Hotel, Restaurant and Tourism Managers

### 4 Credits

Beginning Spanish for HRTM majors only. Will count towards HRTM degree language requirement. Does not count towards language requirement for other majors. Restricted to: Main campus only. Restricted to HRTM majors.

### SPAN 211. Intermediate Spanish I

### 3 Credits (3)

Speaking, reading and writing. Not open to Spanish-speaking students except by consent of instructor.

**Prerequisite:** language placement and assessment by departmental examination or C or better in SPAN 112.

### SPAN 212. Intermediate Spanish II

## 3 Credits (3)

Speaking, reading and writing. Not open to Spanish-speaking students except by consent of instructor.

**Prerequisite:** language placement and assessment by departmental examination or C or better in SPAN 211.

## SPAN 213. Spanish for Heritage Learners II

### 3 Credits

Emphasis on development of heritage language skills learned at home and/or in the community. Covers spoken Spanish, reading activities and grammar skills to build on existing knowledge of the language.

### SPAN 214. Spanish for Heritage Learners III 3 Credits

Continued development of heritage Spanish language skills learned at home and/or in the community. Emphasis on reading, writing and critical thinking skills. Review of grammar points will also be stressed in preparation for upper level courses.

# SPCD-ENGLISH AS A SECOND LNG (SPCD)

# SPCD 108. Intermediate ESL Listening and Speaking 3 Credits

Development of listening and speaking skills with attention to pronunciation. Emphasis on conversation and oral practice appropriate to an academic setting. Graded S/U.

**Prerequisites:** placement based on English language screening test, and either a minimum TOEFL score of 500 or consent of instructor.

# SPCD 110. Intermediate ESL Composition and Grammar Review 3 Credits

Development of fluent academic writing skills, with an emphasis on grammar review for editing purposes.

**Prerequisite(s):** Placement based on English language screening test, and either a minimum TOEFL score of 500 or consent of instructor.

### SPCD 111G. Advanced ESL Composition

#### 4 Credits

Academic writing, including library research papers and the issue of plagiarism, for students with nonnative English. (SPCD 111G is substituted for ENGL 111G for international students whose native language is not English.). Restricted to: Main campus only.

**Prerequisite(s):** Placement based on English language screening test, and either a minimum TOEFL score of 500 or consent of instructor; or successful completion of SPCD 110.

# **SPED-SPECIAL EDUCATION (SPED)**

### SPED 201. Topics

### 3 Credits

Offered under various subtitles that indicate the subject matter to be covered. May be repeated 3 times for a maximum of 9 credits.

# SPED 202. Culture, Learning and Academic Achievement in a Diverse Society

### 3 Credits

Development of culturally responsive learning strategies, skills and utilization of support services, to enchance academic achievement. Restricted to: Main campus only.

# SPED 210. Introduction to Special Education

For paraprofessional students who will be working with a teacher in a Special Education classroom. This class will provide an overview of characteristics of children with special needs, legal issues, framework of effective instruction and a variety of practical teaching and learning strategies that are relevant to the tasks and academic demands required in inclusive classrooms.

# **STAT-STATISTICS (STAT)**

# STAT 251G. Statistics for Business and the Behavioral Sciences 3 Credits

Techniques for describing and analyzing data; estimation, hypothesis testing, regression and correlation; basic concepts of statistical inference. Crosslisted with: A ST 251G.

Prerequisite(s): C- or better in MATH 120.

# STAT 271G. Statistics for Psychological Sciences

Techniques for describing and analyzing data; basic concepts of statistical inference; estimation, hypothesis testing, correlation, and analysis of variance.

Prerequisite(s): C- or better in MATH 120.

# **SUR-SURVEYING (SUR)**

# SUR 101. Introduction to Surveying Engineering 1 Credit

Review and discussion of career paths open to surveying engineers. Restricted to: Main campus only.

# SUR 201. GPS and Spatial Data Applications 3 Credits

Overview of spatial data applications based on GPS observations. Emphasis on positioning and navigation using code-phase techniques with handheld receivers. Use of coordinate systems. Students encouraged to have their own GPS handheld unit.

### SUR 222. Plane Surveying

### 3 Credits (2+3P)

Theory and practice of geomatics as applied to plane surveying in the areas of linear measurements, angle measurements, area determination, differential and trigonometric leveling, and topographic mapping. May be repeated up to 3 credits. Crosslisted with: DRFT 222.

Prerequisite(s): MATH 190G.

### SUR 264. Introduction to LIS

### 3 Credits (2+3P)

Introduction to land information systems. Land tenure systems, coordinate systems, computer methods. Pre/

Corequisite(s): DRFT 109.

# SUR 285. Precise Digital Mapping

### 3 Credits

Perform basic photogrammetric mapping, and create digital terrain models. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): SUR 222 or DRFT 222.

# SUR 292. Public Land Survey System Boundaries 3 Credits (2+3P)

Detailed study of the U.S. Public Land Survey System Instructions with special emphasis on New Mexico. Sectionalized land subdivision, corner restoration, and field surveys. Field trips required.

Prerequisite: SUR 222.

# SURG-SURGICAL TECHNOLOGY (SURG)

# SURG 120. Surgical Technology Clinical I 2-4 Credits

This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. This course is designed to prepare the student to enter the surgical environment. This course provides an introduction to the operating room, observation of surgical procedures, direct participation in the preoperative (pre-op, intra-op, post-op) preparation of individual cases and professional roles and responsibilities of individual members of the surgical team. Direct supervision is provided by the clinical professional. May be repeated up to 4 credits.

**Prerequisite(s):** Admission to Surgical Technology Program, BIOL 221, BIOL 225, BIOL 226, NURS 150.

Corequisite(s): SURG 140,SURG 145.

# SURG 140. Introduction to Surgical Technology 4 Credits

This is an orientation to surgical technology theory, surgical pharmacology and anesthesia, technology sciences and patient care concepts and is designed to prepare the student to enter the surgical environment with entry-level knowledge necessary to understand patient responses to disease, illness, hospitalization, surgical procedures, commonly used pharmacological and anesthetic agents, and legal, moral, and ethical issues that could be encountered in the surgical environment. Restricted to Community Colleges campuses only.

Prerequisite(s): Admission to Surgical Technology Program; BIOL 221, BIOL 226, & NURS 150.

# SURG 145. Fundamentals of Perioperative Concepts & Techniques 4-5 Credits (3+3P)

This is an in-depth coverage of perioperative concepts such as aseptic/ sterile principles and practice, infectious processes, wound healing and creation and maintenance of the sterile field. This course is designed to prepare the student to enter the surgical environment with entry-level knowledge of aseptic technique principles and practices, the creation and maintenance of the sterile field including equipment, supplies and instrumentation, and basic case preparation and procedures. An introduction to diseases and disease processes that may be displayed by the surgical patient and the patient's bodily responses to disease are also included. May be repeated up to 5 credits.

**Prerequisite(s):** Admission to Surgical Technology Program, BIOL 221, BIOL 225, BIOL 226, & NURS 150.

# SURG 150. Surgical Procedures I 4-5 Credits (3-5+3P)

This course is an introduction to surgical procedures and its related pathologies. Emphasis on surgical procedures related to general, obstetrics/gynecology, genitourinary, otorhinolaryngology and orthopedic surgical specialties incorporating instruments, equipment. It is designed to prepare the student to function actively in the surgical environment with entry-level knowledge of surgical procedures. This course expands the basic foundation principles and combines the study of common surgical procedures to include anatomy, physiology and pathophysiology. Specific patient care concepts, medications, instrumentation, equipment, supplies and complication related to selected surgical procedures will be discussed. Admission to Surgical Technology Program necessary to enroll in the course.

Prerequisite(s): SURG 140, SURG 145, and SURG 120.

# SURG 155. Pharmacology for the Surgical Technology 3 Credits

This is an orientation to surgical pharmacology and anesthesia and is designed to prepare the student to enter the surgical environment with knowledge necessary to categorize the classification of drugs, calculate drug dosages and identify the therapeutic use, routes of administration, indications, contraindications and adverse effects of pharmacologic agents used in the perioperative setting. This course is the foundation for the acquisition of program specific competencies as identified by the AST Core Curriculum. Restricted to Carlsbad campus only.

### SURG 160. Surgical Procedures II 4 Credits

This an introduction to surgical procedures and related pathologies. Emphasis on surgical procedures related to thoracic, peripheral vascular, plastic/reconstructive, ophthalmology, cardiac and neurological surgical specialties incorporating instruments. The course is designed to prepare the student to continue to function actively in the surgical environment with entry-level knowledge of more complex surgical procedures. This course expands the basic foundation principles and combines the study of complex surgical procedures to include anatomy, physiology, and pathophysiology. Specific patient care concepts, medications, instrumentation, equipment, supplies, and complications related to specific surgical procedures will be discussed. Realities of clinical practice and concepts of death and dying will also be discussed. Admission to Surgical Technology Program necessary to enroll in the course. Restricted to Community Colleges campuses only.

Prerequisite(s): SURG 150, SURG 260.

# SURG 230. Professional Readiness 2-3 Credits (2-3)

This course transitions the student into professional readiness for employment, professional readiness for attaining certification and professional readiness for maintaining certification status. May be repeated up to 3 credits. Admission to Surgical Technology Program necessary to enroll in the course.

Prerequisite(s): SURG 140, SURG 145, SURG 120, SURG 150, SURG 260. Corequisite(s): SURG 160, SURG 265.

# SURG 260. Surgical Technology Clinical II 4 Credits

This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This course is designed to provide the student the opportunity to function actively in the role as a surgical technologist and health care team member in a clinical setting under the direct supervision of faculty and health care staff. Applications of basic principles and practices combined with a supervised clinical experience participating in common surgical procedures is the focus. Admission to Surgical Technology Program necessary to enroll in the course. Restricted to Community Colleges campuses only.

Prerequisite(s): SURG 120, SURG 140, & SURG 145.

# SURG 265. Surgical Technology Clinical III 3-7 Credits

This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. This course is designed to provide the student the opportunity to function actively in the role of a surgical technologist and health care team member in a clinical setting under the direct supervision of faculty and health care staff. Refinement and application of basic principles and practices combined with entry-level employment competency expectations is the focus. Preparation for the National Certification Examination for Surgical Technologists is also included. May be repeated up to 7 credits. Admission to Surgical Technology Program necessary to enroll in the course.

Prerequisite(s): SURG 260.

# TCEN-ENVIRONMENTAL/ENERGY TECH (TCEN)

# TCEN 101. Energy for the Next Generation 3 Credits (2+2P)

This course will survey a broad range of sources of energy, types of energy, energy storage, and the forms of energy. Students will be exposed to theory in the classroom, laboratory exercises, and field trips to provide them with a solid foundation for all subsequent energy related environmental courses. Crosslisted with: OETS 101.

**Prerequisite(s)/Corequisite(s):** OETS 118 or MATH 120. Restricted to: Community Colleges only.

## TCEN 105. Building Analyst I 3 Credits (2+2P)

This course is designed to provide the foundational knowledge and expertise necessary for the energy auditor and home performance contractor. Crosslisted with: OETS 105. Restricted to: Community Colleges only.

# TCEN 106. Building Analyst II 3 Credits (2+2P)

Designed to prepare the student for the BPI Building Analyst Certification. This course will walk the student through the hands-on process of conducting visual building inspections, diagnostic testing, identifying improvement opportunities, documenting a home's performance and preparing a scope of work. Crosslisted with: OETS106.

**Prerequisite(s)/Corequisite(s):** TCEN 105 or OETS 105. Restricted to: Community Colleges only.

# TCEN 110. Photovoltaic Application 4 Credits (3+2P)

This course will provide an introduction to Photovoltaic (PV) installation. The course will provide instruction on site selection, prep, installation, and maintenance for photovoltaic applications. Students that complete the course and have the opportunity to take the entry level exam with the North American Board of Certified Energy Practitioners (NABCEP) en route to becoming Certified Installers. Crosslisted with: OETS110.

Prerequisite(s)/Corequisite(s): TCEN 101 or OETS 101. Restricted to: Community Colleges only.

# TCEN 111. Basic Electrical Principles I, DC Circuits 4 Credits (3+2P)

Course begins with the basics of electricity and DC circuits. Includes categorization of material properties within conductors, semiconductors, and insulators. Gradual progression tackles more complex topics like DC circuit analysis of series and parallel circuits, including Kirchhoff's laws, Thevenin's & Norton's theorems, and superposition. Finally DC combination circuits, magnetism and electromagnetism, generators and motors are covered. Emphasis on safety throughout. May be repeated up to 4 credits.

**Prerequisite(s)/Corequisite(s):** OETS 104 or MATH 120. Restricted to Community Colleges campuses only.

# TCEN 112. PV Power Generation Design Fundamentals 3 Credits (2+2P)

A study of photo voltaic design basics, photo voltaic (PV) Cells, modules, and system components; electrical circuits; grid-tied/grid-interactive PV system design and sizing for use on homes; solar electric products and applications; and understanding energy conversion from sunlight to electricity, and working with solar conversion equipment. Pre/ May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): TCEN 111 and (OETS 104 or MATH 120). Restricted to Community Colleges campuses only.

# TCEN 113. OSHA 10 Hour Construction Hazard Identifications 1 Credit

Intended for entry-level participants to provide instruction on a variety of construction safety and health standards. Topics include Introduction to OSHA, Electrical, Ladder, Excavation, Scaffold, and Forklift Hazards, Fall Protection, Materials Handling, Personnel Protective Equipment and Confined Space Entry Hazards. Meets OSHA 10-Hour Requirements.

# TCEN 115. Wind Power Generation Design Fundamentals 3 Credits (2+2P)

Course covers wind turbine module descriptions and functions and wind system installation, operation, and troubleshooting. Additional topics include wind energy harvesting and the conversion process from the generator system to electricity. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): TCEN 111 and (OETS 104 or MATH 120).

# Restricted to Community Colleges campuses only. TCEN 121. Basic Electrical Principles II, AC Circuits 4 Credits (3+2P)

Course begins with an overview of the primary components of AC circuits, such as resistors, inductors, rectifiers, transformers and capacitors, and then gradually introduces new, more complicated topics like applying AC principles in power generation and generators, motors, parallel and combination circuits, troubleshooting and evaluation of circuit conditions. May be repeated up to 4 credits.

Prerequisite(s)/Corequisite(s): TCEN 111 and (OETS 104 or MATH 120). Restricted to Community Colleges campuses only.

# TCEN 130. Introducation to Biomass/Biogas 3 Credits (2+2P)

Introduction to utilization of renewable biological wastes including crops for production of fuels. Anaerobic digester, gasification, pyrolysis, combustion and fermentation will be covered.

**Prerequisite(s)/Corequisite(s):** TCEN 101 or OETS 101. Restricted to: Community Colleges only.

### TCEN 140. Biofuel Science

### 3 Credits (2+2P)

Fundamentals of basic organic chemistry and biochemistry applied to biofuel synthesis. Students will also be introduced to concept of conservation of matter and chemical reactions. Restricted to: Community Colleges only.

# TCEN 156. Building Envelope

### 3 Credits (2+2P)

Designed to prepare the student for the BPI Building Envelope Certification. This course will provide the principles behind building performance testing and the purpose of completing a comprehensive energy audit. Through lecture and subsequent field training, the student will learn how to use building diagnostics to develop a prescriptive plan for enhancing comfort, health & safety, building durability, and energy savings. The student will learn how to outline the follow-up process required after completion of the retrofit. Crosslisted with: OETS156. Restricted to: Community Colleges only.

Prerequisite(s): TCEN 106 or OETS 106.

# TCEN 180. Bio-diesel and Bio-ethanol Production 4 Credits (2+4P)

Overview of the production of biofuels. Students will be introduced to current biofuel production processes, trans-esterification, hydrolysis and fermentation reactions, distillation, and laboratory synthesis of biofuels and engine performance tests. Restricted to: Community Colleges only. **Prerequisite(s):** TCEN 140.

# TCEN 205. NEC for Alternative Energy 4 Credits (2+4P)

This hands-on course will cover the National Electrical Code specifics concerning photovoltaic installation. Also code compliant wiring of basic electrical systems will be covered. Existing installations will be visited and studied. Restricted to: Community Colleges only.

Prerequisite(s): TCEN 101 and ELT 105.

# TCEN 210. Solar Thermal 4 Credits (2+4P)

The purpose of this course is for students to learn to install solar thermal collectors for several applications, including domestic hot water, pool heating, and space heating. Students will be able to identify types of systems and components, adapt a system design, conduct a site assessment, install solar collectors, install components, install control systems, perform a system checkout, and maintain and troubleshoot a solar thermal system. Restricted to: Community Colleges only. **Prerequisite(s):** TCEN 101 or OETS 101.

# TCEN 215. Fluid Thermal Systems 4 Credits (2+4P)

Fluid properties and measurement, piping and tubing standards, pumps and operation. Restricted to: Community Colleges only.

Prerequisite(s): PHYS 110G or PHYS 211G.

### TCEN 220. Cooperative Experience

### 1-3 Credits (1-3)

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. May be repeated up to 6 credits. Consent of Instructor required.

**Prerequisite(s)/Corequisite(s):** MAT 235. Prerequisite(s): TCEN 180. Restricted to: TCEN majors. S/U Grading (S/U, Audit). Restricted to: Community Colleges only.

# TCEN 221. Roofing Materials and Methods 3 Credits (2+2P)

Covers application techniques and estimation of asphalt and wood roofing products and accesories including gutters and flashing. Presents roof penetration, roof loading issues, and energy system installation requirements for mounting photo voltaic or solar thermal systems.

Prerequisite(s): TCEN 112.

# TCEN 222. Photo Voltaic Grid Tie Installation 4 Credits (3+2P)

This is a more advanced course culminating in a PV system-to-grid connection. This course includes gathering site specific data, design, wire type and sizing specific to project, installation of all solar modules and balance of system (BOS)components, and grounding and bonding of system components, all in accordance with the latest NEC. Upon project design approval a system will be commissioned for the grid. Decommissioning will commence after measurements and troubleshooting as directed by the instructor. May be repeated up to 4 credits

Prerequisite(s)/Corequisite(s): TCEN 121 and TCEN 223. Prerequisite(s): TCEN 111 and TCEN 112. Restricted to Community Colleges campuses only.

# TCEN 223. Photo Voltaic National Electrical Code Principles 2 Credits (2+1P)

Focuses on all sections of the National Electrical Code and local code requirements applicable to photo voltaic electrical installation. A partial list of areas covered is chapters one through four and section 690, "Solar Photovoltaic Systems" of the National Electrical Code. Pre/

Prerequisite(s): TCEN 112. Corequisite(s): TCEN 222.

# TCEN 224. Field Experience

# 1-3 Credits (1-3)

Student will collaborate with instructor in proposing, defining, implementing, and analyzing outcomes of a project in the Environmental and Energy fields of study. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: TCEN majors. Restricted to: Community Colleges only.

## TCEN 240. Renewables and Sustainability

### 3 Credits

Various renewable energy technologies and sustainable design practices will be introduced. Restricted to: Community Colleges only.

Prerequisite(s): TCEN 101 or OETS 101.

# TCEN 241. Solar Thermal SHW Principles/Installation and Maintenance 3 Credits (2+2P)

Course presents the theory, installation, operation, and maintenance of solar hot water (SHW) systems. Topics include the types of systems to choose, the costs associated with SHW installation and operation, system sizing requirements, batteries and battery chemistry. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): OETS 104 or MATH 120.

# TCEN 246. Building Weatherization & Auditor Fundamentals 3 Credits

Course provides information on how to locate air leaks and identify heat losses or gains through specific testing. Students will learn how to inspect and evaluate building envelopes, mechanical systems, and ventilation systems to determine the safety and energy consumption for each system. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): TCEN 113 and OETS 104.

Corequisite(s): TCEN 221.

# TCEN 250. Photo Voltaic System Integrator Fundamentals 3 Credits

Teaches the student project management fundamentals for working with homeowners, businesses, government, contractors, and manufacturers to design, build, and install complete alternative energy systems. Covers photovoltaic, small wind, and micro-hydro system designing, permitting, budgeting, and cost estimating requirments. Pre/

Prerequisite(s): E T 125. Corequisite(s): TCEN 222.

# TCEN 251. Advanced Photo Voltaic On/Off Grid Installation 3 Credits (2+2P)

Photo Voltaic advanced topics to include panel racking and installation, battery storage, charge controllers, mechanical integration of arrays on buildings, and key elements involved in choosing a mounting system. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): TCEN 222. Restricted to Community Colleges campuses only.

# TCEN 252. NABCEP Entry-Level Exam Review 1 Credit

Course presents knowledge, key terms, and concepts of photovoltaic systems and solar hot water systems as related to the NABCEP Entry-level exam. This exam is for those wanting to enter the workforce in either solar thermal or solar PV. Scheduling and taking the exam is the responsibility of the student. May be repeated up to 1 credits. Consent of Instructor required.

**Prerequisite(s)/Corequisite(s):** TCEN 253. Prerequisite(s): TCEN 222. Restricted to Community Colleges campuses only.

# TCEN 253. Renewable Energy System Troubleshooting and Maintenance 3 Credits (2+2P)

Covers wind, solar and solar thermal system troubleshooting and maintenance topics to include equipment, electrical, and installation problem areas. May be repeated up to 3 credits.

**Prerequisite(s)/Corequisite(s):** TCEN 251. Prerequisite(s): TCEN 222. Restricted to Community Colleges campuses only.

### TCEN 254. Renewable Energy Internship

### 2 Credits

Student will receive industry-related renewable energy experiences at an approved industry location. Typical areas of hands-on practices will be installing solar PV, solar hot-water systems, or wind energy systems. May be repeated up to 6 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

Prerequisite(s): TCEN 112 and 113 and 222.

# THTR-THEATRE (THTR)

# THTR 101G. The World of Theatre

### 3 Credits

An appreciation class introducing the non-major to all aspects of theatre, including its history, literature and professionals. Students attend and report on stage productions.

### THTR 105. Acting for Non-Majors

#### 3 Credits

An introduction to basic performance techniques for non-majors.

### **THTR 110. Beginning Acting**

#### 3 Credits

Basic understanding of self-expression through a variety of physical exercises, improvisation, and character study, culminating in scene or monologue work. Restricted to: THTR majors.

### THTR 120. Stage Movement

#### 3 Credits

Physical techniques for the actor to develop kinesthetic awareness and skills in characterization, archetypes, and stage combat. Restricted to: THTR majors.

### THTR 130. The Art of Theatre

#### 3 Credits

This course introduces the variety and scope of theatre professions, the value and goals of the theatre major and an analysis of the art form from script to stage. Restricted to: Required for THTR majors majors.

### THTR 141. Introduction to Stagecraft

#### 3 Credits

Basic techniques used in the construction of scenery, props, and sound. Lab required. Pre/

Corequisite(s): THTR 141L.

### THTR 141 L. Stagecraft Laboratory

#### 1 Credit

Class members will assist with construction for productions in a studio environment. Pre/

Corequisite(s): THTR 141.

### **THTR 142. Introduction to Costume Crafts**

### 3 Credits

Common costume production techniques, including basic stitching, use of equipment, knowledge of available materials, dyeing, and 3-D. **Prerequisite(s)/Corequisite(s):** THTR 142L. Restricted to: THTR majors.

### THTR 142 L. Costume Craft Lab

### 1 Credit

Class members will assist in construction for productions in a studio environment. Pre/

Corequisite(s): THTR 142.
THTR 149. Running Crew I

### 2 Credits (1+2P)

Students learn about backstage and front of house production positions and work on a technical aspect of a production in a rehearsal and performance environment.

# THTR 200. Theatre Workshop I 0.5 Credits

Required for all freshman and sophomore theatre majors, this course coordinates all processes within Theatre Arts, providing a forum for discussion and feedback. May be repeated up to 4 credits. Restricted to Las Cruces campus only.

# THTR 210. Intermediate Acting: Scene Study and Monologues 3 Credits

Monologues and scene work, using character and script analysis. **Prerequisite(s)/Corequisite(s):** THTR 205. Prerequisite(s): THTR 110 with C- or above.

#### THTR 220. Vocal Production for the Actor

#### 3 Credits

Exploration and development of the actor's vocal instrument, including relaxation, projection, diction and articulation. May be repeated up to 3 credits. Restricted to: THTR majors.

### **THTR 222. Theatre Topics**

### 1-3 Credits (1-3)

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 9 credits.

### THTR 249. Running Crew II

#### 1 Credit

Students work on a technical aspect of a production in a rehearsal and performance environment.

### THTR 250. Introduction to Design

### 3 Credits

Introduction into our visual world via the language of designers, focusing on collaboration, creative thinking and presentation skills. The varied design professions in theatre and the performing arts will be explored. Restricted to: Required of all THTR Majors majors.

# **UNIV-UNIVERSITY STUDIES (UNIV)**

### UNIV 101. Tutorial

#### 1-3 Credits

Development of specific skills required for college courses, such as note-taking, listening, and test-taking. To be taken in conjunction with a regular designated college course. May be repeated for a maximum of 3 credits. Graded S/U.

### UNIV 110. Personal Learning Skills I

### 1-3 Credits

Individualized programs for self-improvement in skill areas necessary for academic success in the university environment. Each course to bear an appropriate subtitle. May be repeated up to 3 credits. Graded S/U.

### **UNIV 112. Academic and Personal Effectiveness**

### 2 Credits

Learn academic self-analysis skills through the application of study and learning techniques to current course demands. Exposure to a variety of topics which enhance university and life-long learning.

### **UNIV 113. Speed Reading**

### 1 Credit

Introduction to strategies and techniques for increasing reading rate and comprehension related to academic areas.

# **UNIV 114. Financial Literacy Money Matters**

### 2 Credits

This course will cover a variety of financial literacy topics ranging from budgeting to student loan repayment. This course is designed to assist students in becoming more financially literate. Restricted to Las Cruces campus only.

## UNIV 115. Transition from Military to University

### 2 Credits

Making a positive transition from military to civilian life is key to success. This course will cover a variety of topics ranging from time management to critical thinking. This course is designed to assist military and veteran students in becoming more effective learners through self-awareness, effectiveness study & learning strategies, and interpersonal skills. Skills and techniques for managing military to civilian readjustment transition issues are discussed and examined. Restricted to Las Cruces campus only.

# UNIV 116. Preparing for Cooperative Education & Internship 1 Credit

The Cooperative Education Course provides students with a comprehensive overview of career-related topics designed to assist with securing Cooperative Education and Internship employment. Students learn about philosophies and approaches to resumes, cover letters, interviewing, job searching, networking, and professionalism. A primary focus of the course is on experiential learning where students have opportunities to practice and implement course concepts including interviewing, networking, job searching, and document creation. In addition to exploring topics related to Cooperative Education and Internship, the course is designed to provide students with tools and strategies for successfully navigating the transition from student to employee. S/U Grading (S/U, Audit). Restricted to Las Cruces campus only.

### UNIV 117. Diversity at the University

#### 1 Credit

In this course students will engage in discussions about diversity at the university, what it means in today's society and local community, and build on its complexity at NMSU. S/U Grading (S/U, Audit). Restricted to Las Cruces campus only.

# UNIV 118. Career Explorations and Planning 1 Credit

This course is designed to increase the likelihood that individuals will successfully navigate the challenges they face when making college major and related career choices. Restricted to Las Cruces campus only.

# UNIV 150. The Freshman Year Experience 3 Credits

An introduction to the university and its resources; emphasis on development of academic and personal skills that enable freshmen to become successful learners. Restricted to: Main campus only.

Prerequisite(s): Freshman Standing Only.

# UNIV 161. NMSU Gospel Choir

### 1 Credit

Students will gain performance experience and exposure to urban contemporary gospel music. Open to all majors. May be taken for unlimited credit. Restricted to: Main campus only.

# W S-WOMEN'S STUDIES (W S)

# W S 201G. Introduction to Women s Studies 3 Credits

Analysis of the status of women in society today and history and consequences of gender stratification and inequality from the perspectives of sociology, anthropology, psychology, political science, and other sciences.

# W S 202G. Representing Women Across Cultures 3 Credits

Historical and critical examination of women's contributions to the humanities, with emphasis on the issues of representation that have contributed to exclusion and marginalization of women and their achievements. Crosslisted with: HON 218

# WATR-WATER UTILITIES (WATR)

# WATR 120. Introduction to Water Systems 3 Credits

Introduction to and theory of groundwater sources, production, treatment, and distribution.

# WATR 130. Wastewater Collection and Basic Treatment Systems 3 Credits

Introduction to wastewater characteristics, collection, and basic treatment operations.

# WATR 140. Applied Water and Wastewater Math I 3 Credits

Introduction to basic water and wastewater mathematics, flows through distribution networks and collection systems, and fundamentals of flow measurement

Prerequisite: CCDM 114 N or equivalent.

### WATR 160. Systems Maintenance

### 4 Credits (2+4P)

Basic tools, equipment, maintenance schedules, chlorinator troubleshooting, and chlorine safety. Hands-on training with valves, pumps, meters and chlorination equipment.

# WATR 175. Programmable Logic Controllers 2 Credits

This course will introduce students to electrical safety, theory, and the function, operations, programming and troubleshooting of the PLC controlling common electrical components utilized in control circuits associated with the water and wastewater industry. Restricted to: Community Colleges only.

### WATR 180. Water Chemistry

### 3 Credits

Basic chemistry with applications to water and wastewater analysis. **Prerequisite:** CCDM 114 N or consent of instructor.

#### WATR 182. Water Chemistry Analysis

### 1 Credi

Beginning water and wastewater laboratory analysis including gravimetric, volumetric, and quality control techniques.

Prerequisite: CCDM 114 N or equivalent or consent of instructor.

# WATR 190. Water and Wastewater Microbiology 3 Credits

Overview of microorganisms associated with water and wastewater. Growth and reproduction, energy production, and methods of counting. **Prerequisite:** WATR 130, WATR 180, or consent of instructor.

# WATR 192. Water and Wastewater Microbiological Analysis 1 Credit

Introduction to water and wastewater treatment operational tests such as BODs, solids testing, activated sludge control tests, use of microscope, and bacteriological techniques.

Prerequisites: WATR 130 and WATR 182, or consent of instructor.

# WATR 200. Internship

### 3-5 Credits

On-the-job training/work experience with municipalities or industries, working in water or wastewater treatment plants, high purity water plants, industrial waste plants, distribution systems, or wastewater collection systems. May be repeated up to 5 credits. Consent of Instructor required. Restricted to: Water Technology majors. S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

### WATR 220. Water Treatment Systems

### 3 Credits

Theory of water systems operation including surface water treatment, fluoridation, sodium zeolite softening, corrosion control, iron removal, various filtration methods, and overview of SDWA.

Prerequisites: WATR 180 and WATR 182 or consent of instructor.

### WATR 222. Water Systems Operation

#### 1 Credit

Operations of various water treatment systems including surface water treatment, sodium zeolite softeners, and various filtration methods.

Prerequisite: WATR 220 or consent of instructor.

# WATR 230. Advanced Wastewater Treatment

#### 4 Credits

Calculations and operations involved in wastewater and water reclamation plants.

**Prerequisites:** WATR 140, WATR 190, and WATR 192, or consent of instructor.

### WATR 232. Wastewater Systems Operations

#### 1 Credit

Operation of pretreatment, primary, and biological treatment units.

Prerequisite: WATR 230 or consent of instructor.

# WATR 240. Advanced Water and Wastewater Math II 3 Credits (2+2P)

Advanced water and wastewater mathematics. Flow measurement. Systems head and pump curves.

Prerequisites: WATR 140.

# WATR 250. Municipal Systems Management

#### 4 Credits

Management of water utility systems including laws, finance, records, and safety.

Prerequisites: WATR 120, WATR 130.

# WATR 255. Special Individualized Problems in Water Technology

1-4 Credits

Individual studies in areas directly related to water technology.

Prerequisite: consent of instructor.

# WATR 270. Special Topics

### 1-4 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

### WATR 275. Certification Review

### 3 Credits

Review of water and wastewater plant operations and laws in preparation for state certification exams. May be repeated up to 3 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): WATR 120, WATR 130, WATR 140, WATR 160.

# WATR 285. High Purity Water Treatment Systems

### 3 Credits

Principles of high purity water production including microfiltration, ultrafiltration, reverse osmosis, and deionization.

Prerequisite: WATR 220.

### WATR 287. Advanced Water Chemistry Analysis

### 3 Credits

Sampling techniques, analysis, and evaluation of potable water contaminants using gravimetric, volumetric, spectrophotometric, and other instrumentation methods. May be repeated up to 3 credits. **Prerequisite(s)**: Consent of instructor or WATR 285.

Restricted to Community Colleges campuses only.

# WATR 290. Advanced Wastewater Microbiology and Chemistry 3 Credits

Covers NPDES permits and DMR calculations and reporting; 503 sludge regs, including pathogen and vector attraction reduction and pollutants; wetlands, composting, and wastewater treatment ponds microbiology; activated sludge bulking and foaming microbiology and treatment; and use of selector to remove nutrients and prevent the growth of filamentous bacteria.

Prerequisite: WATR 190, WATR 192.

### WATR 292. Advanced Wastewater Analysis

### 3 Credits

Covers sampling techniques, analysis, and evaluation of wastewater contaminants using gravimetric, volumetric, spectrophotometric, and other instrumentation methods.

Prerequisite: WATR 190 and WATR 192.

# WELD-WELDING TECHNOLOGY (WELD)

# WELD 100. Structural Welding I

#### 6 Credits (3+6P)

Development of basic skills in SMAW, OFC, and OFW in accordance with the AWS entry-level welder program.

# WELD 101. Fundamentals of Welding

#### 3 Credits

Set-up and adjustment of ARC and oxyacetylene equipment. Welding safety procedures and terminology. Skill development in laying weld beads with various patterns, positions, and processes.

# WELD 102. Welding Fundamentals

### 3 Credits (2+2P)

Survey of welding and cutting processes for nonmajors. Classroom instruction and laboratory work with OFC/OFW, SMAW, GMAW, FCAW, and plasma arc cutting.

# WELD 105. Introduction to Welding

### 3 Credits

Welding practices, procedures, and terminology. Welding safety, equipment types, electrode types in usage, joint design and testing procedures.

# WELD 110. Blueprint Reading (Welding)

### 3 Credits

Interpretation of prints related to welding. Emphasis on AWS standard symbols for welding, brazing, and nondestructive examination.

# WELD 112. Professional Development and Leadership 1 Credit

As members and/or officers of various student professional organizations, students gain experience in leadership, team building, and community service. Students competing or participating in Skills USA are required to register for the course. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: WELD majors. S/U Grading (S/U, Audit). Restricted to: Community Colleges only.

### WELD 115. Structural Welding II

### 6 Credits (3+6P)

Continuation of WELD 100. Emphasis on AWS entry and advanced level welder skills with SMAW, including all-position welding with mild and stainless steel electrodes. Plasma arc and air-carbon arc cutting, metallurgy, heat treatment, and weld defects.

Prerequisite: WELD 100.

### WELD 120. Basic Metallurgy

#### 3 Credits

Properties of ferrous and nonferrous materials. Service conditions and heat treatment of metals related to welding trade.

Prerequisites: WELD 100 or consent of instructor.

### WELD 125. Introduction to Pipe Welding

### 3 Credits (2+2P)

Pipe fit-up and welding techniques for pipe fitting and pipe weld joint using SMAW, GMAW, GTAW, and FCAW, 2G welding of pipe. Restricted to: Community Colleges only.

**Prerequisite(s):** WELD 100, WELD 130, and WELD 140, or consent of instructor.

#### WELD 126. Industrial Pipe Welding

#### 3 Credits

Enhancement of WELD 125. Development of more advanced pipe welding skills.

Prerequisites: WELD 110, WELD 130 and WELD 140.

Corequisite: WELD 125.

### WELD 130. Introduction to GMAW MIG)

### 3 Credits (2+2P)

Development of basic skills with gas metal arc welding (MIG) in accordance with AWS entry-level welder objectives. Wire electrodes, shielding/purge gases, and modes of metal transfer.

### WELD 140. Introduction to GTAW TIG)

#### 3 Credits (2+2P)

Development for basic skills with gas tungsten arc welding (TIG) in accordance with AWS entry/advanced welder objectives. Welding mild steel, tungsten electrode preparation, filler wire selection, and equipment set-up.

# WELD 150. Pipe Welding II

### 3 Credits (2+2P)

Continuation of WELD 125; with fillet and groove welded joints in a horizontal fixed and 45-degree fixed positions (5-F, 5-G, 6-F, 6-G).

Prerequisite: WELD 125.

# WELD 151. Industrial Pipe Welding II

### 3 Credit

Enhancement of WELD 150. Development of more advanced pipe welding skills. Emphasis on industry driven test.

Prerequisites: WELD 125 and WELD 126.

Corequisite: WELD 150.

### WELD 160. Introduction to SAW and FCAW

### 3 Credits (2+2P)

Submerged arc and flux-cored arc welding. Demonstrations and practice with machine travel submerged arc welding (SAW), flux-cored arc welding (FCAW-G, FCAW-S) on mild steel plate and pipe. Restricted to: Community Colleges only.

# WELD 170. Welded Fabrication

### 3 Credits (1+4P)

Development of fabrication skills including basic layout, measuring, and utilization of various welding processes including out-of-position welding. Use of common shop tools.

**Prerequisites:** WELD 100, WELD 110, WELD 130, and OETS 104 or OETS 118.

# WELD 180. GTAW II

### 3 Credits (2+2P)

Continuation of WELD 140. Development of more advanced GTAW skills. Emphasis on pipe welding with mild steel, stainless steel, and aluminum.

Prerequisite: WELD 140 or consent of instructor.

### WELD 190. Welded Art

### 3 Credits (1+4P)

Students explore the possibilities of welded art in the form of sculpture, jewelry, furniture and as a framework to support other art media. Offered as an elective for students who wish to create art using welding. May be repeated up to 12 credits. Restricted to Community Colleges campuses only.

Prerequisite(s): WELD 102.

# WELD 205. Welding Equipment Maintenance 3 Credits (2+2P)

Hands-on experience in the maintenance and repair of welding equipment, including welding machines and associate shop equipment, as well as the development of preventative maintenance programs. Basic safety, including MSDS and Right-to-Know will be introduced. Restricted to: Community Colleges only.

Prerequisite(s): WELD 100, WELD 130, WELD 140, WELD 160.

### WELD 211. Welder Qualification

#### 6 Credits (3+6P)

Laboratory and classroom instruction on AWS and ASME Welder Performance Qualification Tests. All position plate and pipe techniques and tests for SMAW, GMAW, GTAW, FCAW, and SAW. Nondestructive and destructive examination methods. Basics of welding codes. Restricted to majors.

**Prerequisites:** OETS 104 or OETS 118; and WELD 100, WELD 110, WELD 120, WELD 130, WELD 140, WELD 160 and WELD 180 or consent of instructor.

### WELD 221. Cooperative Experience I

#### 1-6 Credits

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U. Restricted to majors.

Prerequisites: WELD 100 or WELD 101 and consent of instructor.

# WELD 230. Weld Testing

### 3 Credits (2+2P)

Covers destructive and nondestructive examination methods used to test welds. Tensile, compression, bend, hardness, impact, visual, dyepenetrant, magnetic particle, ultrasound, and radiographic methods of testing/examination. Restricted to: Community Colleges only.

Prerequisite(s): WELD 100, WELD 130, WELD 140, WELD 211, and OETS 104, or consent of instructor.

### WELD 255. Special Problems in Welding Technology

### 1-6 Credits

Individual studies in areas of welding technology. May be repeated for a maximum of 12 credits.

Prerequisite: consent of instructor.

### **WELD 295. Special Topics**

# 1-4 Credits

Topics to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

# STUDENT HANDBOOK

The NMSU-DACC Student Handbook is divided into the six sections whose titles appear in the menu on the left under "Student Handbook." Questions concerning the policies and procedures in this handbook should be directed to:

Office of the Vice President for Student Services Doña Ana Community College 2800 Sonoma Ranch Blvd. Las Cruces, NM 88011-1656 (575) 527-7530

Policies in the NMSU-DACC Student Handbook are subject to change.

# **Student Social Code of Conduct** Section 1

# Part I: Introduction and Overview

This Student Social Code of Conduct, here after referred to as code, is adopted by the authority outlined in New Mexico State University Policy 3.101. It sets forth the rights and responsibilities of NMSU/DACC students; outlines the standards for social conduct; provides the types of interim measure and sanctions which may be imposed for violation of the code; provides a prompt and fair fact finding hearing, as well as an objective review process if students elect to appeal the outcome of the fact finding hearing.

The code consists of the following Parts:

Part I: Introduction and Overview to the Student Social Code of Conduct

Part II: Jurisdiction

Part III: Standards for Student Social Conduct

Part IV: Interim Measures Pending Fact Finding/Sanction Hearing; Range of Potential Sanctions for Substantiated Misconduct

Part V: Students' Rights and Responsibilities; Student Discipline and Appeal Hearing Processes

Part VI: Definitions

### Part II: Jurisdiction

- On-campus: The code applies to conduct which takes place on university premises.
- 2. Off-Campus Conduct: The code generally is not applied to conduct which occurs off campus, but the university retains the right to act in cases where there is a sufficient connection between the off campus conduct and the university. Disciplinary action imposed by NMSU/DACC may proceed, and be in addition to, any penalty that might be imposed by an off-campus authority. Examples of when off campus conduct will result in action under the code include but are not limited to the following:
  - a. Conduct at university sponsored events;
  - Conduct which reasonably may present a danger or threat to the health or safety of the student or others;
  - Conduct which significantly impinges upon the rights, property or achievements of self or others or significantly breaches the peace or causes social disorder,

OR

- d. Conduct detrimental to the educational mission or interests of the university.
- 3. Social Media: As a general rule, personal use of non-NMSU/DACC social media is not governed by this code. Students should be aware, however, that online postings such as blogs, web postings, chats and social networking sites are in the public sphere and are not private unless password protected, and even then may be shared in unpredictable ways and with unintended audiences. In cases where personal and academic or professional boundaries are blurred, students should exercise discretion. Exceptions to the general rule may be made when actions or statements over social media have a sufficient connection to the university. These exceptions apply when:
  - a. the use of an electronic medium involves the use of NMSU/DACC resources (e.g. email account, NMSU/DACC electronic media, use of NMSU/DACC work time) inconsistent with the policies and procedures applicable to such use;
  - the use of an electronic medium involves a true threat, defined as a threat whereas a reasonable person would interpret as a serious expression of intent to inflict harm upon specific individuals;
  - c. the use of an electronic medium posts material considered to be forms of illegal bullying, discriminatory or other severe and pervasive harassment, or stalking, in violation of the code or the law:
  - d. the use of an electronic medium is used to defame someone, post unlawful materials, or otherwise causes a material and unreasonable interference with the education, research public service and outreach missions of the university;
     OR
  - e. the use of the electronic medium provides evidence of a potential violation of the code warranting investigation and potential disciplinary action.
- 4. Court or Administrative Proceedings Outside of the University: If a charged student/student organization wishes to have the hearing postponed because there is pending or possible civil or criminal litigation which the student(s) feels might be prejudice by the findings of the hearing, such postponement may be granted at the discretion of the appropriate administrator, provided that the student/student organization agrees to accept conduct probation or suspension as an interim sanction. Such probation, suspension or ban from campus will be determined and activated by the appropriate administrator and will remain in effect until a hearing is held, either at the request of the student, or upon notice to the student/student organization, at the request of the appropriate administrator, should it be decided that the postponement of the hearing is no longer appropriate.
- Determination of Hearing Officer: Location of the incident shall determine who will serve as the Hearing Officer for cases which may involve the violation of the code, unless there is a challenge to impartiality or as provided in the following section (Students Holding Multiple Roles).
- 6. Students Holding Multiple Roles: Students often serve in various capacities on campus. This code applies in all instances. Depending upon the circumstances, a student may be held to higher or additional standards by other authorities on campus (e.g. Housing, Intercollegiate Athletics), which means that a student may be subject to more than one set of rules and consequences for the same action.
  - a. Community Colleges: Violations of the code occurring on property overseen by a specific Community College within the NMSU

- system will be heard by Vice President for Student Services. The provisions of this code will be applied at the community colleges.
- b. On-Campus Housing Students: Violations of the code or campus housing rules occurring within campus housing properties or parking lot assigned to on-campus housing units shall be heard by a designated Hearing Officer within the Department of Housing and Residential Life. The fact finding hearing and appeal processes described herein apply to these cases. If the alleged violation involves conduct for which deferred suspension, suspension, dismissal, or expulsion would be the appropriate sanction, then the hearing process will be managed by the Office of the Dean of Students. The Department of Housing and Residential Life may also request the Office of the Dean of Students to hear a case which may not result in deferred suspension, suspension, dismissal, or expulsion if the appropriate administrator determines there is a conflict of interest or other concern if it were to be heard within Housing and Residential Life.
- c. Title IX: Students, faculty, staff who suspect or observe stalking, dating violence, domestic violence, or other conduct involving sexual discrimination, including sexual misconduct or harassment shall be reported immediately to the university's Title IX Coordinator, the Director of the Office of Institutional Equity at: Office: (575) 646-3635; TTY: 575-646-7802; email: equity@nmsu.edu. Professional staff subject to confidential reporting laws (e.g. licensed mental health counselors and physicians) are not subject to this reporting requirement. The Title IX Coordinator ensures all reported incidents are promptly assessed and investigated in accordance with the protocols outlined in Policy 3.25 of the NMSU Policy Manual. If the investigation substantiates a violation of the code, the Office of Institutional Equity will provide a copy of the investigative report to the appropriate administrator. The appropriate administrator will review and initiate the sanction and hearing process, as well take any additional remedial action, as may be appropriate under the circumstances, consistent with the code and with Title IX.
- d. Academic Related Conduct: When a behavior results in the possibility of a violation of the Academic and Social Code of Conduct, the Dean of the college or designee shall work with the appropriate administrator and decide if one or both processes will be used to investigate and determine level of responsibility.
- e. Employment: When a student is also a student employee and violates the code while acting in the capacity of employee, then the appropriate administrator shall coordinate with the Office of Employee and Labor Relations regarding student and/or employee discipline issues.
- f. Athletes: When a student is also a student athlete and violates the code, the student may go through the process used by the Department of Athletics as well as the code. These two process may take place concurrently and one outcome may or may not affect the outcome of the other process.
- g. Cadets in ROTC: When a student is also a cadet in an NMSU ROTC program and violates the code, the student may go through the process used by the appropriate ROTC program, as well as, the code. These two processes may take place concurrently and one outcome may or may not affect the outcome of the other process.
- h. Dual Credit/Early College High School: If a dual credit or early college high school student is involved in an incident where a violation of the code may have occurred, NMSU/DACC has the right to charge the student for the possible violation and follow

the process for investigation, hearing, and determination. The student has the same rights given to all students during this process. The NMSU Hearing Officer or DACC Vice President for Student Services shall be determined by the location of the incident

# Part III: Standards for Student Social Conduct, Core Values, and Behavioral Expectations

The university considers the examples described under each of the core values listed below to be inappropriate for members of the university community. The expectations for conduct are consistent with the core values applied to all students. The university encourages students, employees, and community members to report to an appropriate administrator or university police all suspected and observed misconduct. Students found responsible for violations of the Code will be subject to disciplinary sanction(s). **See Part IV** (p. ) for interim measures and the range of potential sanctions.

- Integrity: University students exemplify honesty, honor and a respect for the truth in all of their dealings. Behavior that violates this value includes, but is not limited to:
  - Falsification: Knowingly furnishing or possessing false, falsified or forged materials, documents, accounts, records, identification, or financial instruments.
  - Unauthorized Access: Unauthorized access to any university building or unauthorized possession, duplication or use of means of access to any university building or failing to report in a timely manner a lost university identification card or key.
  - c. Collusion: Action or inaction with another or others to violate the code
  - d. Election Tampering: Tampering with the election of any university recognized student organization.
  - Taking of Property: Intentional and unauthorized taking of university property or the personal property of another, including goods, services and other valuables.
  - f. Stolen Property: Knowingly taking or maintaining possession of stolen property.
- 2. Community: University students build and enhance their community.

  Behavior that violates this value includes, but is not limited to:
  - Disruptive Behavior. Substantial disruption of university operations including obstruction of teaching, research, administration, other university activities, or authorized nonuniversity activities which occur on campus.
  - b. Rioting: Causing, inciting, or participating in any disturbance that presents a clear and present danger to self or others, causes physical harm to others, or damage or destruction of property.
  - c. Unauthorized Entry: Misuse of access privileges to university premises or unauthorized entry to or use of buildings, including trespassing, propping or unauthorized use of alarmed doors for entry into or exit from university buildings.
  - d. Trademark: Unauthorized use, including misuse, of university or organizational names and images.
  - e. Damage and Destruction: Intentional, reckless or unauthorized damage to or destruction of university property or the personal property of another.
  - f. ICT and Acceptable Use: Violating the university Acceptable Use and Computing Policy (policy 2.35.1.1.1), found online at: manual.nmsu.edu (http://manual.nmsu.edu).

- g. Gambling: Gambling as prohibited by the laws of the State of New Mexico.
- h. Weapons and Other Explosive Materials/Devices: Possession, use, or distribution of explosives (including fireworks and ammunition), guns (including air, BB, paintball, facsimile weapons, and pellet guns), or other weapons or dangerous objects such as arrows, axes, machetes, nun chucks, throwing stars, or knives with a blade longer than three (3) inches. Any object intended to be used as a weapon.
- Tobacco: Smoking or tobacco use in any area of campus where smoking or tobacco use is prohibited.
- j. Fire Safety: Violation of local, state, federal or campus fire policies including, but not limited to:
  - Intentionally or recklessly causing a fire which damages university or personal property or which causes injury;
  - Failure to evacuate a university controlled building during a fire alarm;
  - iii Improper use of university fire safety equipment; or
  - iv Tampering with or improperly engaging a fire alarm or fire detection/control equipment while on university property.
- k. Ineligible Pledging or Association: Pledging or associating with a student organization without having met eligibility requirements established by the university.
- I. Animal: Animals, with the exception of service and emotional support animals, are not allowed on campus except as may be permitted by university policy; animal owners and handlers shall abide by applicable local laws relating to the care and control of animals. See Assistive, Service, and Companion Animals on University Premises (policy 3.06).
- m. Wheeled Devices: Skateboards, roller blades, roller skates, bicycles and similar wheeled devices are not permitted to be ridden inside university buildings, residence halls or on athletic fields or courts. Additionally, skateboards and other wheeled items may not be ridden on rails, curbs, benches, or any such fixtures that may be damaged by these activities, and individuals may be liable for damage to university property caused by these activities.
- 3. Social Justice: Student recognizes that respecting the dignity of every person is essential for creating and sustaining a flourishing university community. They understand and appreciate how their decisions and actions impact others and are just and equitable in their treatment of all members of the community. They act to discourage and challenge those whose actions may be harmful to or diminish the worth of others. Conduct that violates this value includes, but is not limited to:
  - a. Discrimination: Any act or failure to act that is based upon an individual or group's actual or perceived status related to age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, serious medical condition, sex, sexual orientation, spousal affiliation, or protected veteran status that is sufficiently sever that it limits or denies the ability to participate in or benefit from the university's educational program or activities.
  - b. Harassment: Any unwelcome conduct based on actual or perceived status including: age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, serious medical condition, sex, sexual orientation, spousal affiliation, or protected veteran status. Any unwelcome conduct should be reported to campus officials, who will act to remedy and resolve

- reported incidents on behalf of the victim/complainant and community.
  - i Hostile Environment: Sanctions can and will be imposed for the creation of a hostile environment when harassment is sufficiently severe, pervasive or persistent and objectively offensive that it unreasonably interferes with, limits, or denies the ability to participate in or benefit from NMSU/DACC's educational or employment program or activities.
  - ii Bullying: Sanctions can and will be imposed for bullying when harassment is sufficiently severe, pervasive or persistent and objectively abusive that it unreasonably interferes with, limits, or denies the ability to participate in or benefit from NMSU/ DACC's educational or employment program or activities.
- c. Retaliatory Discrimination or Harassment: Any intentional, adverse action taken by any responding individual or allied third party, absent legitimate nondiscriminatory purposes, against a participant (or supporter of a participant) in a civil rights grievance proceeding or other protected activity.
- d. Unacceptable Bystander Behavior.
  - i Complicity with or failure of any student to appropriately address known or obvious violations of the code.
  - ii Complicity with or failure of any organized group to appropriately address known or obvious violations of the code or law by its members.
- e. Abuse of Conduct Process: Abuse or interference with, or failure to comply in, university processes including conduct and academic integrity hearings including, but not limited to:
  - i Falsification, distortion, or misrepresentation of information;
  - Failure to provide, destroying or concealing information during an investigation or an alleged policy violation;
  - iii Attempting to discourage an individual's proper participation in, or use of, the campus conduct system;
  - iv Harassment (verbal or physical) or intimidation of a member of a campus conduct body prior to, during, or following a campus conduct proceeding;
  - v Failure to comply with the sanction(s) imposed by the campus conduct system; or
  - vi Influencing, or attempting to influence, another person to commit an abuse of the campus conduct system.
- 4. Respect: University students show positive regard for each other and for the community. Behavior that violates this value includes, but is not limited to:
  - Harm to Persons: Intentionally or recklessly causing physical harm or endangering the health or safety of any person.
  - b. Threatening Behavior.
    - i Threat: Written or verbal conduct that causes a reasonable expectation of injury to the health or safety of any person or damage to any property.
    - ii Intimidation: Intimidation defined as implied threats or acts that cause a reasonable fear of harm in another.
  - c. Bullying or Cyberbullying: Bullying or cyberbullying are repeated or severe aggressive behaviors that intimidate or intentionally harm or control another person physically or emotionally, and are not protected by freedom of expression.
  - d. Hazing: Defined as an act that endangers the mental or physical health or safety of a student, or that destroys or removes public

- or private property, for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in a group or organization. Participation or cooperation by the person(s) being hazed does not excuse the violation. Failing to intervene may also violate this policy.
- e. Intimate Partner/Relationship Violence: Violence or abuse by a person in an intimate relationship with another.
- f. Stalking: Stalking is a course of unwelcome conduct directed at a specific person that would cause the person to reasonably fear for their own safety.
- g. Sexual Misconduct: Includes, but is not limited to, sexual harassment, non-consensual sexual conduct, non-consensual sexual intercourse, or sexual exploitation.
- Public Exposure: Includes deliberately and publicly exposing one's intimate body parts, public urination, defecation, and public sex acts.
- Responsibility: University students are given and accept a high level
  of responsibility to self, to others and to the community. Behavior
  that violates this value includes, but not limited to:
  - Alcohol: Use, possession, misuse or distribution of alcoholic beverages except as expressly permitted by law and university policy.
  - Drugs: Use, possession, sale or distribution of illegal drugs and other controlled substances or drug paraphernalia except as expressly permitted by law and university policy.
  - Prescription Medications: Abuse, misuse, sale, or distribution of prescription or over-the-counter medication.
  - d. Failure to Comply: Failure to comply with the reasonable directives of university officials or law enforcement officers during the performance of their duties or failure to properly identify oneself to those persons when requested to do so.
  - e. Financial Responsibilities: Failure to promptly meet financial responsibilities to the institution, including, but not limited to: knowingly passing a worthless check or money order in payment to the institution or to an official of the institution acting in an official capacity.
  - f. Health and Safety: Creation of health or safety hazards including, but limited to: dangerous pranks, hanging out of or climbing from/ on/in windows, balconies, roofs.
  - g. Other Policies: Violating University, college, departmental, programmatic policies or rules, including all Residence Hall rules and regulations.
  - h. Violations of Law: Evidence of violation of local, state, or federal laws, when substantiated through the university's conduct process.

# Part IV: Interim Measures Pending Fact Finding/ Sanction Hearing; Range of Potential Sanctions for Substantiated Misconduct

- 1. Interim Administrative Action Pending Investigation or Disciplinary
  Hearing
  - a. Interim measures may be imposed on a student or student organization, at the discretion of the Vice President for Student Services, if the student is a community college student. Notice of imposition of an interim measure shall be provided to the student or student organization in writing.
  - The student or student organization may appeal the imposition of an interim measure by submitting a written request for a meeting

- to review the matter to the President of DACC if the decision is made by a Vice President for Student Services. If requested, the review meeting will be conducted within five (5) days of the receipt of the written request. The scope of the review meeting will be limited solely to the issue of the imposition of the interim measures, including requests for special arrangements during the period of interim measures.
- c. If a student's enrollment status is changed as a result of an interim measure, and the student is subsequently found not responsible for the violation, the university may:
  - i Correct any record of the change in enrollment status in the student's permanent records and other reports in a manner compliant with State and Federal laws.
  - ii Refund to the student, at a minimum, a pro rate of any tuition/fees and other university specific fees and charges as appropriate due to the temporary change in enrollment status and in a manner consistent with the university policy and procedures.

# 2. Range of Interim Measures

- a. Cease and Desist: University officials and faculty may, under appropriate circumstances, order a student to stop an activity considered disruptive to the University.
- b. Interim Suspension: The Vice President for Student Services may temporarily suspend a student or student organization when it is determined that a student's/student organization's presence adversely affects the health, safety, or welfare of the university community or a member of the university community.
- c. Restrictions on Activities: The Vice President for Student Services may restrict a student's/student organization's activities when it is determined that the health, safety, or welfare of a student or members of the university community is at risk. Restrictions on activities may include, but are not limited to: registering for or attending class; accessing or contacting certain individuals (no contact order); accessing university property, facilities, resources or equipment; participating in university activities, organizations or student activities.
- d. Restrictions by Other Authorities: Interim measures may also be taken by other authorities based on the specific rules or requirements relating to such other authorities (e.g. academic and co-curricular programs, campus housing and intercollegiate athletics etc.)
- 3. Range of Potential Sanctions for Substantiated Misconduct
  - When an investigation substantiates, by a preponderance of the evidence, that a student/student organization, the student/student organization will be sanctioned appropriately. The sanction is intended to educate the student/student organization and to deter future misconduct. Progressive discipline is appropriate for lesser violations, however, for serious misconduct, progressive discipline is not required; the sanction should be commensurate with the seriousness of the violation. The following will be considered when determining the level of discipline (sanction): prior warnings or discipline for similar misconduct, if any; the risk of potential harm created; actual personal injury or property damage which resulted; damage to the university community, reputation or interests. One or more of the sanctions listed below may be imposed by the appropriate administrator:
  - a. Documented Verbal Warning: This sanction is the lowest level of sanction, designed to "warn" a student that if the behavior is not changed, more serious discipline or sanctions will result.

- b. Written Warning: This type of sanction is designed for less serious violations of the code, for which progressive warnings are likely to be effective. The student/student organization is issued a written warning notifying the student/student organization that the behavior did not meet university standards.
- c. Disciplinary Probation: The placement of a student/student organization on disciplinary probation, for a certain term or indefinitely, indicates that the misconduct was a serious violation of university standards. Additional substantiated violations of the Code, whether similar in nature or not, which occurs during a probationary period will result in more serious sanctions. Probationary status also may result in restrictions being placed on a student's/student organization's activities. Examples of such restrictions include, but are not limited to: restriction of privilege to
  - i participate in student activities or in student organizations,
  - ii represent university on athletic teams, or in other leadership positions;
  - iii have access to university housing facilities or other areas on campus;
  - iv have use of university resources and/or equipment; or
  - v have contact with specified person(s).
    A student who has been placed on indefinite disciplinary probation, or whose probation has been indefinitely noted on the transcript, may petition to have the probation lifted or the notation removed from the transcript. This petition will not be accepted if submitted prior to one calendar year from the date the probation began. Students must petition to the Vice President for Student Services to have the removal of probationary status removed. The decision of the administrator is final.
- d. Loss of University Privileges: This sanction involves the temporary or permanent withdrawal of university privileges, including but not limited to: use of university facilities, resources, equipment, attendances at athletic functions, student union, library use, parking privilege, university computer usage, and/or residence hall or other visitation.
- Restitution: This type of sanction requires the student/student organization to pay for all or part of damages (personal injury or property) they caused or contributed to.
- f. Community/University Service: A student/student organization is required to complete a specified number of hours of service at one of the University's campuses, or in furtherance of the University's interests.
- g. Educational Requirements: This sanction may be used for lesser violations or in conjunction with other sanctions. A student/ student organization may be required to complete a specified educational sanction related to the violation committed. Such educational requirements may include, but are not limited to, completion of a seminar, report, alcohol or drug assessment, presentations, and/or counseling.
- h. Change or Revocation of Housing Assignment: This sanction may be used when a violation of the code also constitutes a breach of the license agreement entered into by the student, or as a remedy to address claims of discrimination, harassment, bullying, stalking or other inability to get along with neighbors. The student/student organization may be required to
  - i relocate to a new university housing assignment;

- ii leave university owned housing for a specified period of time; or
- iii leave university owned housing permanently.
- i. No Contact Order. A directive informing the student/student organization that they are not permitted to have any contact, direct or indirect, with one or more designated persons or group(s) through any means, including personal contact, email, telephonic, electronic or third parties. No contact order directives may be issued as a sanction or may also be issued by the appropriate administrator under circumstances which do not involve student/student organization discipline.
- j. Deferred Suspension: A status given to a student for a defined period of time, not to exceed one year, in which the student may stay enrolled in classes but may not formally represent NMSU/ DACC in any manner such as on athletic teams, intramural teams, student leadership roles, or participate in student organizations.
- k. Suspension: A student who is suspended shall not be enrolled and is required to leave the University for a specified period of time. The specified period of time cannot be longer than one calendar year. The student must comply with all sanctions and complete all requirements prior to re-admission. During the suspension period the student may not visit or come onto any NMSU premises without specified written permission of the Vice President for Student Services. Credits taken at another institution of higher education may not be accepted as transfer credits when or if the student returns to NMSU/DACC.

A student organization who is placed on suspension shall not be recognized as a chartered student organization and therefore, may not receive the recognition, rights and privileges of a chartered student organization for a specified period of time. The specified period of time cannot be longer than one calendar year. The student organization must comply with all sanctions and complete all requirements prior to re-chartering.

I. Dismissal: A student who is dismissed is required to leave the university for an indefinite period of time. Students may not reenroll nor reenter university premises for a minimum of one calendar year, and then, only by petitioning and obtaining consent from the Vice President for Student Services. A permanent notation of dismissal is placed on the student's transcript. During the dismissal period, the student may not visit or come onto NMSU/DACC premises without specific written permission from the Vice President for Student Services. Credits taken at another institution of higher education may not be accepted as transfer credits when or if the student returns to NMSU/DACC.

A student organization placed on dismissal shall not be recognized as a chartered student organization and therefore, may not receive the recognition, rights and privileges of a chartered student organization for an unspecified period of time. Student organizations may not re-charter for a minimum of one calendar year, and only then, by petitioning and obtaining the consent of the Vice President for Student Services. The student organization must comply with all sanctions and complete all requirements prior to re-chartering.

 Expulsion: Expulsion is used as a sanction only in the most serious cases of misconduct. A student who is expelled is permanently deprived of the privilege to continue at the university in any capacity. The student may not visit or come onto any NMSU/DACC premises or NMSU/DACC sponsored events without specific written permission of Vice President for Student Services.

A student organization who is given the sanction of expulsion is permanently deprived of the privileges to continue as a chartered student organization at NMSU/DACC. Therefore, the student organization loses all recognition, rights and privileges given to chartered student organizations.

- n. Denial of Further Registration and/or Credits: Denial of the privilege to reenroll or invalidation of credits earned is a sanction available when a student has been found to have made false, fraudulent or materially incomplete statements on official university records. Examples of such records include but are not limited to: application for admission, residence affidavit, and application for graduation.
- Withholding Degrees: Withholding issuance of a degree, diploma, certificate or official transcript pending compliance with university policies or pending completion of the processes set forth in this code, including but not limited to completion of all elements of a sanction.

# Part V: Students' Rights and Responsibilities; Student Discipline and Appeal Hearing Processes

## 1. Student Rights

- To be accompanied by an advocate at meetings or hearings related to charges.
- To be notified of alleged facts and evidence supporting the charge(s) at least five (5) days prior to any scheduled disciplinary hearing.
- c. To examine evidence the university has concerning the incident.
- d. To receive notice of any witnesses the university plans to call to testify at the hearing.
- e. To participate in a fact finding hearing with an impartial Vice President for Student Services: A student party to the proceedings may challenge the impartiality of the Vice President for Student Services. The challenged hearing or appeal officer may elect voluntary recusal. If the challenged official does not voluntarily recuse, the President of DACC shall determine the validity of the challenge and if applicable, appoint an alternate hearing officer.
- f. To call witnesses to present relevant testimony on behalf of the student, as determined by the Vice President for Student Services.
- g. To question witnesses who are called to present testimony in support of the charge(s).
- h. To choose not to answer questions during the investigative process and to not testify at the disciplinary hearing, without the student's silence being treated as evidence of being responsible for violating the Code.
- The right to appeal the decision of the disciplinary Hearing Officer to a higher authority.

### 2. Student Responsibilities:

a. Charged students, as well as students who are witnesses, shall be honest and cooperative with university officials during investigative and hearing/appeal processes. This responsibility is subject to a student's constitutional right to remain silent in order to not implicate oneself in a violation or crime. If a student exercises the right to not testify or chooses to not participate at

- all in the proceedings, the Hearing Officer may choose to proceed based upon the evidence gathered from other sources.
- b. A charged student electing to contest the charges shall, at least three (3) days in advance of the hearing, provide the Vice President for Student Services with a list indicating the witnesses who the student intends to call upon to testify at the hearing, and shall also submit copies of the documentation or identify other evidence, if any, in support of the student's position relative to the charge.
- c. If the student is found ultimately responsible for violating the code, and a sanction is imposed, the student shall complete all sanctions(s) required in the final decision and report such completion to the Vice President for Student Services.
- 3. Students' Rights When Title IX is Implicated: Victims/complainants, as defined in this policy, especially with regard to alleged violations of Title IX (sexual discrimination, including sexual misconduct and harassment, sexual assault/violence, domestic violence, dating violence, stalking and other crimes of violence), have the right to special consideration and assistance during the investigation, hearing and resolution phases of the student disciplinary process. In order to ensure fairness to all parties in the proceedings, the student charged is entitled to request the same consideration:
  - a. Questioning during Investigation and Hearing: A victim/ complainant or student charged may provide a list of questions and request that they be asked during the investigative or hearing stages of the student discipline processes. In order to be considered, the questions must be submitted in writing to the Vice President for Student Services, as appropriate, and at least three (3) days in advance of any scheduled disciplinary hearing.
  - b. Hearing Modifications: A victim/complainant or student charged may request reasonable alternate arrangements relating to participation in the disciplinary hearing, such as submission of questions in written form rather than verbal direct questioning, or to be allowed to provide information from a separate location. As long as the integrity of the hearing is not compromised, and the parties and the hearing official are able to see and communicate with each witness (including the victim/complainant and the accused), reasonable requests will be granted.
  - c. Past Behavior. A victim/complainant or student charged has a right to have past unrelated behavior excluded from the disciplinary hearing. The issue of whether past behavior is related or relevant will be determined by the Vice President for Student Services.
  - d. Victim Impact Statement: If the charged student(s) is found responsible, the victim/complainant has a right to submit a victim impact statement to the Vice President for Student Services for consideration at the sanctioning phase only. The statement may include a description of how the victim was impacted by the conduct violation and may include recommendations for sanctions, penalties, or restitution. However, the Vice President for Student Services is not bound by these recommendations.
  - e. Notification: In cases involving arson, assault, burglary, criminal homicide, destruction/damage/vandalism of property, dating violence, domestic violence, kidnapping, robbery, forcible sex offenses, non-forcible sex offense, stalking or any other crime or attempted crime of violence, the victim/complainant has a right to be notified by the Vice President for Student Services of the final results of the investigation and disciplinary proceedings conducted with respect to the alleged offense. The notification of final results will include

- i the name of the charged student(s);
- ii the violation with which the student was charged;
- iii whether the student was found "responsible" or "not responsible"; and
- iv any sanction(s) imposed, to the extent that the sanction may affect the victim/complainant.
- f. Appeal: As is the case for all violations of the code, in incidents involving violations of Title IX (sexual discrimination, including sexual misconduct and harassment, sexual assault/violence, domestic violence, dating violence, stalking and other crimes of violence); the victim/complainant and the charged student each have the right to appeal the outcome of the fact finding/sanction hearing, as outlined below in this Part V, Section 5.

## 4. Investigation and Educational Conference

### a. Determination of Charges

- i Alleged violations of the code may be reported to the appropriate administrator by any member of the community including but not limited to: (a.) university departments, (b.) university police, (c.) faculty, staff, or students or (d.) third parties.
- ii The appropriate administrator, or designee, will review the information to determine if a student/student organization will be charged with violating the code.
- iii The appropriate administrator, or designee, may not charge a student/student organization with a violation of the Code more than one year after the date the conduct occurred or was discovered, whichever is later.

### b. Notification of Charges and Date/Time of Educational Conference

- The appropriate administrator or designee will notify the student/student organization in writing of the allegations and charge(s).
- ii The notice will include the date and time of an Educational Conference. The conference will be scheduled no earlier than five (5) days and no later than ten (10) days from the date of the notice unless requested by the student/student organization representative(s). If the time or date of the conference is not feasible to the student/student organization representative(s), the student/student organization representative(s) must notify the appropriate office based on the information provided in the notification within two (2) business days of the scheduled Educational Conference to reschedule.
- iii If at any time during the course of the judicial process, the appropriate administrator determines that either charges are not warranted or that insufficient evidence exist to continue, then the charges may be withdrawn, and the student/student organization representative(s) will be so notified in writing.

# c. Educational Conference

- i Educational Conferences are facilitated by Vice President for Student Services. Individual Educational Conference for cases will be delegated by the appropriate administrator.
- ii The purpose of the Educational Conference is to review with the student/student organization representative(s) the allegations and charges, the code, the judicial process, the hearing forum, possible sanctions, and to answer questions the student/student organization representative(s) may have.

- iii During the conference the charged student/student organization:
  - Will be presented with a list of rights and responsibilities as a charged student/student organization. The charged student/student organization will be requested to sign the document indicating that the rights have been explained and that the student/student organization's representative understands them.
  - Have the opportunity to accept or deny responsibility for the alleged violations. An acceptance of responsibility for the violations will constitute a waiver of the student/ student organization's right to a hearing and appeal.
- iv If the student/student organization's representative fails to attend the Educational Conference without notice of reasonable cause, the case may be forwarded to the next step in the process.

#### d. Hearing

- i A student has the right to a fact finding hearing before the Vice President for Student Services.
- ii The purpose of the hearing is for the university to present the evidence related to the alleged violation, provide a time to allow the accused student/student organization to give a statement or present evidence, and to hear from witnesses.
- iii Absent a time extension, a hearing shall be scheduled no less than five (5) days from notice and no more than ten (10) days from the Educational Conference. Extensions may be granted to a student, (requests will be considered by the Vice President for Student Services) provided all parties are notified about the request for time extension and the reason for the need for an extension.

### 5. Fact Finding Hearing and Determination of Sanctions, if Warranted

- a. Hold on Student's Record: The University may place a hold on the records or registration of any student who fails to respond to a university disciplinary notice or fulfill any sanctions previously issued by the university. All pending disciplinary matters must be resolved prior to a student's graduation, transfer from or continued education at the university.
- b. Standard of Proof: The duty to prove a disciplinary case rests with the university and the standard of proof shall be preponderance of the evidence. "Preponderance of the evidence" means that the information presented supports the findings that it was more likely than not that the violation occurred.
- c. Advocate: A charged student/student organization is entitled to have any one (1) person at the hearing to serve in the capacity as the Advocate. Student/student organization may consult with their advocate during the hearing process. However, this consultation must take place in a manner that does not disrupt the proceedings. The advocate shall not speak on behalf of the student, question witnesses, present information or argue before the panel. The advocate shall not serve as a witness. The student must notify the appropriate administrator no later than three (3) days prior to the hearing if the student will have an advocate present during the hearing
- d. Confidentiality: All hearings shall be closed and confidential.
- e. Accommodations for Students with Disabilities: Any student with a disability may request reasonable accommodations during the disciplinary process. This request must be made to the appropriate office which handles accommodations for

- students with disabilities at least three (3) days in advance of the hearing. If necessary, the Vice President for Student Services may postpone the hearing to provide reasonable accommodations.
- f. **Safety Procedures:** The Vice President for Student Services may accommodate concerns for the safety of the individuals involved by providing separate facilities or other alternatives.
- g. Pre-hearing Information Notice: The University will make available pre-hearing information including a copy of the hearing procedures and copies of records that will be presented by the university at the hearing. The pre-hearing information will be available at least three (3) days in advance of the hearing.
- h. Failure to Appear: If a charged student fails to appear, without giving notice of extenuating circumstances, the hearing may proceed in the student's absence.

#### i. Role of the Vice President for Student Services:

- i Accept information for consideration as deemed to be relevant. Repetitive testimony offered for the same purpose is an example of evidence the Vice President for Student Services might deem to not be necessary.
- ii Make procedural decisions relating to the hearing. Examples include requests for time extensions, assertions of conflict of interest affecting impartiality of hearing officer.
- iii Make procedural modifications in the interest of fairness or safety.
- iv Take action deemed necessary to maintain order in the hearing process.
- Right Not to Testify: No student will be compelled to make selfincriminating statements.
- k. Information: The Vice President for Student Services and the charged student/student organization will be given an opportunity to provide information. This may include, but is not limited to, pertinent records, documents, written or oral statements. The student/student organization will also be given an opportunity to inspect records held by the appropriate office.
- I. Witnesses: The Vice President for Student Services and the charged student/student organization may call witnesses. In order to preserve the educational atmosphere of the hearing and to avoid creation of an adversarial environment, all questions for witnesses will be directed through the Vice President for Student Services. If a witness cannot appear, their written or recorded statement may be considered. Witnesses will be required to wait outside until their point of participation and will be asked to leave the hearing after being questioned.
- m. Multiple Students Charged: In cases involving multiple students charged from the same incident, information obtained in one hearing may be used at another hearing subject to FERPA, HIPAA and other individual privacy considerations, and provided that each charged student involved has the opportunity to review and respond to the information at their hearing.
- n. Effective Date of Sanctions: When the Vice President for Student Services decision affects a student's academic status, the change will be effective immediately, and may only be changed based on the terms contained in the Vice President for Student Services decision (e.g., a one year suspension) or based on the terms of a decision on appeal.
- o. **Decisions of "responsible" or "not responsible" on the charge(s):**The Vice President for Student Services' decision letter shall be based on the information presented at the hearing. The Vice

- President for Student Services shall determine whether or not the student is responsible for violating the code as charged.
- p. Record: There shall be a single record of all student/student organization conduct hearing and shall be maintained in the Vice President for Student Services. This record is the official record and is the property of the university. For hearings before the Vice President for Student Services, the Vice President for Student Services' notes will become part of the record. The student/ student organization may request a copy in writing which will be provided.
- q. Notice of Hearing Officer's Decision: The Vice President for Student Services shall issue a written decision letter to the student/student organization within five (5) days following the conclusion of the hearing. This time may be extended, provided the student/student organization shall be notified of any such extensions. The decision letter shall explain the basis for the Vice President for Student Services' finding(s) on each charge and sanction for each charge if found responsible for the charge.
- r. Notice of Right to Appeal/Final Review: The decision letter shall also inform the student/student organization of their right to appeal to the President of DACC, in writing, within five (5) days from the date of receipt of the Vice President for Student Services' decision letter.

#### 6. Appeal from Decision of Vice President for Student Services

- a. The President of DACC will review the notice of intent to appeal and determine:
  - i Whether the appeal was submitted timely; if not submitted timely, the President of DACC may decide to accept the appeal, if the appealing student requests a waiver of the time limit and provides the reason for the late submission which indicates an extenuating circumstance outside the student's control prevented a timely appeal; and
  - ii Whether or not the notice of appeal states a permissible ground for appeal. If grounds for appeal have not been identified in the written notice of appeal, the appeal shall not be considered further, and the decision of the Vice President for Student Services will be upheld.
  - iii Grounds for appeals are:
    - 1. procedural or prejudicial error was committed, or
    - 2. evidence not available at the time of the hearing is now available.
- b. If proper grounds for appeal have been identified, and the appeal has been deemed timely, the President of DACC will proceed to review the matter.
- Each party may submit a statement in writing explaining why they think the determination of the Hearing Officer should be upheld, reversed, or modified.
  - i The statement from the student/student organization must be included with the request for appeal.
  - ii The statement from the Vice President for Student Services will be submitted to the President of DACC, along with the hearing record, at the time the request for appeal is received. Absent a time extension, the Vice President for Student Services must submit the statement and the hearing record within two (2) days of receipt of appeal. The President of DACC may grant a time extension, upon notice to all parties.
- d. The President of DACC will review the evidence presented at the hearing, any relevant policies or law, the decision of the Vice

- President for Student Services and the submittals from the parties in order to issue a decision of the appeal in writing.
- e. The student/student organization will be notified of the decision by the President of DACC within five (5) days from receipt of the Request for Appeal, absent notification to all parties that additional time is needed in which to review. Delivery of the decision may be accomplished electronically to the student's official NMSU email address via the conduct database used by the university.
- f. The decision by the President of DACC will be final.

#### 7. Records

- Records of all disciplinary actions imposed within the DACC system shall be forwarded to the Vice President for Student Services to maintain as the official student conduct record.
- b. Students found "not responsible" or cases in which charges are dropped are considered not to have a judicial record. However, the records will be maintained by the university in accordance with applicable State record retention laws or university policy whichever is longer.

#### 8. Transcript Notations

- a. A notation will be placed on the student's transcript during any period of permanent probation, suspension, dismissal or expulsion. In the case of permanent probation, suspension, or dismissal the student, after a period of one year or term of sanction whichever is longer, may request to have the notation removed from the transcript by submitting a letter to the Vice President for Student Services with the reason the notation should be removed. The Vice President for Student Services will make the determination if the notation should be removed. The Vice President for Student Services decision is final.
- b. If a student is expelled, a permanent notation will be placed on the student's transcript.

#### Part VI: Definitions

- Advocate: The advocate is an individual, of the student's choosing, who serves a supporting role to either the victim/complainant or to the charged student during the fact finding hearing or appeal processes. The advocate shall not actively advocate on behalf of the student, including the questioning of witnesses or the direct presentation of information to the hearing or appeal officer.
- Appeal: The hearing review process by which a student may seek a final review of the decision made by the disciplinary Vice President for Student Services.
- President of DACC: is designated, by position, to review and make a decision on appeals at DACC.
- 4. Appropriate Administrator: One of several key administrators involved in the investigation of alleged student social misconduct and corresponding administrative action, and to whose office suspected or observed student social misconduct should be reported:
  - a. Vice President for Student Services For misconduct alleged to have occurred at a community college or at an event sponsored by a community college or involving a community college student off campus but having an impact on campus.
  - Office of Institutional Equity Director/Title IX Coordinator For misconduct on university premises or at any university sponsored event involving discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, serious medical condition, sex, sexual orientation,

- spousal affiliation, and protected veteran status, the Office of Institutional Equity Director/Title IX Coordinator will work with the Office of the Dean of Students or appropriate Community College Vice President for Student Services/Success.
- 5. Charged Student: Any student accused of violating the code, which incorporates applicable university policies and procedures. A breach of academic integrity is a violation of university policy and therefore, this code, and is subject to distinct investigative, sanction and disciplinary hearing and appeal process applies.
- Complainant: Also referred to as a "reporter", is any person who
  reports suspected or observed misconduct by a student; a complaint
  or report need not be in writing and may be submitted anonymously.
- 7. Continuing Relationship: A continuing relationship is one in which there remains a relationship between student and the university. For example, a student who is not enrolled during the summer months, but is expected to return in the fall is deemed to have a "continuing relationship" with the university.
- Day: When used in this policy, "day" refers to an NMSU/DACC official business day, Monday through Friday, and excludes days which are official NMSU/DACC holidays and unplanned closures of the university.
- 9. Educational Conference: The educational conference is a step in the student conduct process which explains to the charged student the nature of the charges, the evidence in support of those charges, and options for possible resolution, including an overview of the disciplinary hearing and appeal processes.
- Enrolled Student: An individual who is registered for class regardless of when the class begins.
- Faculty Member: Any person hired by NMSU/DACC to conduct classroom or teaching activities or who is otherwise considered by NMSU/DACC to be a member of its faculty.
- 12. Good Standing: A student in good standing is one who is not on conduct- related probation, deferred suspension, suspension, dismissal, or expulsion and has completed all misconduct related sanctions.
- 13. Hearing: A step in the student conduct process where the university presents the facts in support of the charge(s) against the student and the proposed sanction, and the student is allowed to provide the facts in support of the student's position to the Vice President for Student Services.
- 14. Hearing Officer. A university official authorized by the President of DACC to conduct hearings in the matters of alleged violations of the code.
- 15. In Writing: Any form of written communication such as a hard copy letter or an email from the student's official NMSU email account.
- 16. Mitigating or Aggravating Circumstances: Circumstances which may be considered, at the discretion of the Vice President for Student Services when deciding the level of responsibility or type of sanction to be imposed. These circumstances include the student's motive for engaging in the alleged misconduct; disciplinary history; and effect of the behavior on safety and security of the university community.
- 17. Social Conduct: Any conduct that is not addressed by the academic code of conduct and subject to those distinct policies and investigative/disciplinary procedures.
- 18. Student: A student includes all persons enrolled at NMSU/DACC and persons who are not officially enrolled for a particular term but who have continuing academic relationships with the university. This includes the following:

- a. Individuals enrolled in one or more credit hours;
- b. Individuals who are degree seeking or non-degree seeking;
- c. Individual who is in an academic related certificate program;
- d. Individual who is registered for non-credit courses;
- e. Individuals seeking dual credit;
- f. Individuals attending Early College High School;
- g. Individuals participating in credit bearing internships;
- Individuals participating in national student exchange, study abroad, or international related programs connected to NMSU/ DACC: and
- Individuals able to access student services such as, but not limited to, student fee funded activities, counseling, social work services, student diversity and outreach, career services, and student success center.
- Student Organization: Any group of students who are recognized by NMSU/DACC as a chartered student organization.
- University Community: Includes any person who is a student, faculty member, staff member, or any other person employed by NMSU/ DACC.
- University Official: Includes any person employed by NMSU/DACC performing assigned administrative or professional responsibilities.
- University Premises: University premises means all lands, facilities and other property owned, operated or controlled by the Board or Regents of NMSU.
- 23. University Sponsored Activities: University sponsored activities are those events and activities involving students, student organizations, or university departments, faculty members, or employees that are:
  - Expressly authorized, aided, conducted or supervised by the university;
  - b. Funded in whole or in part by the university;
  - Initiated by an officially chartered student organization and conducted or promoted in the name of that student organization or the university; or
  - d. Take place on university premises.
- 24. **Victim, also referred to as a "Complainant"**: A person alleged to have been harmed by a student in violation of the Code.

## Academic Code of Conduct Section 2

#### **Academic Misconduct**

- 1. Persons and/or groups involved in Academic Discipline Cases
  - Vice President for Academic Affairs When an academic violation occurs, the Vice President for Academic Affairs (or a designee) will dispose of any violations referred or appealed to the Dean's Office.
  - b. Academic Appeals Board A student appeals board shall be established for each academic year as a standing committee consisting of three (3) faculty members and two (2) students to be appointed by the Vice President for Academic Affairs. In some cases, the Vice President for Academic Affairs may convene the Academic Appeals Board and solicit its recommendation.
  - c. The decision of the Vice President for Academic Affairs is final and will be reported to all parties concerned within three (3) working days under the general process.

#### 2. Academic Misconduct

Any student found guilty of academic misconduct shall be subject to disciplinary action. Academic misconduct includes, but is not limited to, the following actions:

- a. Cheating or knowingly assisting another student in committing an act of cheating or other forms of academic dishonesty.
- b. Plagiarism is using another person's work without acknowledgment, making it appear to be one's own. Any ideas, words, pictures, or other source must be acknowledged in a citation that gives credit to the source. This is true no matter where the material comes from, including the internet, other student's work, unpublished materials, or oral sources. Intentional and unintentional instances of plagiarism are considered instances of academic misconduct. It is the responsibility of the student submitting the work in question to know, understand, and comply with this policy. If no citation is given, then borrowing any of the following would be an example of plagiarism:
  - An idea or opinion, even when put into one's own words (paraphrase)
  - · A few well-said words, if these are a unique insight
  - · Many words, even if one changes most of them
  - Materials assembled by others, for instance quotes or a bibliography
  - · An argument
  - A pattern or idea
  - · Graphs, pictures, or other illustrations
  - Facts
  - All or part of an existing paper or other resource
     This list is not meant to include all possible examples
     of plagiarism. See the University Library's web page on
     plagiarism for further examples.
- Unauthorized possession of examinations, reserve library materials, laboratory materials, or other course-related materials.
- d. Unauthorized changing of grades on an examination, in an instructor's grade book, or on a grade report; or unauthorized access to academic computer records.
- Nondisclosure or misrepresentation in filling out applications or other NMSU/DACC records in, or for, academic departments or colleges.
  - Students who engage in disruptive activities in an academic setting (e.g., classrooms, academic offices or academic buildings) are subject to disciplinary action in accordance with Section IV-Non Academic Misconduct-All Students. Such students are also subject to administrative actions in accordance with the NMSU/DACC Catalog.
- 3. Academic Discipline Process General Cases
  - a. Course or Departmental Level

For incidents that occur at the course or academic department level, the faculty member or department head must inform the student of the alleged offense within ten (10) working days of its discovery, and after an investigation and/or conference, will take one of the following actions:

- i The allegation may be dismissed as unfounded
- ii The allegation may be dismissed for lack of evidence
- iii The student may admit guilt and a sanction will be imposed
- iv The Hearing Officer will determine guilt based on preponderance of the evidence and a sanction will be imposed

v The Hearing Officer will report the decision to the student and to the Vice President for Academic Affairs

#### b. Other Academic Misconduct

For those incidents involving academic misconduct not at the course level (e.g., falsification of academic records), the Vice President for Academic Affairs, or a designee, will serve as the Hearing Officer and will follow the same process as outlined above.

#### c. Appeal Process

- i All possible levels of appeal should be exhausted before a case reaches Vice President for Academic Affairs. The student must always be told the next level of appeal.
- ii A student who wishes to appeal an instructor's decision may do so by writing to the course department chair (Division Dean, if instructor is also Department Chair) within five (5) working days. The appropriate Hearing Officer will consider both sides of the case and report the decision to the student, the course instructor, the Department Chair, the corresponding Division Dean, the Vice-President for Academic Affairs, and the Vice-President for Student Services within ten (10) working days. If extenuating circumstances prevent either party from meeting this time frame, an alternate schedule will be formulated by all parties involved.
- iii Either party may appeal a Department Chair's decision to the Dean of the college corresponding Division Dean; however, a request for a formal hearing need not necessarily be granted. The following points will apply in all cases of appeal:
  - The appeal must be made in writing to the appropriate appellate person or body within the specified period of time.
  - 2. The appeal must include the name of the individual making the appeal, the action that is being appealed, the date the action took place, and the grounds for appeal. Appeals must be made on the basis of one or more of the following grounds:
    - a. Procedural or prejudicial error was committed.
    - b. The finding of facts contained in the decision included inaccurate information.
    - Specific evidence presented at the hearing is objectionable. Reason for the objection must be stated, i.e., why evidence should not be considered.
    - d. Evidence not offered during the hearing is now available. Reason why the evidence was not offered during the hearing must be stated.
    - e. The sanction imposed is excessive or inappropriate. Reasons for believing this must be stated.
  - If warranted, the Vice President for Academic Affairs shall convene the Academic Appeals Board to solicit its recommendation before making a decision.
  - The highest level of appeal for academic misconduct is the Vice President for Academic Affairs whose decision is final.

#### d. Academic Appeals Board Procedures

i If a decision is made to seek a recommendation from the Academic Appeals Board, the Vice President for Academic Affairs, or a designee, shall assemble case materials for the Board which will normally meet within three (3) weeks. ii The Vice President for Academic Affairs, or a designee, will inform all parties of procedures to be followed.

### **Grievance Procedures**

#### **Section 3**

#### **Student Academic Grievance Policy**

Procedure for Initiating Grievance Complaints: This procedure has been established to provide a method to resolve undergraduate student grievances at the lowest administrative level in a fair and expeditious manner. For the purpose of this procedure, grievances are limited to alleged violations of university policy or procedures by NMSU/DACC or its employees, disputes with faculty and/or alleged unfair treatment. Usually this method is used to appeal a grade the student feels was not justified. Under no condition should these policies be used when the student has allegedly violated the University Code of Conduct or a contractual agreement, and at no hearing should either party have a lawyer. Any student who believes that he/she has been unjustly treated within the academic process may proceed as far as necessary in the steps detailed below. Should the alleged grievance not involve a faculty member or course, the student is to appeal directly to the department chair/program director or division dean in whose area the alleged grievance occurred.

- 1. Appeal to the faculty member. The student is to submit a written appeal to the faculty member within 30 days after the start of the grading period following the grading period in which the alleged grievance occurred. If the alleged grievance occurs during a summer grading period, the student is to submit an appeal no later than 30 days into the fall grading period following the summer grading period in which the alleged grievance occurred. The faculty member and the student are to discuss the problem. The faculty member will submit a written report outlining his or her decision to the student and division dean within ten working days of receipt of the student's written appeal.
- 2. Appeal to the department chair or program director. If a decision satisfactory to the student cannot be reached, the student may submit a written appeal to the department chair/program director in which the course in question was taught. This is to be done within ten days of the receipt of the faculty member's written decision. The faculty member, the department chair/program director, and the student are to meet to discuss the problem. The department chair/program director will send a written response outlining his or her decision to the student and faculty member within ten days of this meeting.
- 3. Appeals to the division dean: If a satisfactory decision cannot be reached among the department chair/program director, the faculty member, and the student, the student or the faculty member may submit a written statement of appeal to the division dean. This is to be done within ten working days after the receipt of the written decision by the department chair/program director. The division dean may request a written recommendation from the College Academic Appeals Board. Should this be the case, the College Academic Appeals Board will conduct a hearing with the student and faculty member (not necessarily at the same time) to review the merits of the appeal. They may also ask for supporting evidence for or against the decision of the department chair/program director within five working days following the conclusion of their review process. The division dean may meet with the student, faculty member, and department chair/program director to discuss the appeal (not necessarily at the

same time). The division dean will submit a written response outlining his or her decision to the student, faculty member, department chair/program director, and Vice-President for Academic Affairs within ten days of the last meeting.

- 4. Appeals to the Vice-President for Academic Affairs: The Vice-President for Academic Affairs may, at his or her discretion, review the appeal upon the written request of the student or faculty member and render a final decision. An appeal to the Vice-President for Academic Affairs is the last step in the appeals process and the Vice-President for Academic Affairs decision cannot be appealed further. Should the Vice-President for Academic Affairs not choose to review the appeal, the decision of the division dean is final.
- 5. Exceptions to the time involved: The division dean may waive the normal time frame for appeals for compelling reasons. Regardless of circumstances, academic appeals must be initiated with the course instructor within two years of the conclusion of the grading period in which the course was taken.
- Enrollment: A student need not be enrolled at NMSU/DACC to initiate an appeal.

College Academic Appeals Board: The College Academic Appeals Board will be appointed by the Vice President for Academic Affairs to hear student appeals. The appeals board will consist of three faculty members and two students.

Maintenance of records: Instructors and/or departments shall keep records used to compute individual grades for two years after the completion of a course. If a grade has been appealed, these records shall be kept for at least two years after completion of the appeal. Academic divisions or Departments may require that records be kept for longer periods.

#### Student Non-Academic Grievance Policy

Any student, who believes that he/she has been treated unjustly in a non-academic area, not involving a contractual agreement, can file a grievance as long as the Code of Conduct has not been violated. The purpose of this policy is to allow the parties to resolve grievances at the lowest administrative level in a fair and expeditious manner without the involvement of lawyers. A grievance must be filed no later than thirty (30) days following the time the alleged problem occurred. Failure of NMSU/DACC personnel to respond within ten (10) days, at any level in the procedure, will allow the student to proceed to the next step. The channel of appeal for non-academic grievances shall be:

- 1. The aggrieved student must first confer with the staff member involved in an attempt to resolve the problem.
- Unresolved grievances shall be filed in writing by the student with the appropriate supervisor. The supervisor will conduct an inquiry and attempt to resolve the matter impartially and as quickly as possible. This step must be concluded within ten (10) days of the date the grievance was received.
- 3. If the grievance is not resolved at Step 2, the student may forward a copy of the grievance and all relevant correspondence to the appropriate campus officer. The campus officer (or his/her designee) will conduct an investigation and attempt to resolve the issue. This process shall be concluded within ten (10) days of the date the grievance was received.
- 4. If the issue is not resolved in Step 3, the student may appeal to the President of DACC. If warranted, the President will appoint a hearing panel consisting of a student, a faculty member, and a staff person from departments or colleges not involved in the grievance. If a

hearing panel is appointed, the parties involved in the grievance will be allowed to submit written documentation concerning the problem, may be present at all hearing sessions, and will be given the opportunity to provide additional oral information on their behalf.

Upon completion of the hearing(s), the panel will forward a written recommendation to the President or his/her designee. This document should include findings of fact and the basis for the recommendation. The decision of the President or his/her designee is final.

## **Student Complaint Procedure for Texas Residents**

After exhausting the institution's grievance/complaint process, current, former, and prospective students who are Texas residents may initiate a complaint with the Texas Higher Education Coordinating Board. The required forms must be filed via e-mail or regular mail. Facsimile transmissions of the forms are not accepted.

E-mail Address: StudentComplaints@thecb.state.tx.us

#### Postal Address:

Texas Higher Education Coordinating Board College Readiness and Success Division P.O. Box 12788 Austin, TX 78711-2788

#### **Required Forms:**

- · A Student Complaint Form
- A signed Family Educational Rights and Privacy Act (FERPA) Consent and Release Form
- · A THECB Consent and Agreement Form
- A signed Authorization to Disclose Medical Record Information Form (only in the case of complaints involving students with disabilities)

The forms listed above are available at the following Web address: http://www.thecb.state.tx.us/index.cfm?objectid=C9BD55D4-C5A3-4BC6-9A0DF17F467F4AE9

Note that one of the downloadable PDF files contains three of the forms.

## Additional Policies and Procedures Section 4

### **Additional Policies and Procedures**

#### **Alcohol Policy**

[Amendment Adopted by Administrative Council 10.11.05; Ratified by Board of Regents 09.08.06] [Amendment Adopted by Administrative Council 07.13.10; Approved by the Board of Regents 07.20.10]

#### **Statement of Purpose**

The Board of Regents of New Mexico State University recognizes that diversity of opinion and freedom of choice are concepts upon which higher education has been established. Inherent within these two basic concepts are the exercise of individual responsibility and making informed decisions on matters related to personal behavior. These are concepts basic to all American freedoms.

Within the university setting, faculty, staff and students must demonstrate a mutual respect and commitment to the institution's educational mission while at the same time fostering diversity of opinion,

freedom of choice, and responsibility. In this regard, the university respects the right of those of legal age to consume alcohol if they so choose, providing they do so in accordance with this policy and all applicable laws.

This Alcohol Policy shall apply to every function or event, including but not limited to receptions, banquets, dinners, picnics, or any outdoor event, social event, and campus-wide activity sponsored by organizations or individuals associated with New Mexico State University. Off-campus events conducted by university approved organizations are bound by this policy.

NMSU/DACC recognizes it cannot protect its staff and students from making decisions that could potentially cause harm to themselves or others. NMSU/DACC disclaims any intention to assume duties to protect its staff and students from their own abuse of drugs or alcohol or to protect third party persons from conduct of the staff or students.

#### Scope of Policy

This Alcohol Policy shall apply to all NMSU campuses (Las Cruces main and community colleges) that have applied for and received a waiver from their respective county jurisdictions.

#### **Permissible Use of Alcohol**

Where permitted under the policy, the use of alcohol shall be considered a privilege and may be allowed only if consistent with local, state and federal laws and university policy, and only when it does not interfere with the academic atmosphere of the university.

- Students of legal age are permitted to use alcohol only in a manner consistent with this policy and the Student Code of Conduct.
- Students who reside on campus and are 21 years of age or older may possess and consume alcohol as permitted by law and in areas designated by the director of Housing and Residential Life. Refer to the housing policy for those areas designated as "alcohol free".
- 3. Selling, either directly or indirectly, of alcoholic beverages on campus is prohibited, except in those university facilities possessing a state alcohol license granted under the authority of the Board of Regents, or where pre-approved by the president or designee by event type. The president or designee has authorization, at their discretion, to grant permission for the serving or sale of alcohol at any other oncampus events. All venues approved for the routine sale of alcoholic beverages must have in place an approved policy for the sale and service of alcoholic beverages.
- Events occurring on campus involving alcohol must obtain the proper approval/permit. The following shall apply:
- Any event involving alcohol must be registered and approved by the university in order to obtain a proper permit.
- Student groups, campus organizations and Greek affiliates who wish
  to host events involving alcohol must have proper policies in place,
  consistent with university policies and local, state and federal laws,
  before they will be issued a permit for their event.
- Student fees may not be used directly to purchase alcohol. However, in certain cases, student fees may be used to fund events where alcohol may be served, provided the appropriate permits are obtained and applicable policies are adhered to.
- · Permits will be issued by the president or designee.
- State law requires that anyone serving alcohol must complete a class and receive a server's permit.
- If the consumption of alcohol is a normal part of an academic class, written approval for use must be obtained from the Office of

the Executive Vice President and Provost and the Alcohol Review Committee.

#### **Unacceptable Use of Alcohol**

NMSU/DACC discourages the use of alcohol that is inconsistent with local, state and federal laws and university policy. NMSU/DACC recognizes that the illegal use of alcohol interferes with the academic environment of this institution and the personal growth of its students.

- NMSU/DACC explicitly prohibits the unlawful use, possession, sale, or distribution of alcohol or controlled substances by all students and employees. Any violation of applicable local, state, and/or federal law is considered to be a violation of this institution's policies.
- Staff and/or students will be disciplined if their use of alcohol threatens to create disorder, public disturbances, danger to themselves or others, or property damage.
- Students who have not yet reached legal age are prohibited from purchasing, using, and/or possessing alcohol.
- 4. Except as outlined by this policy, consumption or possession of alcohol intended for consumption is prohibited on the university campus. Possession of alcohol intended for consumption is permitted for the sole purpose of prompt delivery to a designated, approved location.
- Open containers of alcohol are prohibited outside of designated areas.
- Kegs, party balls or common containers are not permitted, unless in conjunction with an event approved by the president or designee.

#### **Alcohol-Related Misconduct**

- Possession of false identification. Students found in possession of or attempting to use false identification in order to procure alcohol will be subject to the fullest force and effect of the consequences outlined in this policy and/or the Student Code of Conduct.
- Alcohol as an aggravating factor to other violations. If alcohol is found to be an aggravating factor in other violations of the Student Code of Conduct and/or local, state and federal laws, the student may be subject to more severe punitive sanctioning.
- Off-campus violations of Student Code of Conduct. The university reserves the right to impose sanctions upon students and student organizations that violate this policy and/or the Student Code of Conduct, even if such actions occurs off-campus.

#### **Consequences for Violations**

- Students found to be in violation of any of these policies through Student Judicial Services will be subject to disciplinary action ranging from Disciplinary Probation in conjunction with educational sanctioning through Expulsion from the university.
- Students in violation may also be subject to the disciplinary procedures of Housing and Residential Life, if applicable.
- 3. Staff or students found to be in violation will also be subject to all local, state and federal laws and nothing in this policy shall be construed to protect staff or students from such actions as local, state and/or federal law enforcement deem appropriate. Similarly, if local, state and/or federal law enforcement entities decide not to pursue action against violators, the university reserves the right to process violations through the Student Judicial Services and/or Housing and Residential Life, if applicable.
- 4. Staff or students who have not been found to be in violation of any of the policies herein who wish to self-identify and seek confidential help through the Employee Assistance Program, Counseling Center and/or the Wellness, Alcohol and Violence Education Program, will

not jeopardize their employment or academic status. This benefit will continue as long as the staff member or student refrains from further alcohol misuse and/or abuse.

#### **Children in the Academic Workplace**

Students, staff, faculty, and administrators can expect to attend and teach class, or complete work or research in laboratories, libraries, offices, and other workplaces with a minimum of distractions or interruptions. Consequently, the following regulations have been established, and will be enforced by the appropriate dean or administrative supervisor, to ensure that an appropriate academic environment is maintained:

- Children visiting campus must be closely supervised by an adult at all times.
- 2. Children will be prohibited from entering dangerous settings such as labs and equipment rooms without the approval of the appropriate dean or administrative supervisor.
- Children may not attend a class in session without the prior approval of the instructor. Children under the care of the instructor may not attend class without the prior approval of the immediate supervisor.
- 4. Children may, on rare occasions and with the approval of the supervisor, accompany a parent to the workplace. However, the expectation is that parents will make alternate arrangements for the care of their children during normal working hours.
- Children taking part in programs and/or special events on-campus are expected to abide by the rules and regulations established by the program or event sponsors.

#### Family Education Rights and Privacy Act (FERPA)

FERPA, the Family Educational Rights and Privacy Act, is a federal law that protects the privacy of student education records and affords students the right to refuse to permit New Mexico State University/Doña Ana Community College from releasing or disclosing any information about them. Additionally, FERPA gives parents certain rights with respect to their children's education records.

More information about FERPA at NMSU can be found on the Registrar's Office website.

#### **Film Policy**

In order to comply with the Federal Copyright Act (Title 17 United States Code) which governs how copyrighted materials, such as films/movies, may be used, it is strongly suggested that chartered student organizations and university departments of New Mexico State University review and adhere to the following guidelines as indicated by the Motion Picture Licensing Corporation when the proposed event involves the screening of a film/movie on the campus. The Department of Campus Activities will be available for consultation regarding the public performance licensing procedures, but will not be responsible for ensuring that the student organization or university department have complied with the intent of the law and have secured the appropriate license.

By law, as well as by intent, the pre-recorded videocassettes and DVDs (referred to henceforth as "Videos") which are available in stores throughout the United States are for all purposes intended for "home use only." Rentals or purchases of Videos do not carry with them licenses for non-home showings. Before you can legally engage in any non-home showings, you must have a separate license, which specifically authorizes such use.

Any institution, organization, company or individual wishing to engage in non-home showings of Videos should be aware of the Copyright Act's provisions governing the showing of Videos. The Copyright Act grants to the copyright owner the exclusive right, among others, "to perform the copyrighted work publicly." (Section 106 -FCA) In summary, the Copyright Act mandates:

- 1. The rental or purchase of a Video does not carry with it the right "to perform the copyrighted work publicly." (Section 202 FCA)
- 2. Videos may be shown without a license in the home to "a normal circle of family and its social acquaintances" (Section 101 FCA) because such showings are not "public."
- 3. Videos may also be shown without a license for non-profit educational purposes and in certain narrowly defined "face-to-face teaching activities" (Section 110. 1 FCA) because the law makes a specific, limited exception for such showings. (Sections 106 and 110(1) FCA)
- 4. Other showings of Videos are illegal unless they have been authorized by license. Even "performances in 'semipublic' places such as clubs, lodges, factories, summer camps and schools are 'public performances' subject to copyright control." (Senate Report No. 94-473, page 60; House Report No. 94-1476, page 64)
- 5. Institutions, organizations, companies or individuals wishing to engage in non-home showings of Videos must secure licenses to do so – regardless of whether an admission or other fee is charged. This legal requirement applies equally to profit-making organizations and non-profit institutions (Senate Report No. 94-473, page 59; House Report No. 94-1476, page 62)

Showings of Videos without licenses, when one is required, are infringements of the established copyright. If done "willfully and for purposes of commercial advantage or private financial gain," they are a federal crime and subject to a \$150,000 penalty per advantage or private financial gain," they are a federal crime and subject to a \$150,000 penalty per exhibition (Section 506 – FCA). In addition, even innocent or inadvertent infringers are subject to substantial civil damages (\$750 to \$30,000) for each illegal showing and other penalties. (Sections 502-505 – FCA)

#### **To Obtain Public Performance License**

Obtaining a public performance license is relatively easy and usually requires no more than a phone call. Fees are determined by such factors as the number of times a particular movie is going to be shown, how large the audience will be and so forth. While fees vary, they are generally inexpensive for smaller performances. Most licensing fees are based on a particular performance or set of performances for specified films. The major firms that handle these licenses include:

#### Swank Motion Pictures, Inc.

http://www.swank.com (800) 876-5577

#### **Criterion Pictures**

http://www.criterionpicusa.com

#### **Motion Picture Licensing Corporation (MPLC)**

http://www.mplc.org (800) 462-8855

#### Freedom of Expression Policy

New Mexico State University/Doña Ana Community College recognizes and promotes an intellectually open campus. The free exchange of ideas through written, spoken, and other forms of expression reflects its public

land-grant heritage, support of diverse points of view, and commitment to excellence in education and research.

#### A. Campus Use for Free Expression

Any outdoor area that is generally accessible to the public may be used by any individual or group for petitioning, distributing written material, handing out newspapers, or conducting speech acts. Prior approval is not necessary as long as the primary action is not to advertise or sell a commercial product. Activities must follow all applicable fire codes, local, state, and federal laws. Activities shall not:

- · Unreasonably obstruct vehicular or pedestrian traffic.
- · Block the entrances or exits to buildings and facilities.
- Permanently occupy land areas or permanently locate signs and posters.
- · Erect permanent structures, shelters or camps.
- Unreasonably interfere with classes, university work, and scheduled events.

In exercising the right of free expression, one must also accept the responsibility of following the laws related to the safety of people and property. If property damage or excessive littering occurs, or other unusual expenses are incurred by the university as a result of the event, event organizers may be held responsible for reasonable charges if deemed appropriate by the President or his/her designee.

- 1. Petitioning and the Distribution and Posting of Literature and Signs
  - a. All literature distributed must contain identifying information either (1) the name of an NMSU/DACC sanctioned organization, or (2) the name and address (which may be an organization and e-mail address) of the unaffiliated entity or person or the telephone number of the unaffiliated entity or person for someone to contact in case of litter problems.
  - Literature may be distributed hand-to-hand, through the use of tables, or by posting on designated bulletin boards and kiosks.
  - c. Written materials may not be placed in non-approved locations. Written materials may not be placed on any part of a university building or structure without university permission. Posting on traffic signs, power poles, trees, and automobile windshields is not allowed.
  - d. Tables are allowed as long as they do not unreasonably interfere with pedestrian traffic. Materials may not be left on unattended tables. While scheduling of tables is not required in advance, those individuals who have previously scheduled a site through the Campus Activities Office or other appropriate university offices will take precedence.

#### 2. Group Speech Activities

- a. Group speech activities, including rallies, parades and demonstrations, that are advertised through public media including newspapers, radio, television, flyers, or electronic lists may need to be coordinated through the NMSU Police Department (as described in 2b).
- b. Any individual, group, or organization sponsoring a group speech activity that is expected to draw more than 100 persons at one time and uses public media for advertising must notify the NMSU Police Department no less than 72 hours in advance of the activity, so that the NMSU Police Department can take appropriate actions to ensure the safety of the event and issue a permit as proof of prior notification. Activities expected to draw

- 500 or more participants, or require road closures or detours, must be scheduled two weeks in advance.
- c. Any individual, group, or organization planning a group speech activity is encouraged to contact the Campus Activities Office in advance so that activities may be coordinated with appropriate university offices. This will allow for locations to be reserved or other concerns to be addressed, such as the use of sound amplification equipment. Contacting the Campus Activities Office is voluntary and does not constitute an approval process.
  - i All scheduling is done on a "first come, first serve" basis.
  - ii Activities that are scheduled receive priority in the use of space on campus.

#### 3. Electronic Sound Amplification

- a. The use of electronic sound amplification equipment is authorized in the open lots to the East of the Pan American Center and Aggie Memorial Stadium, the Corbett Center Outdoor Stage, and the "Aggie Pond" area off Espina Street, from 7:00 a.m. to 7:00 p.m. Sunday through Thursday, and from 7:00 a.m. to midnight on Friday and Saturday.
- Sound amplification equipment may be allowed at other times and in other locations if coordinated in advance through the Campus Activities Office.

#### 4. Use of Chalk

- a. Chalk may be used on campus as long as it is restricted to concrete walkways.
- All chalk used must be of a temporary or removable nature.
   Permanent chalk, such as surveyor's chalk, may not be used under any circumstances.

#### B. Policy Enforcement

Any person violating this policy will be subject to:

- Being asked to cease and desist or to relocate by appropriate university employees acting within the scope of their duties.
- 2. Being ordered to leave the premises or property owned or controlled by the university by the police or a person in charge of the property.
- Institutional disciplinary proceedings under the Student Code of Conduct if violation by a student. Violations by faculty or staff will be referred to the appropriate department or academic unit.
- 4. Arrest for violation of local, state, and federal law(s).
- 5. Restriction of future use of, or access to, the NMSU/DACC campus.

#### C. Reference to Other Policies Impacting Freedom of Expression

In the event that the terms of this policy conflict with other existing policies impacting freedom of expression in areas generally accessible to the public, the terms of this policy shall prevail.

#### **Fund Raising/Sales and Solicitation**

Raising funds is a means for campus organizations to supplement their other resources in meeting the goals of their organization. In order to avoid conflicts, duplications, or violation of laws or regulations, it is necessary to establish guidelines to aid in coordinating such activities.

Although the University supports organizational fund-raising efforts, it recognizes that the campus is not a market place to be exploited by opportune entrepreneurial projects. Fund raising is not the primary function of student organizations, and campus organizations do not have

an implicit right to use the campus or the community for fund-raising activities.

Fund raising through sales and solicitations, both on and off-campus, are governed by University Sales and Solicitation Policies. Full text copies of these policies are available from the Campus Activities Office. The Director of Campus Activities makes interpretation of the Sales and Solicitation Policy. The Campus Activities Office is located in Corbett Center Student Union Room 235.

#### **Housing and Residential Life Application Acceptance Policy**

The University reserves the right to refuse to give a housing assignment to any student. Examples of reasons for refusal include, but are not limited to, individuals who have a criminal history, individuals who have behavioral problems which may, in the opinion of the University, negatively impact the group living environment, individuals who have been previously evicted from campus housing, or individuals who have poor rental histories.

#### **Housing and Residential Life Dining Regulations**

Dining regulations are contained in the Dining Services contract, which each student agrees to when applying for dining services. Additional copies are available in the ID Card Office. Upon reasonable notice and for good cause the University reserves the right to terminate the dining agreement for failure of the student to abide thereby. Examples of good cause include, but are not limited to, failure to abide by the terms of the Dining Agreement, a change in student status (including academic or disciplinary suspension), or a failure to comply with the policies and regulations contained in the Campus Dining Services program brochure and/or official informational bulletins distributed by Campus Dining services which are hereby incorporated into Dining Services Agreement. Dining regulations are enforced under the Student Code of Conduct.

#### **Housing and Residential Life Regulations**

Housing regulations are contained in the Single Student Housing License Agreement, which each student agrees to when applying for housing services, as well as the "Housing and Residential Life Handbook," which each student receives at move-in. Additional copies are available at the Housing Office and all residential area offices. Students living off-campus are also subject to housing regulations when visiting residential areas. Housing regulations are enforced through the Housing and Residential Life Office as well as through the Student Code of Conduct.

#### **Nondiscrimination Policy**

The university is dedicated to providing equal employment and educational opportunities to all persons without regard to age, ancestry, color, disability, gender, gender identity national origin, race, religion, sexual orientation, spousal affiliation or veteran status. The university strives to comply with all federal and state nondiscrimination laws, including:

- · Titles VI and VII, Civil Rights Act of 1964
- Age Discrimination in Employment Act of 1975
- Equal Pay Act of 1963
- Pregnancy Act of 1978
- Education Amendments of 1972, Title IX
- Section 504 of the Rehabilitation Act of 1973
- · Vietnam Era Veterans Readjustment Act of 1974
- Executive Order 11246
- Executive Order 11141
- · Americans With Disabilities Act of 1990

- · Civil Rights Act of 1991
- · New Mexico Human Rights Act

This dedication extends to recruitment, hiring, promotion, compensation, training, benefits, separations, and to the availability and delivery of all educational, academic, and student welfare programs and services. The Office of Institutional Equity/EEO Office is responsible for assuring compliance with equal employment opportunity programs throughout the university. Any individual who wishes to file a discrimination complaint or discuss discrimination issues is encouraged to contact the Office of Institutional Equity/EEO Director or the Human Resources (Personnel) Director if the individual is uncomfortable reporting the complaint to the Office of Institutional Equity/EEO Director. For nondiscrimination complaints or matters, employees may contact the Assistant Director of Employee Relations, Hadley Hall, room 15, and the telephone number is 646-4148.

To access the complete grievance procedures for discrimination, please refer to Chapter four, Section 4.05.10 of the New Mexico State University Policy Manual (dated May 6, 2011). Copies of this policy manual may be obtained via the Human Resources (Personnel) website at http://www.nmsu.edu/manual/.

#### **Sexual Harassment Policy/Hostile Work/Academic Environment**

To access the complete Sexual Harassment Policy, please refer to Chapter three, Section 3.94 of the New Mexico State University Policy Manual (dated May 6, 2011). Copies of this policy manual may be obtained via the Personnel website at http://www.nmsu.edu/manual/.

All employees and students should be aware that the university is prepared to take action to prevent and remedy such behavior, and that individuals who engage in such behavior are subject to disciplinary action. Faculty and staff with actual or apparent authority who engage in sexual harassment or neglect to control the work environment may be held accountable. Anyone who may have been subjected to sexually offensive behavior or conduct in the classroom or work environment is encouraged to contact the Office of Institutional Equity/EEO Director. The office is located in O'Loughlin House on University Ave. and the telephone number is 646-3635.

Disability: Qualified students with disabilities are to be provided with reasonable accommodation in accessing buildings, programs, and services. Students are encouraged to contact Services for Students with Disabilities (at 527-7548) for academic related services, and may refer to the "Campus Directory" for resource information, telephone numbers, and Telecommunication Devices for the Deaf (TDD) locations. Disability based discrimination grievances may be filed according to the procedures set forth in Section 4.05.10 of the New Mexico State University Policy Manual (May 6, 2011).

#### **Parking and Traffic Regulations**

Anyone who parks anywhere on-campus must obtain and display a parking permit, unless the vehicle is parked in a free lot or at a paid parking meter. The individual in whose name a vehicle is registered or a permit is issued with the Parking Office will be responsible for any violations of the Parking and Traffic Regulations. Additionally, all motor vehicle statutes of the State of New Mexico apply. Call 646-1839 or visit http://www.nmsupolice.com/ for more information.

#### **Procedures for Entry and Search of University-Operated Housing**

The University respects the student's desire for privacy within the realm of the group-living experience on state property and will make every effort to protect that privacy. Campus premises occupied by students

and the personal possessions of students shall not be searched unless appropriate authorization has been obtained. Campus living quarters may be entered for the purposes and under the restrictions listed:

#### A. Procedures for Entry

- Maintenance Premises may be entered after knocking, to give attention to health, sanitation, maintenance, and safety requirements.
- 2. Inspections Housing personnel and any other appropriate University official or staff may enter any room/ house/ apartment for inspection purposes, with appropriate written notice. Twenty-four hours' notice will be given whenever possible. Housing personnel or any other appropriate University official conducting the inspection shall report violations of University regulations and state or federal laws via established procedures.

#### 3. Other -

- a. The University Housing staff may enter a room/ house/ apartment, after knocking, without written authorization when there exists immediate and compelling cause, i.e., loud noise, complaints from other residents, emergency circumstances (such as fire evacuation), or similar overt occurrences. Evidence of regulatory or statutory violations that exists in plain and open view of the entering staff members may be used in initiating disciplinary procedures.
- b. In instances where immediate and compelling cause does not exist, written authorization from the individual in charge of the residential area or his superior must be obtained prior to entry. Such authorization must show reasonable cause, i.e., there must exist a reason to believe, other than mere suspicion, that violations of federal and state statutes or University regulations are occurring. If the occupant of the room/house/apartment is absent, a staff member of the residential area must be present during the entry. Evidence of regulatory or statutory violations that exist in plain and open view of the entering staff member may be used in initiating disciplinary procedures.
- Police agency entry Police entrance shall be governed by the requirements of customary legal investigative practice.

#### B. Procedures for Search

Administrative Search — Upon presentation of reasonable cause, the Director of Housing and Residential Life or his/her superior may issue written authorization for the search of a designated room/house/apartment and the contents thereof. The authorization stating the reason(s), cause(s), or condition(s) necessitating the search shall be presented to the designated occupant(s) prior to the search. In execution of the search, the Director of Housing and Residential Life or his/her designee, the Coordinator for Residential Communities or his/her designee and the occupant should be present; however, it is not imperative that the occupant be present.

#### C. Appeal and Grievance Redress

- Entry and Search Authorization Appeals In cases where disciplinary
  procedures arise from evidence obtained on the basis of entry
  or search authorizations, the cause for, validity, or scope of the
  authorization may be challenged by the student-defendant and such
  challenge must be adjudicated by the University disciplinary system
  before any further action is taken.
- Grievance Allegations In such case that a student believes his guaranteed rights have been violated by an act of entrance or search, he/she may present written allegation of this belief to the Vice

President for Student Affairs and Enrollment Management, who shall thereupon require an investigation of the allegation. Should this investigation demonstrate that a University employee has intentionally erred and violated a student's rights, this employee shall be subject to disciplinary action, including possible termination.

#### **Posting Policy**

Written information may be posted on campus at designated locations (a list may be obtained from the DACC Student Activities Office). Written materials may not be placed on automobile windshields, traffic signs, power poles, trees or any part of a university building or structure including walls, glass, doors or floors. Permission to use building bulletin boards is at the discretion of the building monitor and use must conform to facility operating policies where they exist.

Posters or signs providing directions or information related to a convention or special event may be placed on single stakes and displayed on the date of the event, but must be removed by the sponsoring group when the event is over.

Questions related to the interpretation of this policy should be directed to the Office of Campus Activities.

#### **Smoking Policy**

Accumulating evidence has shown environmental or second hand tobacco smoke increases the risk of cancer and other health hazards for non-smokers as well as smokers. NMSU/DACC has a vital interest in maintaining a healthy and safe environment for its students, faculty, staff and visitors while respecting individual choice. Consistent with these concerns and the New Mexico Clean Indoor Air Act, NMSA 1978, § 24-16-1 through 11, the following policy has been established to restrict smoking of tobacco, or any other weed or plant, and provide procedures for accommodating the preferences of both smokers and nonsmokers.

Smoking of tobacco products is prohibited in all buildings (exceptions below) owned or leased by the University as well as within 25 feet of entrance or exit, vehicles, and during some organized outdoor events on University property.

#### **Smoke-Free Areas**

Smoking is prohibited in or at:

- All enclosed buildings and facilities including classrooms, offices, food service venues, lavatories, and most residence halls (in accordance with Housing & Residential Life policies);
- Within 25 feet of building entrances and exits (when reasonable) and fresh air intake grills unless it is a specially designated smoking area
- · Partially or fully enclosed walkways, corridors, elevators
- · Vehicles owned, leased or rented by the University; and
- Within 50 feet of any area where flammable materials are handled or stored, or where other significant fire hazard may exist
- Indoor athletic or other University-sponsored or designated events

No Smoking signs or the international no-smoking symbol will be posted at major entrances of all University buildings except for those campus residences where smoking is permitted.

#### **Smoking Permitted Areas**

Smoking is permitted outdoors on University property except during organized events which have been designated as "No Smoking". Individuals choosing to smoke outdoors must be 25 feet from doorways, open windows, enclosed walkways, and ventilation systems to prevent smoke from entering enclosed buildings and facilities, and to prevent

public access from being denied to an individual with a respiratory medical condition.

In accordance with Housing and Residential Life policies, smoking is permitted in those units which constitute private residences; when everyone in the shared residence is a smoker or at the discretion of each Family Housing unit.

Fraternities and sororities will work toward an agreement, consistent with University policy during the current school year.

#### **Education and Services for Smokers**

In light of numerous adverse health effects associated with active smoking, and with exposure to second hand smoke, the University will provide educational services to faculty, staff, and students about the hazards of smoking and information and services on quitting smoking. In addition to consulting with their own health care providers, students, faculty, and staff may get assistance from the following University programs.

- Students may contact the NMSU Student Health Center for information and programs on quitting smoking.
- Faculty and staff may obtain assistance in smoking cessation through the NMSU Student Health Center.

#### **Cooperation and Compliance**

This policy relies on the mutual courtesy and cooperation of smokers and nonsmokers for its success. It is the responsibility of all members of the NMSU/DACC community to observe the provisions of this policy on smoking. Complaints or concerns or disputes regarding its implementation should be referred to the immediate supervisor for resolution. Environmental Health & Safety will assist in determining what distance or location is reasonable for the particular situation. If a resolution cannot be reached, the matter will be referred by the supervisor to the appropriate Department Head, Director, Dean, and Vice President for mediation. Managers, Department Heads and unit Directors are responsible for seeing that persons in their areas are informed and comply with this smoking policy. Those having difficulty complying with these restrictions are encouraged to seek assistance from the resources listed in Section 4. Students, faculty, and staff violating this policy are subject to disciplinary action. Any person who commits an unlawful act under any of the provisions of the New Mexico "Clean Indoor Air Act" shall be fined in an amount not less than ten dollars or more than twentyfive dollars for each violation.

#### **Disposal of Tobacco Waste**

Anyone who chooses to smoke or use smokeless tobacco on campus must discard the waste in an appropriate manner.

#### **Vacating University Buildings or Property**

The University recognizes the importance of providing a venue where members of the community can freely and openly express their ideas. However, if an individual(s) and/or organization improperly or illegally occupy university buildings or property, the following statement will be read.

You are violating university regulations and/or State laws concerning improper occupation of buildings or property. If you leave within the next 10 minutes, no further action will be taken. If you do not leave within 10 minutes you may be arrested. If you are a student, you may also be subject to disciplinary action as outlined in the Student Code of Conduct.

In the event a crime (other than the peaceful, but illegal occupation of a building or property) has occurred, is occurring, or is about to occur,

action may be taken without regard to the above statement by the appropriate university officials in order to protect the safety, lives, and property of the university community.

## **Constitution of the Student Government Association of DACC**

### **ARTICLE I: Preamble**

We, the students of Doña Ana Community College, hereby adopt this Constitution which makes provision for a democratic student government organization. The executive officers will consist of a President, Vice-President, Secretary, and Treasurer, duly elected by the Doña Ana Community College student body and Senate Leader selected by DACC Student Senate. The members of officially sanctioned student organizations' shall elect a senator to serve on the DACC Senate Committee. This student government will provide a communication link with the Doña Ana Community College administration, faculty, and student body facilitating the expression of student opinion and voice on campus. The name of this organization shall be called "Student Government Association of Doña Ana Community College," hereafter referred to as the SGADACC.

### **ARTICLE II: Purpose**

The primary purpose of the SGADACC shall be as follows:

- A. To represent the student body of Doña Ana Community College.
- B. To encourage cooperation and communication between the students, faculty, administration, and all other campus organizations.
- C. To provide a forum for student expression and the exchange of student-faculty views.
- D. To enhance the quality of student life at this campus.
- E. To develop good citizenship attitudes by performing community service projects on and off-campus.
- F. To develop leadership skills, training, and development.
- G. To provide students with networking skills and opportunities.

## **ARTICLE III: Membership**

**Section 1:** The membership of the Student Government Association shall consist of the following:

- A: Executive Committee: The Executive Committee shall consist of the following elected officials:
  - President
  - · Vice-President
  - Treasurer
  - Secretary
  - · Senate Leader

Senate leader. Senators shall select, by vote, a Senate leader.

- The Senate leader will attend all executive board meetings and work with the Vice-President to assign senator duties.
- B. Senators: Senators shall be an elected or appointed representative from each active officially sanctioned club of DACC.
- C. Executive Board: The Executive Board shall consist of the SGADACC Executive Committee, and the Vice President for Student

Services. The Executive Board will meet prior to each SGADACC senate meeting.

#### D. SGADACC Senate:

- 1. The SGADACC Senate will consist of all senators selected or appointed to SGADACC.
- 2. The SGADACC Senate will meet prior to each SGADACC general meeting. The Senate leader will coordinate and conduct all meetings along with Vice President of SGADACC.
  - E. Terms of Office: All SGADACC officers and senators shall serve for one (1) year, commencing July 1 and ending June 30 of the following calendar year. Any elected official shall be eligible to remain in office provided that he/she maintain a cumulative GPA of 2.5 for Executive Officers, and 2.0 for Senators.

## **ARTICLE IV: Meetings and Committees**

**Section 1:** The SGADACC shall hold general meetings at a minimum of once a month during the fall and spring semesters. All meetings shall be conducted according to Robert's Rules of Order.

**Section 2:** The SGADACC shall hold senate meetings at a minimum of once a month during the fall and spring semesters.

Section 3: All students, faculty, and staff associated with DACC may attend general meetings of the Student Government Association.

Section 4: Standing and Ad Hoc Committees shall be appointed as necessary by the President of the SGADACC and chaired by an officer or Senator. The chairperson will report to the President or designated officer of the SGADACC on the committee's progress and will present recommendations from the committee to the SGADACC in senate meetings. The chairperson shall assist and coordinate the work of the committee.

## **ARTICLE V: Duties and Responsibilities**

**Section 1:** The duties and responsibilities of Student Government Association elected officials include, but are not limited the following:

#### 1. President:

- · Shall serve as a role model to the student body.
- Shall have the responsibility of overseeing the duties and responsibilities of the executive committee.
- Communicating and publicizing the affairs of the student body.
- Shall meet regularly with the Vice President for Student Services
- · Must attend all SGADACC meetings.
- Shall represent the student body at the administrative council meetings and/or any other DACC administrative meeting that requires the presence of the SGADACC.
- May attend meetings with Student Government Associations from different colleges and universities.
- · Shall appoint standing senator committees.
- Shall approve any Requests for Funding and/or Non-Club Requests for Funding.
- Will oversee all communication with student organization presidents.

#### 2. Vice-President:

- · Shall serve as a role model to the student body.
- · Shall assume the role of President in their absence.
- Will oversee all communication with the student organization advisers dealing with requests for funding, activity requests, and/or monthly status reports.
- Will oversee all communication with the DACC departments, dealing with Non-Club requests for funding.
- · Shall attend all SGADACC meetings.
- · Shall assign senator duties with the senate leader.
- · Shall present a report of activities to the student senate.

#### 3. Treasurer

- · Shall serve as a role model to the student body.
- Shall keep an accurate record of all monies received and disbursed.
- Shall prepare financial reports for all SGADACC meetings, including current balance, expenses per student organization, and non-club expenses.
- · Shall oversee all communication with Business Office.
- Shall meet with the Business Office once a month to check the SGADACC balance.
- · Shall attend all SGADACC meetings.

#### 4. Secretary

- · Shall serve as a role model to the student body.
- Shall be responsible for recording the minutes and acting as the official timekeeper of all SGADACC meetings.
- Shall ensure that copies of the minutes of all SGADACC meetings are distributed in a timely manner to all SGADACC officers and the student senate.
- Shall approve the agenda prior to a meeting and prepare a
  presentation if needed. The agenda/presentation shall be sent
  to the executive team 2 days prior the meeting.
- Shall prepare the conference room prior to a SGADACC meeting, ensuring that each SGADACC member has a nametag, a hard copy of the agenda, a seat, and keep track of the sign-in sheet, with the SGADACC administrative assistant.
- Shall update the student database with the SGADACC administrative assistant.
- · Shall attend all SGADACC meetings.

#### 5. Senate Leader

- · Shall serve as a role model of the student body.
- · Will attend all SGADACC executive board meetings.
- Will work with the Vice President to assign senator duties.
- Shall be responsible for directing all standing committees.
- · Shall present a report of activities to the student senate.
- · Shall attend all SGADACC meetings.

#### 6. Senators:

- · Shall serve as roles models of the student body
- Shall serve on at least one standing committee set forth by the senate leader.
- · Shall communicate regularly with the Senate Leader

- Shall participate in at least two SGADACC-sponsored events per semester
- · Shall attend all SGADACC meetings.

## **ARTICLE VI: Petitioning, Campaigning, and Elections**

#### Section 1:

A. Executive Officers shall be elected at large by the general student body at DACC. To be eligible to run for office, a student shall have a cumulative GPA of 2.5 or better, shall be enrolled in a minimum of 6 credits at DACC and have a declared major. DACC Executive Officer candidates must also be in good academic standing and not have any Student Code of Conduct violations as determined by the Vice President for Student Services. During the spring semester, it shall be the duty of the President to announce to the student body the date of the elections. Within two (2) weeks after the announcement of the elections, each student who desires to become a candidate for executive office must present to the SGADACC a complete petition for candidacy with at least fifty signatures from students of DACC. If a student signs a petition for more than one person for the same office, his/her signature on all such petitions shall be declared void.

B. All candidates will be given an opportunity to campaign with posters and pin-on materials, to be placed throughout the campus in areas designated by the SGADACC. Any questionable material must be presented for approval to the SGADACC Executive Committee.

#### Section 2:

A. Voting shall take place on-line and shall be supervised by the Vice President for Student Services. Voting is open to all DACC students. A candidate running for an executive office who receives a majority of the votes cast shall be elected to office. The Vice President for Student Services shall tally the ballots and the results of the election shall be announced at the next regular meeting of the SGADACC.

B. All newly elected officers will be affirmed at the last regular meeting of the SGADACC in order to start their tenure on July 1. The affirming ceremony will be conducted by the Vice President for Student Services, at the beginning of the new school year or as determined by the Vice President for Student Services.

## **ARTICLE VII: Removals and Resignations**

Section 1: Irreconcilable Differences Between Elected Officials: In the event that irreconcilable differences exist between the elected officials, rendering them unable to work together toward the best interests of the Student Government Association, the Vice President for Student Services upon their recommendation and discretion, may remove any or all elected officials in order to preserve the continued well-being of the SGADACC.

Attendance of each elected or appointed SGADACC officer is mandatory at all meetings. Any officer who is absent from two or more consecutive meetings during one semester without a valid reason shall be sent before the SGADACC Executive Committee for evaluation. Removals are conducted due to the neglect of performance of duties as specified by the Constitution.

Section 2: Any elected official desiring to resign from the SGADACC shall submit his/her resignation in writing to the President, who shall read the letter of resignation under "New Business" for the acknowledgment of the Student Government Association.

### **ARTICLE VIII: Order of Succession**

In the event of the President's resignation, the letter will be addressed to the Vice President for Student Services. Should the President, in some manner, be rendered temporarily unable to fulfill the duties and discharge the powers of his/her office, authorities, responsibilities and duties of such office, the Presidency will be turned over to the Vice President, and shall revert back to the President upon his/her declaration of fitness to serve. In the event the President should resign or be removed from his/her office, the duties and responsibilities shall be given to the Vice President. The Vice President for Student Services, Executive Committee, and Senate will determine the order of succession of executive responsibility in the event that both the President and Vice President become unable to fulfill their responsibilities. If the Vice President resigns, procedure will be followed per Article VII, Section 2. If the Vice President is recalled or in some manner rendered unable to fulfill his/her duties, authorities, or responsibilities of such office, the position of the Vice President will be left to the Executive Committee to fill. An announcement will be made within five (5) working days to all DACC Students that the Vice Presidency is vacant. Proper procedures will be followed with a letter of petition submitted within one (1) week after the vacancy has been announced. These petitions will be reviewed by the Executive Committee and all candidates will be given the opportunity to speak before the SGADACC. A quorum is required to vote, and the SGADACC, by secret ballot, will determine who will fill the position of the Vice Presidency. The Executive Committee shall have the power to appoint a Secretary or Treasurer in the event of a resignation, removal, or other circumstance by which the office becomes vacant.

A. Senator(s) who resigns his/her/their seat or is/are removed will be replaced by another student in that student club. Applications for the open positions will be reviewed, and the Executive Committee will then appoint a replacement from the applications.

## **ARTICLE IX: Organizations/Clubs**

Section 1: To be chartered through the SGADACC, an organization shall have a membership of seven or more students and two (2) community-service or campus projects per semester. Organizations shall submit a Student Organization Recognition/Renewal Form (Form A), a Student Organization Officer Roster (Form B), a club membership list, and official by-laws to the Student Government Association prior to the first senate meeting of the fall semester. Updated student organization officer rosters and club membership lists are required prior to the first senate meeting of the spring semester. Forms not submitted by published deadlines will not be chartered for the applicable semester.

Section 2: For the purpose of obtaining any needed funds, all chartered organizations shall make a request to the Student Government Association in the form of a "Request for Funding" (RFF), Refer to the SGADACC Student Organization Handbook to ensure that all procedures are followed. Any organization failing to conduct business in the best interest of the DACC and not abiding by their by-laws, the SGA Constitution, and/or NMSU/DACC policies may no longer be chartered by the SGADACC, thus being denied funds by the Student Government Association. Exception to this policy can be addressed to the SGADACC in a closed meeting.

## **ARTICLE X: Budgets**

Section 1: the Student Government Association of Doña Ana Community College will adhere to expenditure procedures as outlined in the NMSU Business Policies and Procedures Manual. Financial records shall be maintained by the Doña Ana Community College Finance Office. The Finance Office shall provide monthly reports of all transactions to the treasurer of the Student Government Association so that an accurate record of finances can be recorded by the SGADACC. All funds shall be distributed through the DACC Finance office.

Section 2: Student Government Association monies must be expended according to the following guidelines:

- Annual expense budget will be prepared and approved by the SGADACC and the executive board before any expenditure can be dishursed
- Funds can only be used for the benefit of current DACC students for the purposes of enrollment, retention, and/or completion.
- The President and the Treasurer are the only persons who can sign request for funding/purchase orders for expenditures approved by the Student Government Association.
- All expenditures require the signature of the President, Treasurer, and the Vice President for Student Services.
- Expenditures in excess of \$1,500 require competitive quotes and should be coordinated with the Vice President for Student Services and the Vice President for Business and Finance.
- All funding requests are subject to approval of the Executive Committee.

**Section 3:** The Student Government Association of DACC shall submit an annual expense budget to the Vice President for Student Services for use by the Student Government Association of DACC.

## **ARTICLE XI: Payment to Officers and Senators**

Section 1: The Vice President for Student Services and the Executive Committee shall agree on a set amount to be paid to each Executive Officer and the Senate Leader on an annual basis given the annual allotment from student fees and budgetary constraints. Payments to officers will be disbursed according to Human Resources Policy.

**Section 2**: The Vice President for Student Services and the Executive Committee shall agree on a set amount to be paid each senator on a semester basis given the annual allotment from student fees and budgetary constraints.

## **ARTICLE XII: Emergency Action Clause**

Section 1: The Executive Committee shall establish regular meeting times for themselves to discuss agendas and other issues which need to be presented at general meetings. The Executive Committee shall have the power to act in the name of the Student Government Association in situations where the membership cannot be called into session and immediate action is necessary. The Executive Committee shall report any action taken to the general membership at the next scheduled meeting.

Section 2: The President has executive power to make decisions in the name of the Student Government Association in a situation where the Executive Committee cannot be called into session and when immediate action is necessary. The President shall report any action taken to the Vice President for Student Services. The President shall report any action

taken at the next regular scheduled Student Government Association senate and general meeting.

### **ARTICLE XII: Amendments to Constitution**

Section 1: This Constitution can be amended or revised by a two-thirds (2/3) majority vote of the membership of the Student Government Association. The proposed amendment or revision shall be presented at the next general meeting of the Student Government Association. The proposed amendment(s) or revision(s) shall not be discussed or voted upon until the next general meeting. If passed, the proposed amendment(s) or revision(s) will be reviewed by the Vice President for Student Services for approval or veto.

## GOVERNANCE AND PERSONNEL

## CLICK HERE FOR DACC FACULTY LISTINGS (http://dacc.nmsu.edu/publications/2017-2018-faculty-listings)

#### NEW MEXICO STATE UNIVERSITY

#### Administration

Dr. Dan Arvizu, Chancellor Dr. John Floros, NMSU Las Cruces Campus President TBD, Executive Vice President and Provost Gregory Fant, Associate Vice President and Deputy Provost

#### **Board of Regents**

Susana Martinez, Governor of New Mexico, Ex Officio Regent (Santa Fe. N.M.)

Debra Hicks, Chair (Hobbs, N.M.)

Kari Mitchell, Vice Chair (Las Cruces, N.M.)

Jerean Camúñez Hutchinson, Secretary/Treasurer (Las Cruces, N.M.)

Margie Vela, Student Regent (Las Cruces, N.M.)

Christopher Saucedo, Member (Albuquerque, N.M.)

#### **Ex Officio Members**

Rebecca Corran, Faculty Senate Chair Monica Dunivan, Employee Council Chair Emerson Morrow, ASNMSU President

#### DOÑA ANA COMMUNITY COLLEGE

#### Administration

Dr. Renay M. Scott, President
Dr. Mónica Torres, Vice President for Academic Affairs
Kelly Brooks, Vice President for Business and Finance
Amadeo E. Ledesma, Vice President for Student Services
Eddie Binder, Vice President for External Relations

#### **Advisory Board**

María Flores, President (Las Cruces Public Schools)
Paul Dulin, Vice President (Hatch Valley Public Schools)
Daniel Estupiñan, Secretary (Gadsden Independent School District)
Daniel Castillo, Member (Gadsden Independent School District)
Ray Jaramillo, Member (Las Cruces Public Schools)
Greg Mitchell, Member (Hatch Valley Public Schools)

#### **Ex Officio Members**

Travis L. Dempsey, Superintendent, Gadsden Independent School District

Linda Hale, Superintendent, Hatch Valley Public Schools Dr. Gregory Ewing, Superintendent, Las Cruces Public Schools

#### **Academic Division Deans**

Saundra Castillo, Advanced Technologies Division Michael Mirabito, Arts, Humanities, and Social Services Division Lydia Bagwell, Business and Public Services Division Josefina Carmona, Health Sciences Division Joe Butler, Science, Engineering, and Mathematics Division

# POLICY STATEMENT ON DISCRIMINATION AND AFFIRMATIVE ACTION

### **Notice of Non-Discrimination**

New Mexico State University (NMSU) is dedicated to providing equal opportunities in our employment and learning environments. NMSU does not discriminate on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex (including pregnancy), sexual orientation, spousal affiliation, or protected veteran status in its programs and activities as required by equal opportunity/affirmative action regulations and laws and university policy and rules.

NMSU's Office of Institutional Equity is responsible for compliance with state and federal equal employment opportunity laws and affirmative action regulations. This incorporates implementation of the University's Affirmative Action plan including equal opportunity practices, monitoring, and reporting. If you believe you have been treated in a manner inconsistent with equal opportunity, contact the Office of Institutional Equity.

NMSU has designated Lauri Millot as the Title IX Coordinator and she is responsible for ensuring compliance with Title IX and other state and federal laws addressing sexual and gender-based harassment, including sexual assault, sexual exploitation, sexual intimidation, intimate partner abuse, stalking, and other forms of sexual violence based on sex, gender, sexual orientation, or gender identity.

NMSU recognizes that individuals with disabilities are entitled to access, support and, when appropriate, reasonable accommodation. Ms. Millot is also assigned to coordinate compliance with Section 504 and other state and federal laws that prohibit discrimination on the basis of disability in admission, treatment and/or access to its programs and activities.

Inquiries regarding equal opportunity, affirmative action, Title IX, and/or Section 504 should be directed to:

Lauri Millot
Executive Director
Title IX Coordinator and Section 504 Coordinator
Office of Institutional Equity
O'Loughlin House
Las Cruces, NM 88003
(575) 646-3635
equity@nmsu.edu ( equity@nmsu.edu)

In addition, Agustin Diaz, Jr. has been designated as Deputy Title IX Coordinator and Angela Velasco has been designated as Deputy Section 504 Coordinator. Mr. Diaz and Ms. Velasco can be contacted at the O'Loughlin House or by telephone (575) 646-3635.

Complaints of discrimination, harassment, sexual violence, and retaliation may be directed to the Office of Institutional Equity at equity@nmsu.edu (equity@nmsu.edu). Complaints may also be filed with the Department of Education Office for Civil Rights, Equal Employment Opportunity Commission, and/or New Mexico Human Rights.

#### **Equal Opportunity/Affirmative Action Statement**

New Mexico State University, in compliance with applicable laws and in furtherance of its commitment to fostering an environment that welcomes and embraces diversity, does not discriminate on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex (including pregnancy), sexual orientation, spousal affiliation, or protected veteran status in its programs and activities, including employment, admissions, and educational programs and activities. Inquiries may be directed to the Executive Director, Title IX and Section 504 Coordinator, Office of Institutional Equity, P.O. Box 30001, 1130 E. University Avenue, Las Cruces, NM 88003; 575-646-3635; equity@nmsu.edu (equity@nmsu.edu).

NMSU is committed to providing reasonable accommodations to qualified individuals with disabilities upon request. To request an accommodation, please contact Student Accessibility Services, Corbett Center Student Union, Room 2008, Las Cruces, NM 88003; 575-646-6840 or sas@nmsu.edu ( sas@nmsu.edu) or the Office of Institutional Equity, O'Loughlin House, 1130 E. University Avenue, Las Cruces, NM 88003; 575-646-3635 or equity@nmsu.edu ( equity@nmsu.edu). One week advance notice is appreciated. To request this document in an alternative form, please contact those listed above.

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