

1995 - 1996 CATALOG

Albuquerque Technical-Vocational Institute

Volume 30

July 1995

Welcome to T-VI!

To all new and returning students, welcome!

On behalf of all members of the faculty and staff, I wish you an enjoyable and successful year.

The 1995-96 academic year is a special one for T-VI, because we are celebrating our 30th anniversary. We will be looking back at the many changes from our modest beginnings, and looking forward toward the 21st century—but mostly we will be focusing on the present, as we strive to help students meet their goals.

Alex A. Sanchez, Ed.D.
President

Contents

Introducing T-VI.....	4	Technologies.....	182
Outreach & Transitional Programs.....	14	Architectural/Engineering	
Adult Education.....	14	Drafting Technology.....	183
Admission and Registration.....	17	Business Computer Programming	
Admission.....	17	Technology.....	192
Registration.....	23	Design Drafting Engineering	
New Mexico Residency.....	26	Technology.....	200
Tuition and Fees.....	28	Electronics Engineering	
Estimated Expenses.....	32	Technology.....	205
Financial Aid.....	33	Electronics Technology.....	209
Academic Regulations.....	41	Manufacturing Skills.....	218
Student Services.....	49	Manufacturing Technology.....	220
Developmental Studies.....	56	Trades & Service Occupations.....	225
Arts & Sciences.....	64	Apprenticeship Programs.....	226
Liberal Arts.....	65	Elective Courses.....	229
Business Occupations.....	93	Air Conditioning Heating and	
Learning Centers.....	94	Refrigeration.....	232
Accounting.....	97	Automotive Body Repair.....	236
Administrative Assistant.....	102	Automotive Technology.....	239
Business Administration.....	107	Baking.....	243
Court Reporting.....	117	Carpentry.....	245
Data Entry.....	121	Commercial Printing.....	248
Entrepreneurship.....	122	Construction Technology.....	252
International Business.....	122	Criminal Justice.....	257
Legal Assistant Studies.....	125	Culinary Arts.....	260
Microcomputer Management.....	131	Diesel Equipment Technology.....	261
Pre-Management.....	136	Electrical Trades.....	265
Real Estate.....	137	Environmental Technology.....	269
Sales and Cashiering.....	138	Fire Science.....	272
Health Occupations.....	140	Food Service Management.....	276
Special Courses.....	141	Machine Tool Technology.....	277
Child Development.....	146	Mechanical Technology.....	281
Health Unit Clerk.....	149	Metals Technology.....	283
Medical Laboratory Technician.....	150	Plumbing.....	285
Nursing Assistant.....	155	Quantity Food Preparation.....	289
Practical Nursing.....	157	Transportation Technology.....	291
Nursing.....	161	Truck Driving.....	294
Pharmacy Technician.....	167	Welding.....	296
Phlebotomy.....	169	The T-VI Community.....	301
Respiratory Care Programs.....	171	Campus Directory.....	317
		Index.....	320

About This Catalog

The Catalog is the student's official guide to programs, courses and policies of Albuquerque Technical-Vocational Institute. Beginning with an introduction that includes the T-VI mission statement, the Catalog covers:

- ◆ general information about T-VI: a summary of academic offerings; information about admission, registration, expenses and financial aid; academic regulations and student services; and
- ◆ instructional programs: details about T-VI's seven departments, including course descriptions and requirements for earning degrees and certificates.

This Catalog also includes lists of T-VI Governing Board members, administrators and faculty, as well as a campus telephone directory and maps of the Main, Montoya and Rio Rancho/Intel campuses.

The T-VI Catalog is a summary of information of interest to students; it is not a complete statement of policies and rules. Information in the Catalog is subject to change. Other important information is published in:

- ◆ the class schedule;
- ◆ the Student Handbook;
- ◆ the Student Financial Aid Guide; and
- ◆ handbooks published by instructional departments and other offices.

Not all programs and classes listed in the Catalog are offered at all campuses or every term. If fewer than 12 persons have applied to begin a program, it may be canceled that term. After a program begins, no required class will be canceled, regardless of enrollment, although support classes may be canceled due to insufficient enrollment.

This Catalog is available in alternative formats from the Special Services office at Main Campus.

INTRODUCING T-VI

Now celebrating its 30th anniversary, the Albuquerque Technical-Vocational Institute is an accredited community college offering courses in a variety of occupational, college transfer, developmental/preparatory and adult education subjects. In 1995-96 T-VI's programs include:

- ◆ certificates: in 32 business, health, technologies and trades occupations;
- ◆ associate degrees: in 27 occupational fields and liberal arts;
- ◆ college transfer: courses in 28 liberal arts disciplines transferable for freshman and sophomore credit at four-year institutions;
- ◆ developmental studies: remedial, preparatory and developmental classes for students preparing to meet admission requirements at T-VI or other institutions; and
- ◆ adult education: English, reading, math and English as a second language.

Other T-VI programs include: preparation and testing for the high school equivalency diploma, or GED; concurrent enrollment for high school students; special services for students with disabilities; tutoring and self-paced learning centers. T-VI also offers skills workshops tailored for working people, support for small business and custom training programs for local employers.



Equal Opportunity Policy

The Albuquerque Technical-Vocational Institute affirms that it will not discriminate on the basis of sex, race, color, national origin, religion, age or disability in any of its practices or procedures in accordance with applicable federal, state and local laws, nor will it condone any act of illegal discrimination or harassment on the part of its employees. This provision includes, but is not limited to employment, admissions, testing, financial aid and educational services.

It is the policy of the Institute not to discriminate on the basis of sexual orientation, marital status or ancestry.

Any person who wants to file a complaint based on these laws should contact the equal opportunity officer, Delma Molina, in the Human Resources Office, Main Campus, 2018 Coal Place SE, 224-4600.

In accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, Albuquerque T-VI provides notice that no qualified individual with a disability shall, on the basis of the disability, be excluded from participation in, be denied the benefit of, or otherwise be subjected to discrimination related to any of the institution's educational programs or activities.

If a student has concerns about T-VI's compliance, he or she should contact A. Paul Smarrella in Special Services, P Building, Main Campus, 224-3259.

History

Authorized by the New Mexico Legislature in 1963, the Albuquerque Technical-Vocational Institute was approved by district voters in 1964 to provide adults with skills necessary for success in the world of work. The first nine classes, for 155 students, were held in the summer of 1965 in surplus barracks and a vacated elementary school.

From the first, T-VI's priority has been job training, broadly defined to include preparatory work, skill improvement for adults, vocational courses for high school students and, in recent years, liberal arts and college transfer. Degree-granting power was approved for T-VI by the Legislature in 1986, beginning the transition to a community college.

Until 1979, T-VI was part of the Albuquerque Public Schools, with the APS Board of Education serving as the T-VI Governing Board. The first election for an independent T-VI board was held in September 1979, following approval by the Legislature. In 1994, the Legislature approved districting the Governing Board.

T-VI Today

With enrollment approaching 20,000, T-VI is the third largest postsecondary institution in New Mexico. The Main Campus occupies 60 acres near downtown Albuquerque—with the old elementary school housing administrators—and the 42-acre Joseph M. Montoya Campus is in the Northeast Heights. Classes also are offered at the Rio Rancho/Intel Campus and at the University of New Mexico. Plans are being made for a South Valley campus and a permanent West Side presence.

T-VI's classrooms, libraries and laboratories are modern and comfortable. Each student has access to state-of-the-art equipment, especially computers. T-VI programs, facilities and services are accessible to the disabled.

Advisory committees from local businesses help assure that T-VI students acquire the skills needed for success on the job, and T-VI helps graduates find jobs. The Institute also cooperates with other two- and four-year schools on course articulation and student transfer.

T-VI's Governing Board members are elected by voters in seven geographical districts within the Institute district, which includes all of Bernalillo County and part of Sandoval County.

Funding for T-VI programs and most construction and equipment comes from a property tax levy in the Institute district and annual appropriations by the New Mexico Legislature. Tuition and fees are moderate, and financial aid is available to many students. Private contributions through the T-VI Foundation are increasing every year.

T-VI meets year-round with the year divided into three full terms of 15 or 16 weeks: fall, spring and summer. (Short sessions also are held in some programs, especially in the summer.) Most programs admit beginning students each term—in January, May and September.

Community Offerings

In addition to the adult education and credit courses described in this Catalog, T-VI offers a number of non-credit educational opportunities to the community, including walk-in learning centers (see Business Occupations Learning Centers, page 94, and Small Business Development Center, page 93); libraries (page 50); the Continuing Education Studies program, offering evening and weekend workshops on business, computer and hobby topics (call 224-5580); and the Contract Training office, which arranges custom courses, in the classroom or at the work place, for employees and managers (call 224-4247).

Philosophy

The Albuquerque Technical-Vocational Institute, a community college, believes that each individual, regardless of economic status, should be provided the educational opportunity to develop to the maximum extent possible. The Institute believes that occupational education is necessary for an ever-increasing number of New Mexicans. The Institute believes in providing occupational, basic, general and related education to enable students to develop competence, self-awareness and social responsibility to compete successfully in a chosen field.

Mission Statement

The Albuquerque Technical-Vocational Institute recognizes its unique role as a provider of education leading to employment. Therefore, the primary emphasis is placed on instruction that enhances employment opportunities and lifelong learning. The Institute provides coursework leading to occupational certificates and the degrees Associate of Applied Science, Associate of Arts and Associate of Science; and opportunities for transfer credit to other degree-granting institutions.

The three-fold mission of the Institute is:

- ◆ to provide occupational education that enables students to acquire job skills consistent with local, state and national work force needs;
- ◆ to provide basic education and general education that will expand students' opportunities to succeed in society and the world of work; and
- ◆ to participate in partnerships which promote economic development, including training opportunities for the work force.

Goals

1. The Institute, consistent with work force needs, will offer occupational education to develop its students to the desired level of competence.
2. The Institute will use its degree-granting powers to enhance occupational education and to participate with other colleges and universities in the delivery of education statewide.
3. The Institute will collaborate with other degree-granting institutions to ensure that its liberal arts courses and, where applicable, its occupational courses meet the standards required for transfer credit.
4. The Institute will offer continuing education consistent with identified needs.
5. The Institute, in responding to unmet needs, will provide educational programs to support the social, cultural and personal development of the individual.
6. The Institute will strive for accessibility, equity and diversity to enable New Mexicans to develop educationally and economically regardless of their financial resources or previous education.
7. The Institute will work with businesses, government and other institutions to support the economic development of the community and state.

Accreditation

T-VI is accredited to grant certificates and associate of applied science, associate of arts and associate of science degrees by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools.

In addition, specific programs have accreditation or approval by appropriate agencies.

- ◆ The Accounting, Administrative Assistant, Business Administration, Microcomputer Management Specialist and Pre-Management associate degree programs are accredited by the Association of Collegiate Business Schools and Programs.
- ◆ The Legal Assistant Studies program is approved by the American Bar Association.
- ◆ The Practical Nurse and Associate Degree in Nursing programs are accredited by the National League for Nursing.
- ◆ The Medical Laboratory Technician program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences.
- ◆ The Respiratory Therapy Technology and Respiratory Therapy programs are accredited by the Commission on Accreditation of Allied Health Education Programs and the Joint Review Committee for Respiratory Therapy Education.
- ◆ The Design Drafting Engineering Technology and Electronics Engineering Technology programs are accredited by the Accreditation Board for Engineering and Technology.
- ◆ The Automotive Technology program is certified by the National Automotive Technicians Education Foundation, Inc.
- ◆ The Truck Driving program is certified by the Professional Truck Driver Institute of America, Inc.
- ◆ The Tutorial/Learning Centers are accredited by the College Reading and Learning Association.

General Education Statement

The Albuquerque Technical-Vocational Institute, a community college, provides basic, occupational and general education for a population which includes a broad spectrum of ages, cultural backgrounds and intellectual abilities. The Institute is committed to general education and related courses as an integral part of certificate and associate degree programs. The general education courses include mathematics, communication skills, social and natural sciences, humanities, foreign languages and fine arts. It is believed that general education enhances students' personal and professional attitudes, habits and skills as they pursue lifelong continuum of learning.

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

In associate degree programs, students are required to complete a minimum of 15 semester credit hours of general education in addition to courses in their major field of study. The required general education courses have been selected to enhance students' personal and professional habits, attitudes and skills. These courses are chosen to increase students' abilities to understand and participate more effectively as members of the community and to give breadth to their chosen careers.

The general education courses in the transfer liberal arts degree reflect the common requirements of the state's six universities and approximate the universities' core curriculum in the freshman and sophomore sequence.

1995-96 Academic Calendar

Fall Term, 1995

First day of instruction	September 5
Last day to enroll	
Full term classes	September 11
Short session classes	third day of the session
Last day to change from audit to CR/NC or a traditional grade	
Full term classes	September 11
Short session classes	third day of the session
Applications for graduation due	September 18
Midterm	October 24
Thanksgiving holiday	November 23-24
Last day to change to audit	
Full term classes	November 27
Short session classes	Friday after mid-point of the class
Last day to change from CR/NC to a traditional grade	
Full term classes	November 27
Short session classes	Friday after mid-point of the class
Last day to withdraw	
Full term classes	November 27
Short session classes	Friday after mid-point of the class
Last day of instruction	December 15
Arts & Sciences final exams	December 18-20

Spring Term, 1996

First day of instruction	January 8
Last day to enroll	
Full term classes	January 12
Short session classes	third day of the session
Last day to change from audit to CR/NC or a traditional grade	
Full term classes	January 12
Short session classes	third day of the session
Martin Luther King Day (no classes)	January 16
Applications for graduation due	January 22
Presidents' Day (no classes)	February 19
Midterm	February 28

Staff Development Day (no classes)	March 14
Last day to change to audit	
Full term classes	March 29
Short session classes	Friday after mid-point of the class
Last day to change from CR/NC to a traditional grade	
Full term classes	March 29
Short session classes	Friday after mid-point of the class
Last day to withdraw	
Full term classes	March 29
Short session classes	Friday after mid-point of the class
Last day of instruction	April 19
Arts & Sciences final exams	April 22-24
Graduation	April 19

Summer Term, 1996
(tentative)

First day of instruction	May 6
Last day to enroll	
Full term classes	May 10
Short session classes	third day of the session
Last day to change from audit to CR/NC or a traditional grade	
Full term classes	May 10
Short session classes	third day of the session
Applications for graduation due	May 17
Midterm	June 25
Independence Day holiday	July 4
Last day to change to audit	
Full term classes	July 26
Short session classes	Friday after mid-point of the class
Last day to change from CR/NC to a traditional grade	
Full term classes	July 26
Short session classes	Friday after mid-point of the class
Last day to withdraw	
Full term classes	July 26
Short session classes	Friday after mid-point of the class
Last day of instruction	August 2
Arts & Sciences final exams	August 5-7



Graduate Job Placement, 1994

TOTAL GRADUATES	Could Not Locate	Not Seeking Employment	Continuing School ¹	Available for Work	Employed in training-related job	Unemployed but seeking	PERCENT EMPLOYED (training-related job; graduates available)	Working in New Mexico	Average hourly rate in training-related jobs*	Average annual salary in training-related jobs*
BUSINESS OCCUPATIONS										
Accounting	2	3	1	4	4	-	100%	4	\$8.11	\$16,871
Accounting, AAS	6	10	5	26	26	-	100%	25	\$7.60	\$15,815
Administrative Assistant	2	9	7	7	7	-	100%	6	\$7.37	\$15,344
Administrative Asst, AAS	1	2	1	17	15	2	88%	14	\$8.06	\$16,778
Business Administration	5	4	4	11	9	2	81%	9	\$7.88	\$16,401
Business Admin, AAS	39	6	7	26	22	4	84%	22	\$7.83	\$16,301
Court Reporting, AAS	1	-	-	-	-	-	-	-	-	-
Legal Asst Studies, AAS	1	17	4	53	39	14	73%	39	\$8.22	\$17,097
Pre-Management, AA	1	4	4	-	-	-	-	-	-	-
Sales and Cashiering	20	1	3	16	16	-	100%	16	\$4.81	\$10,021
Secretarial Studies	1	-	-	-	-	-	-	-	-	-
Secretarial Studies, AAS	3	-	-	3	3	-	100%	3	\$8.85	\$18,415
HEALTH OCCUPATIONS										
Child Development, AA	8	-	4	2	4	-	100%	4	\$5.43	\$11,308
Health Unit Clerk	32	6	7	2	19	18	94%	18	\$6.55	\$13,641
Licensed Practical Nurse	14	3	1	2	10	10	100%	9	\$9.72	\$20,227
Medical Lab Tech, AS	13	1	-	-	12	10	83%	10	\$9.86	\$20,515
Nursing, AS	113	18	10	2	85	80	94%	79	\$13.50	\$28,092
Nursing Assistant	68	10	24	23	34	32	94%	32	\$6.38	\$13,280
Pharmacy Technician	14	-	2	2	12	12	100%	12	\$7.06	\$14,679
Phlebotomist	27	3	8	7	16	14	87%	14	\$6.51	\$13,559
Respiratory Therapist, AS	12	-	2	1	10	9	90%	9	\$9.60	\$19,982
Respiratory Therapy Tech	5	-	2	1	3	3	100%	3	\$9.27	\$19,275

*Based on 40-hour work week

TECHNOLOGIES

Arch/Engineering Drafting Tech.....	3	-	1	-	2	2	-	100%	2	\$7.00	\$14,560
Arch/Eng Draft Tech, AAS	18	2	2	2	14	14	-	100%	14	\$7.87	\$16,384
Business Computer Prog Tech	21	1	13	4	7	6	1	85%	6	\$8.69	\$18,087
Bus Computer Prog Tech, AAS	10	-	6	3	4	4	-	100%	4	\$9.97	\$20,758
Design Drafting Eng Tech, AAS	11	-	3	2	8	8	-	100%	6	\$9.89	\$20,561
Electronics Eng Tech, AAS	11	-	4	2	7	5	2	71%	5	\$11.57	\$24,065
Electronics Technology	11	2	3	-	6	4	2	67%	4	\$9.69	\$20,155
Electronics Tech, AAS	17	2	4	3	11	9	2	81%	8	\$11.06	\$23,003
Instrumentation/Control Tech	6	-	3	1	3	3	-	100%	2	\$9.77	\$20,320
Instrum/Control Tech, AAS	5	-	-	-	5	4	1	80%	3	\$12.17	\$25,332
Laser Electro-Optic Tech	1	-	-	-	1	1	-	100%	-	-	-
Laser Elec-Optic Tech, AAS	2	1	-	-	1	1	-	100%	1	-	-
Manufacturing Specialist.....	4	2	2	1	-	-	-	-	-	-	-

TRADES & SERVICE OCCUPATIONS

A/C, Heating, Refrigeration	27	1	5	4	21	19	2	90%	19	\$7.80	\$16,232
Automotive Body Repair	5	-	1	1	4	4	-	100%	4	\$5.44	\$11,310
Automotive Technology	19	3	3	2	13	12	1	92%	12	\$7.04	\$14,646
Baking	23	-	13	10	10	9	1	90%	9	\$5.68	\$11,830
Carpentry	26	6	3	1	17	16	1	94%	16	\$6.64	\$13,824
Commercial Printing	6	-	5	3	1	1	-	100%	-	-	-
Construction Technology, AAS	4	-	-	-	4	4	-	100%	4	\$9.82	\$20,438
Criminal Justice, AAS	23	5	7	6	11	8	3	72%	7	\$8.02	\$16,690
Culinary Arts, AAS	9	-	3	1	6	5	1	83%	5	\$6.48	\$13,478
Diesel Equipment Tech	13	2	4	3	7	7	-	100%	7	\$7.13	\$14,841
Electrical Trades	21	1	3	2	17	17	-	100%	16	\$7.80	\$16,240
Environ Protection Tech, AAS.....	26	3	3	3	20	17	3	85%	17	\$9.96	\$20,729
Fire Science, AAS	6	-	-	-	6	6	-	100%	6	\$8.52	\$17,727
Food Service Management	14	-	5	5	9	9	-	100%	9	\$7.27	\$15,114
Machine Tool Technology	18	-	3	3	15	15	-	100%	14	\$6.97	\$14,500
Mechanical Technology, AAS	3	1	1	-	1	1	-	100%	-	-	-
Plumbing	17	-	4	2	13	13	-	100%	13	\$8.84	\$18,393
Quantity Food Preparation	36	1	27	24	8	7	1	87%	7	\$5.52	\$11,485
Truck Driving ²	41	-	5	3	36	36	-	100%	21	2	2
Welding	12	-	1	1	11	11	-	100%	11	\$6.81	\$14,182
TOTAL	1,024	101	256	-	667	611	56	91%	-	-	-

¹ Counted in Not Seeking Employment or Available for Work

² Local \$10.12/hr, \$21,059/yr; over the road \$12.07/hr, \$25,116/yr

OUTREACH & TRANSITIONAL PROGRAMS

The Outreach & Transitional Programs Department offers free courses to assist students in making the transition to other Institute programs.

Adult Education

T-VI's community-based Adult Education program is part of Outreach & Transitional Programs, offering instruction in basic skills, English as a Second Language (ESL) and other courses which can lead to successful completion of higher education, entry or advancement in the work place or personal fulfillment. Textbooks and courses are provided at no cost. These courses are offered at various sites around Bernalillo County. Course offerings reflect the needs of the community and may change from term to term. More information is available at the Main Campus, 224-4269, or at Montoya Campus, 224-5575.

Hablamos Español: El programa de Educación para Adultos ofrece la oportunidad al alumnado de tomar inglés como segundo idioma (ESL) y cursos de educación elemental los cuales pudiesen conducir a la terminación satisfactoria de una educación superior. Los cursos de este programa brindan al alumnado la oportunidad de superarse personalmente así como la de obtener un empleo mejor remunerado. La instrucción y los libros de texto son absolutamente gratuitos. Estos cursos se ofrecen en varias localidades alrededor del Condado de Bernalillo; los cursos reflejan las necesidades de la comunidad y por consiguiente, pueden variar de un trimestre al otro. Para más información, llame al teléfono 224-4269 en Main Campus o al teléfono 224-5575 en Montoya Campus. **Inscripción:** Prospectos estudiantes que deseen tomar cursos en el departamento de Educación para Adultos podrán hacerlo inscribiéndose en persona en cualquiera de las dos localidades de T-VI o en cualquiera de los sitios que aparecen en la lista a continuación. En Main Campus la inscripción es en la oficina P-1 (224-

4266). En Montoya Campus la inscripción es en la oficina H-100 (224-5575). Un asistente de inscripción le ayudará en la selección de cursos y localidades para que pueda usted satisfacer sus necesidades de horario. Durante el trimestre, habrá personal disponible en cualquiera de los dos T-VIs (Main y Montoya) de lunes a jueves de 7:30 a.m. a 8:30 p.m. y los viernes de 7:30 a.m. a 5 p.m.

Registration: Anyone wanting to take an Adult Education course may register in person at either the T-VI Main or Montoya Campus or any of the off-campus sites listed below. At Main Campus, registration is in the Prep Building, Room P-1 (224-4269). At the Montoya Campus, registration is in Room H-100 (224-5575). A registration assistant will help with course and site selection to meet individual needs and schedules. During the term, staff are available at both Main and Montoya campuses Monday through Thursday from 7:30 a.m. to 8:30 p.m. and Friday from 7:30 a.m. to 5 p.m.

Locations: Adult Education courses are offered at various off-campus locations throughout the Albuquerque area. Off-campus sites provide instruction in ESL, computer-assisted instruction, literacy, family literacy and basic skills. Current off-campus sites include:

Adobe Acres Elementary School, 1724 Camino del Valle SW
Adamedia Community Center, 9800 Fourth NW
Alamosa Elementary School, 6500 Sunset Gardens Road SW
Armijo Elementary School, 1440 Gatewood Ave. SW
Barcelona Elementary School, 2311 Barcelona Road SW
East Central Multi-Service Center, 7525 Zuni SE
El Buen Samaritano, 700 Granite NW
Eugene Field Elementary School, 700 Edith Blvd. SE
John Marshall Multi-Service Center, 1500 Walter SE
La Mesa Elementary School, 7500 Copper NE
Lew Wallace Elementary School, 513 Sixth NW
Los Padillas Community Center, 2019 Los Padillas Road
Los Vecinos Community Center, Old Highway 66, Tijeras Canyon
Mountain View Apartments, 2323 Kathryn SE
Mountain View Elementary School, 5317 Second SW
New Futures High School, 5400 Cutler NE
Polk Middle School, 2220 Raymac SW
Rio Grande High School, 2300 Arenal SW
Tijeras Community Center, P.O. Box 727, Tijeras NM
Valle Vista Elementary School, 1700 Mae Ave. SW
Van Buren Middle School, 700 Louisiana Blvd. SE
Washington Middle School, 1101 Park Ave. SW

West Mesa High School, 6701 Fortuna Road NW

Persons or groups interested in additional adult education courses in the community should contact the T-VI Adult Education office. It may be possible for T-VI to provide courses at locations not listed here.

Expenses: There are no tuition charges or fees for Adult Education courses. Textbooks are provided free to students.

Standards of Progress: Each student receives a certificate that indicates the total number of hours he or she attended in each course. No letter grades are given.

Attendance: Teachers take attendance at each class session. If a student is absent four classes in a row, the teacher tries to contact the student. A student may be dropped from the course after four consecutive absences. Students who have missed or dropped classes are encouraged to go to the Adult Education Learning Centers to continue their studies.

Student Records: The Adult Education office maintains permanent records which include the date a student enrolled in a course, date completed or dropped, total number of course hours and hours attended, and whether a certificate was issued to the student. Transcripts are furnished upon student request to the Adult Education office.

Volunteer Tutors: The Adult Education program trains volunteers to tutor students who request additional instruction. Members of the community may attend a workshop where they are trained to provide one-on-one or classroom assistance or to facilitate an English conversation group for students learning English as a second language. For more information call 224-4305.

Adult Education Learning Centers

The centers are supervised by master instructors who assist with basic skill improvement and English as a Second Language (ESL) practice. Basic skill instruction is also available in Spanish. Volunteers are available for special tutoring. The centers provide individualized instruction and independent study in reading, math, writing and ESL. A variety of instructional resources is available, such as audio cassette tapes, video tapes, film strips, textbooks and computer software. Computer-assisted instruction is available. Instruction is provided on an open-entry basis.

The center at the Main Campus is located at 901 Buena Vista SE, BV-20A. Hours of operation are 8:30 a.m. to 9 p.m. Monday through Thursday and 8:30 a.m. to 4 p.m. Friday. The Montoya Campus center is located at 4700 Morris NE, H-125. Hours are 9 a.m. to 8:30 p.m. Monday through Thursday and 9 a.m. to noon Friday.

For assistance or information, call the Adult Education Learning Center at 224-4280 (Main Campus) or 224-5583 (Montoya Campus).

ADMISSION AND REGISTRATION

Admission is the process of applying and being accepted to T-VI. Registration (see page 23) is the process of selecting courses, receiving a schedule of classes and completing enrollment at T-VI.*

Admission

The Albuquerque Technical-Vocational Institute has an open admission policy which provides all interested individuals the opportunity to enroll in the Institute's certificate or degree programs as well as individual courses. Students are considered for admission to T-VI without regard to sex, race, color, national origin, religion, age or disability. It is the policy of the Institute not to discriminate on the basis of sexual orientation, marital status or ancestry.

Most programs admit new students each term: January, May and September. Students may enter T-VI for any term but are urged to apply for admission at least two months before registration opens for that term.

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

*Note: These requirements and procedures do not apply to students in Outreach & Transitional Programs, including adult education (see page 14).

General Admission Requirements

Any person wishing to apply for admission to T-VI must meet *one* of the following criteria:

- ◆ be at least 18 years of age; or
- ◆ have the General Education Development (GED) diploma or the high school equivalency certificate; or
- ◆ have completed high school; or
- ◆ qualify under Concurrent Enrollment.

Note: Many Trades & Service Occupations and Health Occupations programs have special admission requirements.

Admission Status

A student's admission status is determined by the student's primary goal for taking courses at T-VI.

Certificate/Degree Status: Certificate/degree students are those who have chosen a program of study and intend to earn a certificate or degree from T-VI. Note: Students must demonstrate basic computer literacy in order to earn a certificate or degree (see page 45).

Non-Degree Status: Those who do not wish to earn a degree or certificate or have not yet chosen a major (degree or certificate program) are non-degree students. Students who enter T-VI in non-degree status may request to change to certificate/degree status, declare a major and transfer credits earned in non-degree status by completing a Declare a Major form.

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

Concurrent Enrollment: Qualified high school juniors and seniors may be allowed to enroll in a maximum of two vocational and/or academic courses per term. Students may attend courses on the T-VI campus or at their high school. Admission for concurrent enrollment is in non-degree status. Satisfactory course completion may meet both high school graduation requirements and T-VI certificate and/or degree requirements.

Associate Degree Prep: Concurrent enrollment includes the Associate Degree Prep program, which allows juniors and seniors at some Albuquerque high schools to take T-VI business, technology and trades courses and earn credits toward high school graduation and a T-VI degree. The courses meet outside regular school hours.

Information regarding the Concurrent Enrollment program and specific admission requirements is available in the Admissions Office at any T-VI campus and from the student's high school counselor or vocational coordinator.

Applying for Admission: Returning Students

A returning student (any student who has previously attended T-VI in certificate/degree or non-degree status and has been out for at least one term, summer term ex-

cluded) must visit the Admissions Office to update his/her status. Students who have been absent for more than one year will be required to complete a new admissions application.

Applying for Admission: New Students

New students—those who have never attended T-VI in certificate/degree status—should take the following steps:

1. Complete a T-VI Application for Admission form, available from the Admissions Office.
2. Return the application to the Admissions Office. The application may be mailed 30 days before the term begins; after that, it must be hand delivered to the Admissions Office.

Advisement and Counseling

Admissions advisors and counselors are available to assist applicants with identifying and/or meeting their educational goals. Advisement and counseling services are also available for continuing students through the Admissions Office and instructional departments.

Program and Course Placement

High School/GED Requirement: Students who have not earned a high school diploma and are interested in entering a certificate or degree program may be required to take the ASSET or other qualifying exam. The results of the exam may affect the student's eligibility to enter his or her chosen program.

Health Requirement: An applicant will be discouraged from entering a program where chances of success are poor because of a health or physical condition. An applicant can be denied admission to a program where health or physical condition can be dangerous to the applicant or others.

Program and/or Course Requirements: Effective July 1995, all entering students are required to take the Accuplacer placement advisement test unless they meet one of these conditions:

- ◆ have minimum ACT, SAT or ASSET scores;
- ◆ have completed ENG 101 and MATH 120 or equivalent with a minimum grade of C at an accredited institution;
- ◆ obtain permission from the department to enroll in a class (Permission to Enroll forms are available in the department office);
- ◆ enroll in an exempt course;
- ◆ enroll in a certificate program in the Trades & Service Occupations Department and plan to take all courses in that department; or
- ◆ enroll only in Adult Education classes.

Information on placement test requirements and exemptions is available in the Admissions, Testing and counseling offices. (Also see Prerequisites, page 23.)

Transfer of Credit

Traditional Credit: Credits earned at other institutions by certificate or degree-seeking students at T-VI may be transferred and applied toward program requirements in accordance with the following guidelines:

1. An official transcript from each institution must be sent directly to the T-VI Records Office for transfer credit evaluation. (Transcripts should be requested from the records office at the institution(s) previously attended.)
 - a. Credit for arts and sciences courses earned at regionally accredited postsecondary institutions will be evaluated automatically upon receipt of the official transcript. Courses with D or better grades earned at public New Mexico institutions will be considered for transfer credit; courses from institutions outside New Mexico and private institutions in New Mexico must have C or better grades to be considered for transfer credit.
 - b. To receive transfer credit for occupational courses, the student must request that T-VI's Records Office refer the transcript(s) to the department for review. An interview, demonstration of competence or both may be required before the decision regarding credit is made. Courses will be evaluated according to the occupational program to be followed at T-VI and may be substituted for T-VI requirements as approved by the department dean.
2. Remedial courses and upper-division courses are not generally accepted.
3. Students may appeal the decision on acceptability of transfer credit. The student should contact the Records Office to begin the appeal process.

Non-Traditional Credit: Students may be allowed to establish credit based on prior training. Specific criteria for acceptance of occupational credit have been established by each instructional department. Students interested in this option should contact their department office.

Continuing Education Credit: Current students who completed credit courses in T-VI's Continuing Education Division prior to the winter 1991 term may apply to have that credit transferred to their T-VI transcript. Interested students must request, through the Records Office, that an official copy of their Continuing Education record be sent to the department in which the course was offered.

Examination Credit

Students may establish credit upon the successful completion of approved T-VI occupational challenge examinations and the College Level Examination Program (CLEP) and Advanced Placement (AP) exams.

Occupational Challenge Exams

Challenge examinations have been developed for several courses in Business Occu-

pations, Health Occupations and Technologies, and for all courses in Trades & Service Occupations. The following restriction apply:

- ◆ A student may attempt a challenge only once per course.
- ◆ A student may not take the challenge exam if the student was enrolled in the course at any other postsecondary institution or enrolled at T-VI after the 15th day of the term (including Saturdays).
- ◆ A student's transcript will reflect a grade of TR (credit) for those courses successfully challenged. TR grades are not computed in the student's GPA.
- ◆ Courses successfully challenged may count toward graduation but not the residency requirement.
- ◆ Challenge exam credit might not be accepted by other postsecondary institutions.

Information about occupational challenge exams and exam procedures is available in department offices. There is a \$15 fee per exam. (Health Occupations exam fees may vary.)

Arts & Sciences Exams

Students may earn up to 30 credit hours toward Arts & Sciences requirements through Advanced Placement (AP) and College Level Examination Program (CLEP) tests.

Advanced Placement Exams

T-VI Course	AP Exam	Minimum Score	Credit Hours
ART 101	Art History	3	3
BIO 121/121L	Biology	3	8
CHEM 121/121L, 122/122L	Chemistry	3	8
CSCI 155L	Computer Science AB	4	3
ECON 200	Macroeconomics	4	3
ECON 201	Microeconomics	4	3
ENG 101, 102	English Language & Composition	3	6
ENG 101, 102	English Literature & Composition	3	6
FREN 101, 102, 201, 202	French Language	3	12
FREN 101, 102, 201, 202	French Literature	3	12
HIST 101	European History	4	6
HIST 102	European History	5	6
HIST 161	American History	4	6
HIST 162	American History	5	6
MATH 162	Calculus AB	3	4
MATH 162, 163	Calculus BC	3	8
PHYS 151/153L, 152/154L	Physics B	4	8

T-VI Course	AP Exam	Minimum Score	Credit Hours
PHYS 160/163L	Physics C	4	5
PSCI 200	American Government	4	3
PSCI 220	Comparative Government	4	3
PSY 105	Psychology	3	3
SPAN 101, 102	Spanish Language	3	8
SPAN 101, 102, 201, 202	Spanish Language	4	14

AP scores must be forwarded to the T-VI Records Office. Scores will only be accepted if they are:

- ◆ sent directly from the AP Testing Center, or
- ◆ original scores forwarded to the student, or
- ◆ AP scores included on high school or college transcripts as part of the student's permanent record.

College Level Examination Program

T-VI Course	CLEP Exam	Minimum Score	Credit Hours
CHEM 121/121L 122/122L	General Chemistry	52	3
ECON 200	Introduction to Macroeconomics	55	3
ECON 201	Introduction to Microeconomics	55	3
FREN 101	College French	40	3
FREN 101, 102	College French	45	6
HIST 101, 102	Western Civilization I, II	50	3
MATH 121	College Algebra	56	3
MATH 123	Trigonometry	61	2
MATH 162	Calculus w/Elementary Functions (objective and problem portions)	60	4
PSCI 200	American Government	55	3
PSY 105	General Psychology	55	3
PSY 220	Human Growth and Development	52	3
SOC 101	Introduction to Sociology	52	3
SPAN 101	College Spanish	40	4
SPAN 102	College Spanish	45	4
SPAN 101, 102, 201, 202	College Spanish	54	14

CLEP scores must be forwarded to the T-VI Records Office. Scores will only be accepted if they are:

- ◆ sent directly from the CLEP Testing Center, or
- ◆ original scores forwarded to the student.

Registration

Students are required to register for each term they plan to attend. Registration and payment of fees must be made in accordance with the instructions published in the Schedule of Classes.

Registration for new and returning students begins approximately two months before the start of a term. Continuing students are mailed information about pre-registration. Registration is held through the fifth day of the term for full-term classes and through the third day for short-session courses.

Schedule of Classes: A class schedule is published prior to each term. Starting and ending dates, meeting times and locations, registration instructions and payment information are listed in the schedule, which is available in the Admissions and counseling offices.

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

- ◆ have a cumulative T-VI grade point average of 2.5; and
- ◆ have no grade lower than C in the previous term; and
- ◆ secure permission from the counseling or advisement offices.

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

Permission of Instructor: Students may enroll in some courses only by permission of the instructor. Forms are available in the admissions, advisement, department deans' and counseling offices. Permission of an instructor to enroll does not constitute a waiver of a course, grant credit for another course or allow a course to be overfilled.

Corequisites: A corequisite is a course which must be taken in combination with a specific course. Corequisites are listed with each course description in the Catalog.

Prerequisites

A prerequisite is a requirement which must be completed before a student may enroll in a course. Course prerequisites are listed with each course description in the Catalog. A student who receives an I (incomplete), NC (no credit), PR, D or F as a final grade may not enroll in any class for which the former is a prerequisite. A student may be disenrolled if the prerequisites have not been met.

Most entry-level courses have prerequisites for math, English or reading. Students who have completed course prerequisites may be required to provide proof through transcripts or test scores. Students who do not meet course prerequisites may enroll in preparatory courses in the Department of Developmental Studies.

The following are alternatives to meet entry-level course prerequisites.

Courses listing ENG 099 as a prerequisite:
ENG 099 or above with passing grade
Approved score on Accuplacer

Enhanced ACT English score of 14 or above
SAT verbal score of 260 or above
ASSET writing skills score of 35 or above

Courses listing ENG 100 as a prerequisite:

ENG 100 or above with passing grade
Approved score on Accuplacer
Enhanced ACT English score of 19 or above
SAT verbal score of 350 or above
ASSET writing skills score of 45 or above

Courses listing MATH 099 as a prerequisite:

MATH 099 or above with passing grade
Approved score on Accuplacer
Enhanced ACT math score of 13 or above
SAT quantitative score of 300 or above
ASSET numerical skills score of 34 or above

Courses listing MATH 100 as a prerequisite:

MATH 100 or above with passing grade
Approved score on Accuplacer
Enhanced ACT math score of 16 or above
SAT quantitative score of 350 or above
ASSET numerical skills score of 34 or above and ASSET elementary algebra score of 43 or above

Courses listing RDG 099 as a prerequisite:

RDG 099 or 100 with passing grade
Approved score on Accuplacer
Enhanced ACT reading score of 15 or above
SAT verbal score of 300 or above
ASSET reading skills score of 35 or above
Other college lecture-type courses 101 or higher with C or better (social sciences, humanities, biological and physical sciences, English, etc.)

Courses listing RDG 100 as a prerequisite:

RDG 100 with passing grade
Approved score on Accuplacer
Enhanced ACT reading score of 18 or above
SAT verbal score of 350 or above
ASSET reading skills score of 45 or above
Other college lecture-type courses 101 or higher with C or better (social sciences, humanities, biological and physical sciences, English, etc.)

Although T-VI does not administer the American College Test (ACT), the following cutoff scores have been established for placement purposes: English, 19; Math, 16; Reading, 18; Scientific Reasoning, 19; Composite, 18.

ACT, SAT and ASSET scores may not be more than five years old. Accuplacer scores may not be more than one year old.

Enrollment and Grade Option Changes

Cancellation of Enrollment Before the Term Begins: If a student is not able to attend T-VI when planned but has registered for classes, the student must cancel his or her registration at the Records Office on the Main Campus before the beginning of the term. All fees are returned if registration is canceled before classes begin.

Adding Courses: Most T-VI courses may be added or sections changed through the fifth day of full-term classes and the third day of short-session classes. Students may enter MSP 101L and Developmental Studies self-paced math courses through the tenth week of the term. Registration deadlines for other special and/or self-paced courses are printed in the Schedule of Classes.

Adding, Changing, Declaring Majors: Students may add, change and/or declare a major (program) at any time during the term. In order to graduate with a specific major, students must either declare a major at the time of admission or complete a Declare a Major form in their counseling or advisement office.

“Stepbacks”: Students may, with department approval, “step back” into most developmental courses through the third week of the term and into some lower level occupational courses (in the same discipline) through the fifth week of the term. Students may, however, step back into a self-paced, developmental math course through the tenth week of the term. Students who are having difficulty in a class and are considering this option should contact their department counselor.

Course Repetition Limit: Beginning in the fall 1995 term, a course may be repeated up to three times, regardless of grade option. A student wishing to repeat a course more than three times must obtain approval from the department dean’s office. Topics, problems, internship and cooperative education courses, as well as physical fitness courses, full-term courses dropped prior to the 15th day of the term and half-term courses dropped prior to the 15th day of the session are exempt from the course repetition limit.

Dropping Courses or Withdrawing: To drop a course or withdraw from T-VI a student must complete an official form. Drop and Withdrawal forms are available in the admissions, registration and department counseling offices. *Students should not assume that they will be dropped from their courses for non-attendance.* Students who have not officially dropped a course will receive a final grade in the course.

Full-term courses may be dropped through the 12th week of the term, short-session courses through the Friday following the midpoint of the course. Full-term, first-half term and second-half term courses dropped on or before the 15th day of the term or session (including Saturdays) do not appear on the student’s T-VI transcript. A “W” grade will appear on the student’s record for full-term, first- and second-half term courses dropped after the 15th day and for all other courses dropped after the first day of the session.

Changing Grading Options: Grade options are listed on page 43. Some restrictions on changing grading options may exist for courses with corequisites. Information is available in registration and counseling offices.

A change from the audit grade to a traditional letter grade may be made through the fifth day of the term for a full-term course and the third day of a short-session course. A

change from credit/no credit (CR/NC) to a traditional grade may be made through the end of the 12th week of the term for a full-term course and the Friday after the mid-point of a short-session course.

A change to audit may be made through the end of the 12th week of the term for a full-term course and the Friday after the mid-point of a short-session course.

A change to audit may be made through the end of the 12th week of the term for a full-term course and the Friday after the mid-point of a short-session course.

A change from audit to CR/NC may be made through the fifth day of the term for a full-term course and the third day of a short-session course. A change from a traditional grade to CR/NC may be made through the end of the 12th week of the term for a full-term course and the Friday after the mid-point of a short-session course.

New Mexico Residency

Residence requirements for tuition purposes are established by the New Mexico Commission on Higher Education. A brochure detailing residency requirements and restrictions is available in the Admissions and Records offices.

A student is classified as a resident or non-resident for tuition purposes based on information supplied at the time of admission or readmission. A new or returning student with questions about his or her residency status should contact the Admissions Office.

A continuing non-resident student who has satisfied requirements for New Mexico residency may file a Petition for New Mexico Residency in the Records Office. Residency petitions will be accepted through the 15th day of each term (including Saturdays). All requirements for residency must be met before the first day of the term.

In general, to become a legal resident of New Mexico, four basic requirements must be satisfied:

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

several overt acts which support the student's declaration of intent to become a permanent resident. Examples of such acts are securing a New Mexico driver's license or automobile registration and registering to vote in New Mexico.

Note: Any act considered inconsistent with being a New Mexico resident—such as voting, securing and/or maintaining a driver's license and automobile registration in another state—will cause in-state residency status to be denied or revoked.

Other Residence Regulations

Persons and their dependents who move to New Mexico to work full-time, practice a profession or conduct a business full-time (and who provide appropriate evidence) are not required to complete the 12-month residence requirement before applying for resident status. They must, however, satisfy the other requirements of residency.

Members of the armed forces stationed on active duty in New Mexico, their spouses and dependents are eligible for resident student rates. A certification form is required for all new and returning students.

Active participating members of the New Mexico National Guard are eligible for resident student rates. A certification form is required for all new and returning students.

Non-citizens who are lawfully in the United States and have obtained permanent status from the Immigration and Naturalization Service or non-citizens who serve on active duty in the armed forces of the United States may establish residency by meeting the durational and intent requirements. Any non-citizens on other visas (student, diplomatic, visitor or visiting scholar visa, including spouses and dependents) are non-residents for tuition purposes.

Persons, their spouses and dependents who move to New Mexico for retirement and who provide evidence of formal retirement shall not be required to complete the 12-month durational requirement. They must, however, satisfy the other requirements of residency.

An individual married to a legal resident of New Mexico who provides evidence of marriage shall not be required to complete the 12-month durational requirement but must satisfy all other requirements.

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 tuition rates.

Tuition and Fees

Upon registering for courses, students receive a registration invoice. In order to complete registration, all charges must be paid. Payment deadlines are printed in the Schedule of Classes each term. Failure to pay all charges in full may result in the deletion of the student's schedule. Authorized agencies that have agreed to pay a student's training expenses are billed by the Institute.

Tuition

Tuition is charged according to a student's residency status and the number of credit hours carried. Special tuition rates do not exist for non-resident part-time students or non-resident students enrolling in the summer term.

Tuition rates for 1995-96 (subject to change without notice) are:

	Resident	Non-Resident
<i>Arts & Sciences courses</i> 1 to 11 credit hours and more than 18 credit hours	\$26.50 per credit hour	\$73.75 per credit hour
12 to 18 credit hours	\$318.	\$885.
<i>Occupational courses</i> 1 to 11 credit hours and 12 to 18 credit hours	none none	\$73.75 per credit hour \$885.

Senior Citizen Discount: Senior citizens qualify for a reduced tuition rate of \$5 per credit hour, up to six credit hours per term. The tuition discount applies only to Arts & Sciences courses. To qualify, the student must be age 65 or older prior to the beginning of the term and must be classified as a New Mexico resident for tuition purposes.

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

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

Fees

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

Registration Fee: There is a \$21 registration processing fee required each term (of that, 75 cents is allocated to student activities and organizations).

Administrative Service Fee: This \$10 fee is not paid by students; rather, it is charged to third-party agency agencies that sponsor students.

Educational Service Fee: This fee of \$75 is charged on third-party agency contracts requiring additional services; it is not paid by students.

Transcript Fee: Students may request up to five T-VI transcripts, free of charge, per academic year. Additional copies will be issued for a fee of \$1 per copy.

Late Graduation Fee: A \$20 late graduation fee will be charged to students who do not submit an Application for Graduation by the established deadline.

Course Fees

Fees are charged in some courses to pay for consumable supplies and, in Health Occupations, for uniforms. Note: Students may also purchase textbooks, tools and other required materials from the T-VI Bookstores. Course fees for 1995-96 are:

			Developmental Studies					
AA	100	\$5	SSKL	092	\$5			
Arts & Sciences								
ASTR	111L	\$20	BIO	247L	\$20	MATH	150	\$5
BIO	111L	\$20	BIO	260L	\$20	MATH	162	\$5
BIO	121L	\$20	BIO	278L	\$20	MATH	163	\$5
BIO	122L	\$20	CHEM	112L	\$20	MATH	264	\$5
BIO	124L	\$20	CHEM	121L	\$20	PHYS	153L	\$20
BIO	139L	\$20	CHEM	122L	\$20	PHYS	154L	\$20
BIO	200L	\$20	CHEM	130L	\$20	PHYS	163L	\$20
BIO	223L	\$20	CSCI	101	\$10			
BIO	224L	\$20	CSCI	155L	\$10			
BIO	231L	\$20	CSCI	163	\$10			
BIO	239L	\$20						

Technologies

ARDR 107L	\$15	CP 101A	\$10	CP 281L	\$10
ARDR 119L	\$15	CP 101L	\$10	DDET 106L	\$15
ARDR 130	\$15	CP 105	\$10	DDET 114L	\$15
ARDR 180	\$15	CP 111A	\$10	DDET 115L	\$15
ARDR 181	\$15	CP 111L	\$10	EET 107L	\$15
ARDR 182	\$15	CP 174L	\$10	EET 113L	\$15
ARDR 183	\$15	CP 175L	\$10	DIG 211	\$30
ARDR 184	\$15	CP 176L	\$10	ELEC 103A	\$15
ARDR 203L	\$15	CP 213	\$10	ELEC 103L	\$15
ARDR 209L	\$15	CP 216L	\$10	ELEC 217	\$15
ARDR 210L	\$15	CP 272L	\$10	ELEC 276L	\$15
ARDR 212L	\$15	CP 274L	\$10	PC 202	\$20
ARDR 214L	\$15	CP 276	\$10	PC 213L	\$30
ARDR 220L	\$15	CP 278	\$10	MSP 101L	\$25
ARDR 295	\$15	CP 279L	\$10		
		CP 280L	\$10		

Trades & Service Occupations

TRDR 101	\$210	TRDR 102L	\$105	TRDR 103L	\$105
----------	-------	-----------	-------	-----------	-------

Refunds

Tuition, course fees and the registration fee are refundable only if T-VI cancels a class or if the student withdraws by the 10th day of the term/session. The Health Occupations uniform fee is refundable if the student does not receive the uniform. Refund requests may be made at the Cashier's Office.

Estimated Expenses

Below are estimated expenses for students at T-VI for 1995-96. The Financial Aid Office uses these figures to calculate the amount of financial aid a student will receive.

	1 Term	2 Terms	3 Terms
Full-time Students Without Rent/Mortgage Expenses			
Tuition & Fees	\$204	\$407	\$611
Room & Board	\$595	\$1,190	\$ 1,785
Books & Supplies	\$191	\$382	\$573
Personal Expenses	\$493	\$987	\$1,480
Transportation	\$543	\$1,086	\$1,629
Total	\$2,026	\$4,052	\$6,078
Non-resident Total	\$2,728	\$5,457	\$8,115

Full-time Students With Rent/Mortgage Expenses			
Tuition & Fees	\$204	\$407	\$611
Room & Board	\$3,025	\$6,050	\$9,075
Books & Supplies	\$191	\$382	\$573
Personal Expenses	\$609	\$1,217	\$1,826
Transportation	\$ 543	\$1,086	\$1,629
Total	\$4,572	\$9,142	\$13,714
Non-resident Total	\$5,274	\$10,505	\$15,821

Less Than Half-Time Students			
Tuition & Fees	\$204	\$407	\$611
Books & Supplies	\$191	\$382	\$573
Transportation	\$ 543	\$1,086	\$1,629
Total	\$938	\$1,875	\$2,813
Non-resident Total	\$1,640	\$3,280	\$4,920

Dependent Care Allowance			
One Dependent	\$500	\$1,000	\$1,500
Each Add'l Dependent	\$167	\$333	\$500

Note: These figures are only estimates and are subject to change without notice. See pages 28-31 for specific information on tuition and fees.

FINANCIAL AID

T-VI is committed to helping needy students meet the rising costs of education by providing financial assistance. Although primary responsibility for educational costs rests with the student and his or her family, T-VI, the U.S. government and the state of New Mexico all contribute money to help needy students pursue a higher education.

Students applying for financial aid should complete a Free Application for Federal Student Aid (FAFSA) available at Jeannette Stromberg Hall* on the Main Campus and at Tom Wiley Hall on the Joseph M. Montoya Campus. Both offices are open from 8 a.m. to 4:30 p.m. Monday through Friday. Financial aid personnel are available to help students complete financial aid applications at both offices.

A student does not have to be accepted for admission to T-VI before applying for financial aid. Students are encouraged to apply as early as possible, because processing may take six to eight weeks and funds are limited. Transfer students applying for financial aid must provide financial aid transcripts from every postsecondary school they have previously attended, even if they have not received any financial aid. Financial aid transcript request forms are available at either Financial Aid Office.

General Eligibility Requirements

To receive financial aid students must meet the following requirements:

- ◆ Be a U.S. citizen or an eligible-non-citizen.
- ◆ Enroll at least half time (as defined by federal regulation); this applies to most Title IV programs. Students should check each financial aid program for enrollment requirements. Financial aid does not pay for audited classes.
- ◆ Enroll in an eligible major.

*After February 1996 in the Student Services Building, 900 University SE

- ◆ Enroll in eligible courses. Some ineligible courses include GED, Health Unit Clerk and apprenticeship classes as well as those courses that apply to ineligible majors only. In addition, students may not receive financial aid for more than 30 credit hours of attempted preparatory (Developmental Studies) coursework.
- ◆ Maintain satisfactory academic progress.
- ◆ Not be in default on any federal educational loans.
- ◆ Not owe a refund on a grant.
- ◆ Sign a statement of educational purpose, stating that the money will go toward educational purposes only.
- ◆ Sign, if you are male, a statement of registration with the Selective Service.

Students should refer to the *T-VI Student Financial Aid Guide* for detailed information.

Types of Aid

Students at T-VI can receive aid through grants, scholarships, loans, work study and other programs, most of which are based on financial need. The Financial Aid Office determines how much and what kind of aid students are eligible to receive and assembles a financial aid package to fit their needs.

Federal Pell Grant: This program provides federal grants to students who have not received a bachelor's degree. Pell Grant awards range from \$400 to \$2,340 per year, depending on a student's enrollment status, cost of attendance and family contribution. Students are notified by mail of their particular disbursement date in their award letter. Subsequent distributions are generally scheduled each month for students whose financial aid file was not complete by the first distribution date.

Federal Supplemental Educational Opportunity Grant (FSEOG): FSEOG provides federal grants to needy students to help pay for their postsecondary education. Federal money for the program is limited and available only to students with exceptional financial need. Students with exceptional need are those who receive a Pell Grant, have the lowest family contribution and have unmet need. FSEOG awards at T-VI range between \$500 and \$1,000 a year, and the checks are generally distributed in the middle of each term.

New Mexico Student Incentive Grant (NMSIG or SSIG): Needy New Mexico residents who are eligible to receive a Pell Grant and are enrolled at least half-time are considered for SSIG awards. Awards at T-VI range from \$500 to \$1,500 per year. Checks are generally distributed in the middle of the term.

Federal Stafford Loan (formerly GSL): Students must apply for a Pell Grant before applying for a Stafford Loan. The maximum loan per year is \$2,625 for first-year

students and \$3,500 for second-year students. Borrowers must apply for a subsidized Stafford Loan before applying for an unsubsidized loan. An unsubsidized Stafford Loan does not qualify for federal interest subsidies. Cost of attendance minus estimated financial aid equals the amount a student may borrow in an unsubsidized loan. Students may borrow only up to maximum loan limits. First-time borrowers at T-VI may not pick up their checks until 30 days after the term begins. Previous borrowers receive subsequent disbursements on or after the 18th day of class. Interest rates on Stafford loans are variable and are currently capped at 8.25%. Students must begin repaying the principal on their loans six months after they leave school or drop below half-time status. The minimum monthly payment is \$50 per month. Students should check with the Financial Aid Office for more information on interest rates and to acquire a list of participating lenders.

Federal Parent Loans for Undergraduate Students (FPLUS): Students must apply for a Pell Grant and a Stafford Loan before their parents can apply for FPLUS. FPLUS is designed to help the parents of dependent students who need additional funding after a student has exhausted all other resources.

New Mexico Nursing Student Loan (NMNSL): New Mexico residents preparing for a licensed practical nurse certificate or an associate degree in nursing may apply for a New Mexico Nursing Student Loan. The most a student can borrow is \$5,000 per year. Loan recipients must agree to repay the loan with service in an underserved area in New Mexico. NMNSL loans are generally disbursed on or after the 18th day of class.

Perkins Loan: T-VI does not participate in the Perkins Loan Program.

Work Study: T-VI offers three work study programs: Federal Work Study, New Mexico Work Study and T-VI Student Employment. Work Study is part-time employment on campus that provides students a chance to earn money to help pay educational expenses. Most of T-VI's work study programs are based on financial need and are subsidized by the state and federal government. Students may work up to 40 hours per two-week pay period and earn \$4.50 to \$5.50 per hour, depending on the job. Work-study students are paid every two weeks.

Child Care Services: The City of Albuquerque, Albuquerque Technical-Vocational Institute and surrounding neighborhood associations cooperate to provide low-cost child care to eligible T-VI students and neighborhood residents with children between the ages of 3 and 5.

Tres Manos Child Development Center is located south of T-VI's Main Campus at the Heights Community Center. To apply, a student must submit a completed child care application to the Financial Aid Office by established deadlines. Applications are considered on a first-come, first-served basis with income-eligible single parents receiving priority. Participants must recertify at the beginning of each term.

More information on Tres Manos is available from the Financial Aid Office at Main Campus.

Scholarships: T-VI offers many scholarships funded by various sources, including the T-VI Foundation. Scholarships include:

- ◆ The state Legislative Scholarship, which pays for tuition and the registration fee. Applicants must be New Mexico residents and meet scholastic requirements along with other criteria.
- ◆ The New Mexico Scholars Program, which covers tuition, fees and books. Applicants must be New Mexico high school graduates and residents and must meet scholastic requirements along with other criteria.
- ◆ The Vietnam Veterans Scholarship, which covers tuition, fees and books. Applicants must be New Mexico residents and Vietnam veterans.
- ◆ Departmental scholarships (students should contact specific academic departments for scholarship amounts and requirements).
- ◆ Scholarships offered by outside agencies. The Financial Aid Office at both campuses has a Scholarship Resource Book available to T-VI students. Also, T-VI libraries and public libraries have reference materials listing additional sources of financial aid. For more information on scholarships offered by outside organizations, students should contact the Financial Aid Office.

Other Types of Aid

Students interested in receiving financial aid from the following programs must apply directly with the agency.

Veterans Administration: Students planning to apply for VA benefits must have their enrollment certified by a T-VI VA certifying official. Students who fail to complete a course during a term in which they have received VA benefits may be required to repay those benefits unless they can prove to the VA that mitigating circumstances were involved. Veterans transferring from other institutions of higher learning must provide official academic transcripts from every postsecondary school they have previously attended. Information on eligibility is available at any Veterans Administration office. The Albuquerque office is located at 500 Gold SW, 766-3361.

New Mexico Division of Vocational Rehabilitation (DVR): Disabled persons may be eligible for education and training benefits from DVR. The Albuquerque offices include: 11811 Menaul NE, 87112, 841-4560; 3311 Candelaria NE, 87107, 841-8800; 2929 Coors NW, Suite 102, 87120, 841-8752.

Job Training Partnership Act: This program helps students with education and training if they are unemployed, underemployed or economically disadvantaged. Students should contact the New Mexico Employment Security Department at 841-9362 or the Albuquerque Job Corps Center at 842-6500 or Job Training Services at 768-6060 for information on eligibility. Native Americans should contact the National Indian Youth Council (NIYC) Employment and Training Project at 247-2251 or their tribal offices for the same information.

Stay in School: Stay in School is a federal program designed to help needy students pay for their education by placing them in part-time, temporary government jobs. Most of the jobs are at Kirtland Air Force Base or with the U.S. Forest Service. The student may work up to 20 hours per week, and the pay depends on the job assignment. Many positions pay more than minimum wage. Eligible students must be at least 16 years old, prove economic hardship and enroll as a full-time student. Interested students may ask for information at the Financial Aid Office at either campus.

Financial Aid Check Disbursements

At both Main and Montoya campuses financial aid checks are distributed through the Cashier's Office between 9:30 a.m. and 4:30 p.m. Monday through Friday. Loan recipients who are repeat borrowers and students receiving a second or third loan disbursement are paid on or after the 18th day of class. First-time borrowers at T-VI receiving their first disbursement are paid 30 days after classes begin; otherwise, loan checks arrive four to eight weeks after a student has submitted an application.

Standards of Satisfactory Academic Progress

Federal regulations require that financial aid recipients meet certain academic standards to be eligible for federal financial aid. To ensure financial aid recipients are making satisfactory academic progress, academic transcripts are reviewed at the end of each term to determine eligibility for the next term. All terms of attendance are reviewed, including periods that financial aid was not received and all coursework that was attempted and may have been used to determine financial aid eligibility.

Financial aid recipients can be placed either on financial aid probation or financial aid suspension. Recipients are placed on financial aid probation the first term they fail to meet the qualitative or incremental components of satisfactory academic progress. Students may receive federal student aid during their probationary term. Recipients are suspended from receiving financial aid if they fail to meet any one of the standards below for two consecutive terms. Students who exceed the maximum time allowable to complete their program (see below) at the time they are reviewed are automatically placed on financial aid suspension. Transfer credits are not taken into account when satisfactory progress is reviewed.

1. **Qualitative Progress:** Students must maintain a cumulative grade point average 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, PR, NC, W, AU and TR are not calculated in the GPA. In the case of a repeat course, only the higher grade is calculated into the grade point average. The average is computed by multiplying each final grade point value by the number of credit hours, totaling all grade points and dividing the total points by the total number of credit hours for which there are final grades.

2. **Incremental Progress:** Students must complete a minimum of 70% of all coursework (registered credit hours) they have attempted at T-VI. Any course with a grade of withdraw (W), incomplete (I), progress (PR) or audit (AU) is not considered completed

coursework. Transfer credits are not included in the calculation. Repeat courses are included in the calculation.

3. **Maximum Time Frame:** Students must complete a program within a maximum number of credit hours. The maximum time frame within which a student must complete his or her program must not exceed 150% of the credit hours required in the program. Financial aid will not be paid to students who have exceeded the maximum allowable time when satisfactory academic progress is reviewed each term. Students who have at least one credit hour of maximum time-frame eligibility at the time of review may receive aid for an additional term. All terms of attendance are reviewed, including periods when students did not receive financial aid and all coursework that was attempted and may have been used to determine financial aid eligibility. Preparatory hours are excluded. Repeat courses are included in the calculation.

Financial Aid Probation

Students on financial aid probation are not eligible for deferments beyond the probationary term until final grades are posted and satisfactory academic progress has been reestablished.

Students who do not maintain a 2.0 grade point average or who are not completing at least 70 % of their coursework are placed on financial aid probation for one term. If a student is not making satisfactory academic progress at the time he/she applies for financial aid, the student is placed on probation for the first term of his/her financial aid. While on probation, a student continues to receive financial aid. Students expecting a student loan should check with a student loan advisor to see if they are eligible to receive a loan on probation.

If a student on financial aid probation does not meet the above standards by the end of the probationary term, the student is suspended from receiving further financial aid. Terms spent on financial aid probation are counted toward the maximum allowable time a student has to complete a degree or certificate.

Financial Aid Suspension

Students on financial aid suspension are not eligible for a financial aid deferment.

Students who have been placed on financial aid suspension do not receive any financial aid. Students on financial aid who do not meet satisfactory academic progress standards by the end of their probationary term are suspended from receiving further financial aid.

Financial aid is reinstated when a student completes one term meeting all of the satisfactory academic progress requirements. Terms spent on financial aid suspension are counted toward the maximum allowable time a student has to complete a degree or certificate.

The Appeal Process

Students suspended from financial aid may appeal. The director of financial aid or her/his designee bases reinstatement on mitigating circumstances that directly contributed to deficient academic performance. In the case of a student loan, however, if the

aid is reinstated the loan term will not be backdated to cover the term in which the deficiency took place. Unless otherwise noted, approved appeals are good for the entire period covered by the satisfactory academic progress review.

Students must complete and submit an Appeal Form to the Financial Aid Office, attaching all required documentation. An advisor will review the appeal and forward it to the director of financial aid or his/her designee, who will either approve or disapprove reinstatement of financial aid. Students will be notified of the director's decision within ten working days from the day they submitted the appeal.

Deferments

Students on financial aid probation are not eligible for deferments beyond the probationary term until final grades are posted and satisfactory academic progress has been reestablished. Students who have been suspended are not eligible for deferments unless they have appealed and their appeal has been approved.

All other students awarded enough financial aid to cover their tuition and other costs may defer those costs until their financial aid check arrives. If the student's financial aid cannot meet all the costs, the balance is the student's responsibility. When a student defers costs, T-VI deducts what he or she owes from the check when it arrives, and the student receives the difference.

It is the student's responsibility to pay for tuition, fees, textbooks and/or any other T-VI charges if his or her financial aid check does not arrive or is canceled for any reason. If a student's balance is not paid on or before midterm, a hold may be placed on the student's registration and academic records, and his or her account may be turned over for collection.

To apply for a Financial Aid deferment, students should contact the Financial Aid Office. Details are in the *T-VI Student Financial Aid Guide*.

Refunds, Repayments and Distributions

Refunds

T-VI has a fair and equitable refund policy for federal Title IV programs under which students or their parents can be refunded for an FPLUS loan, unearned tuition, fees, room and board and other charges for those periods of time the student did not register, withdrew or otherwise failed to complete a term.

Pro-Rata Refunds: Pro-rata refunds apply to students who received federal student aid, attended T-VI for the first time and withdrew before they attended 60% of the enrollment period or term.

The pro-rata refund is not less than that part of a student's tuition, fees, room and board and other charges equal to that portion of the student's enrollment period for which the student has been charged that remains on the student's last recorded day of attendance less any unpaid charges and a five % administrative fee.

Other Refund: This refund applies to students who do not meet the pro-rata refund definition. There may be a circumstance in which a student receives a refund after

receiving federal student aid. Although this normally does not occur—students at T-VI generally do not receive federal student aid until after the regular refund period has elapsed—T-VI has a policy under which it must return a portion of the refund to the applicable federal Title IV programs.

Formula: The Financial Aid Office uses the following formula to determine the portion of the refund to be returned. Federal Work Study is excluded from the calculation.

$$\frac{\text{Refund X (Total Title IV Funds - FWS) *}}{\text{(Total aid - FWS and other earnings) *}} = \text{Title IV Refund}$$

* received for the payment period

The refund is allocated in the following order:

- | | |
|--|---|
| 1. Unsubsidized Stafford Loan | 7. Federal Pell Grant |
| 2. Subsidized Stafford Loan | 8. FSEOG |
| 3. Federal PLUS Loan Program | 9. Any other Title IV program |
| 4. Direct Subsidized/Unsubsidized Loan Program | 10. Other federal, state, private or institutional student financial aid programs |
| 5. Direct PLUS Loan Program | 11. The student |
| 6. Federal Perkins Loan Program | |

Repayment of Cash Disbursements

If a student receives a federal cash disbursement for living expenses and withdraws from school, he or she must repay a portion of the amount received if the cash received is greater than the cost of living expenses at the time of withdrawal.

Formula: The Financial Aid Office uses the following formula to determine the portion of the overpayment to be returned to the applicable Title IV program(s). Federal Work Study and Federal Family Educational Loans are excluded from the calculation.

$$\frac{\text{Repayment X (Total Title IV Funds - FFEL and FWS) *}}{\text{(Total aid - FFEL, FWS and other earnings) *}} = \text{Title IV Repayment}$$

* received for the repayment period

The repayment is allocated in the following order:

- | | |
|---------------------------------|---|
| 1. Federal Perkins Loan Program | 2. Federal Pell Grant Program |
| | 3. FSEOG |
| | 4. Any other non-loan Title IV program |
| | 5. Other state, private or institutional student financial aid programs |

ACADEMIC REGULATIONS

Definition of Terms*

Academic Year: The academic year is divided into three full terms of 15 or 16 weeks: fall, spring and summer.

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

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

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

- ◆ freshman: A student who has completed fewer than 30 credits at T-VI
- ◆ sophomore: A student who has completed 30 or more credits at T-VI
- ◆ part-time: A student carrying fewer than 12 credit hours per term
- ◆ full-time: A student carrying 12 or more credit hours per term

Identification Cards: Each student enrolled at T-VI is issued a student identification card. ID cards entitle students to a variety of services and privileges including checking out library books and using the Health Center, as well as student discounts within the community.

* Note: These regulations do not apply to students in Outreach & Transitional Programs, including adult education (see page 14).

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

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

Any student who misses the first three days of a scheduled occupational or Developmental Studies class may be dropped by the instructor. Any student with excessive absences (15 percent of total class hours) in any course may be dropped from the course by the instructor. If a student is dropped from a course for non-attendance he or she also is dropped from corequisite courses.

A student who stops attending a course should not assume that he or she will be dropped by the instructor. (See page 25 for information on dropping courses and withdrawing from T-VI.)

(Health Occupations students should consult their program handbook for specific rules.)

Grading System

Final grades are mailed to students at the end of each term. Final grades are recorded on the student's T-VI transcript and calculated in both a term grade point average (GPA) and a cumulative GPA. (See page 25 for information on the recording of course drops and withdrawals on the student's T-VI transcript.)

GPA is based on the grading system listed below:

Grade		Quality points per credit hour
CR	Credit	(none)
PR	Progress	(none)
NC	No Credit	(none)
A	91-100	4.0
B	81-90	3.0
C	71-80	2.0
D	61-70	1.0
F	Failing	(none)
I	Incomplete	(none)
W	Withdrew	(none)
AU	Audit	(none)
TR*	Credit	(none)

*Designation of grade given for transfer credit, non-traditional credit or examination credit (see page 20).

Grade Point Average

The grade point average (GPA) is computed by multiplying the number of credit hours of a course by the quality point value assigned to the letter grade: A=4, B=3, C=2, D=1, F=0. For example, a four-credit-hour course with a grade of A carries 16 quality points. Then the total number of quality points earned is divided by the total number of eligible credit hours attempted (GPA hours).

Grades of I, CR, PR, NC, W, AU and TR are not calculated in the GPA. Effective fall 1991, courses on the student's transcript or grade card which have an E in the repetition column are excluded from GPA calculation.

Grade Options

Traditional Grade: Students may choose to enroll in Arts & Sciences and occupational courses for a traditional (letter) grade (A, B, C, D, F). Traditional grades are used in calculating GPAs. Students interested in transferring their T-VI course work to another institution are encouraged to enroll in courses for a traditional grade.

Audit: Students may register in occupational or Arts & Sciences courses for audit if they have met the prerequisite(s) for the course. Students may not enroll in Developmental Studies courses for audit.

Students who enroll for audit are expected to attend all class sessions but have no responsibilities for completing assignments.

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

Credit/No Credit: Students may elect to take Arts & Sciences courses for credit/no credit (CR/NC) rather than for a traditional grade. CR/NC is not an option for General Honors or most occupational courses. All Developmental Studies courses are graded on a CR/NC basis. A maximum of nine credit hours graded CR/NC will be allowed toward the Arts & Sciences requirements in certificates or associate degrees.

CR (Credit): Students must meet all minimum requirements for the course. CR is the equivalent of at least the grade of C. Although the student will receive credit for completing the course, a grade of CR will not be computed in the GPA.

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

Note: Certain consequences may result from choosing the CR/NC option. Courses with grades of CR will not be allowed in some business occupations majors (programs). Some schools, scholarship committees and honorary societies do not accept this grading system and/or convert grades of CR to C and NC to F. Students planning to transfer to another institution should talk to an advisor at that institution about possible consequences of CR/NC grades.

Incomplete Grade Assignment and Removal: A grade of I (incomplete) is given when circumstances beyond the student's control have prevented completion of the work for a course within the official dates of a term. In no case is an I to be used to avoid

a failing grade or to allow extra time to complete work normally expected.

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

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

Repeating Courses: A student may choose to repeat a course for a better grade. (Also see page 25.) Each course enrollment and all grades will appear on the student's transcript, but only the higher grade will be used to calculate the GPA. If a course is taken once for a traditional grade and once for CR/NC, the traditional grade will be used in calculating the student's GPA. This policy applies only to courses with identical course abbreviations and course numbers and does not affect any courses taken prior to fall 1991.

Note: Certain forms of financial aid will not provide assistance to students who repeat courses previously completed successfully. Compliance with such regulations is the student's responsibility.

Grade Appeals: Students may formally appeal only final grades of NC or F. Students who do not officially drop a course may not appeal the final grade they receive in the course.

Appeal forms are available in department offices. The following steps must be followed:

1. Appeal must be made to the instructor in writing specifying the student's reasons or substantiation for the requested grade change. The appeal must be made by the end of the fourth week of classes in the following term. The student and the instructor will hold an appeal conference to discuss the grade. If the matter is not satisfactorily resolved at this level, the student may appeal to the department dean.
2. Appeal to the department dean must be made in writing by the student within five days of the instructor appeal conference. The dean will appoint a board (two faculty members and one student) to hear the appeal within one week. The written decision of the board is final.

Academic Standards

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

Warning: A student who has fewer than 16 credit hours attempted at T-VI and whose cumulative GPA is between 1.75 and 1.99 in a given term will receive a warning. Notification of academic warning appears on the student's grade report at the end of each term.

Probation: A student whose cumulative GPA (based on at least 16 credit hours attempted at T-VI) falls below 1.75 in a given term will be placed on probation effective with the following term of enrollment. Students are continued on probation if they

withdraw from T-VI while on probation. Notification of academic probation appears on the student's grade report at the end of each term.

Note: Health Occupations programs may have specific requirements which affect a student's eligibility to continue in the program. Students should refer to the program handbook.

Suspension

After two consecutive terms of probation a student will be suspended from T-VI when both the term and cumulative GPA are below 1.75. The duration of the initial suspension is one term; for subsequent suspensions, one year. Notification of academic suspension appears on the student's grade report at the end of each term and in a notification letter sent to the student.

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

A student who has been suspended may submit a written appeal, explaining the unusual circumstances justifying why he or she should be readmitted, to the director of Admissions and Records, who will approve or deny the appeal. If the director denies the appeal, the student may appeal in writing to the Student Academic Appeals Committee by filing the appeal with the director of Admissions and Records for transmittal to the committee. The student may present the case to the committee in person or ask that the written appeal be considered. If the committee decides to readmit a suspended student, his or her academic status will be probationary.

Graduation

T-VI conducts one graduation ceremony each year at the end of the spring term. A student graduates in the term in which all graduation requirements are completed even if there is no graduation ceremony scheduled that term.

General Requirements: To be eligible to receive a degree or certificate, students must meet the following requirements as well as those listed under the specific major (program) they wish to pursue:

- ◆ an overall cumulative GPA of 2.0 or better and completion of all program and course requirements;
- ◆ completion of the last term of course work in residence at T-VI;
- ◆ enrollment in the major in which they plan to graduate (see page 25 for information on adding, changing and declaring majors);
- ◆ completion *at T-VI* of at least one-quarter of the required credit hours for a certificate and at least 15 credit hours for a degree after the degree becomes available;
- ◆ demonstration of basic computer literacy skills (including practical computer operation, familiarity with keyboard functions and common word processing

- tasks), by passing either an approved course (see individual programs) or a proficiency test available in department computer laboratories; and
- ◆ completion and submission of an Application for Graduation within one term of the last enrollment.

Note: A maximum of nine credit hours of CR may be counted toward certificates or degrees in majors which allow the CR/NC option. Courses graded AU do not apply toward the graduation residence requirement.

All debts to T-VI must be paid in full before graduation.

Application for Graduation: Students in degree or certificate programs must complete an Application for Graduation form by the 10th day of the term in which all graduation requirements will be completed. Application forms are available in the counseling offices and must be returned there. Students requesting a certificate or degree in more than one major must submit an application for each major to the appropriate counseling office.

Students who do not submit an application by the 10th day deadline must pay a \$20 late graduation fee before submitting the application. No application will be processed after the 10th week of the term.

Graduation with Honors: Students earning cumulative GPAs of 4.0 graduate with highest honors. Students with cumulative GPAs of 3.6 to 3.9 graduate with honors. Degrees and certificates note these awards.

Choice of Catalog: The application form for a degree or certificate requires a student to specify the catalog year listing degree or certificate requirements. Students may choose to graduate under the catalog that was in effect when they officially entered the specific major or any subsequent catalog, provided the selected catalog is not more than five years old when the degree or certificate requirements are completed and the student has been in continuous enrollment. Those whose enrollment is discontinuous graduate under the catalog that is current upon their return.

Continuous Enrollment: In order to maintain continuous enrollment for graduation purposes, a student's transcript must show enrollment in each successive term. Full-term, first-half and second-half term courses dropped on or before the 15th day of the term or session (including Saturdays) do not appear on the student's T-VI transcript. If an interruption in enrollment of one or more terms (excluding summers) occurs, graduation requirements applicable at the time of re-enrollment will apply.

Student Academic Records

Official academic records are maintained by the Records Office. These records include, but are not limited to, the admissions application, high school and/or college transcripts, grades and academic standing.

T-VI's policy for maintaining confidentiality of student academic records is in accordance with the Family Educational Rights and Privacy Act of 1974 (P.L. 93-380, 512). Copies of the Rights and Privacy Act are available for examination in the Records Office at the Main Campus and the Admissions Office at the Montoya and Rio Rancho/Intel campuses.

Access to Student Academic Records: All currently enrolled and former students may have access to their academic records. Other individuals and agencies who may have access to students' records include:

- ◆ T-VI officials who have a legitimate educational interest in the records;
- ◆ officials of another school in which a student seeks to enroll, intends to enroll or is enrolled
- ◆ officials of the U.S. Department of Education, the Comptroller General, and state and local educational authorities;
- ◆ state and local officials or authorities if required by a state law
- ◆ organizations conducting certain studies for or on behalf of the Institute
- ◆ accrediting institutions
- ◆ parents or legal guardians of a dependent student under the age of 18, as defined in the Section 152 of the Internal Revenue Code
- ◆ individuals serving a judicial order or a lawfully issued subpoena, provided that a reasonable effort is made to notify the student prior to compliance
- ◆ honor societies and other chartered student organizations for determining membership
- ◆ any person with the written consent of the student or the parent or legal guardian of students under 18
- ◆ appropriate parties in a health or safety emergency

Public Directory Information: T-VI has defined public directory information as:

- ◆ student's name
- ◆ major field of study
- ◆ classification
- ◆ dates of attendance
- ◆ awards and honors
- ◆ degrees/certificates awarded

This information is available to the public and will be released unless an annual written request to withhold the information is on file in the Records Office. Request forms may be obtained in the Records Office.

T-VI does not publish a student directory.

Challenge of Contents: Students have the right to challenge the content of their record if they feel the information is misleading or inaccurate. However, the fairness of a grade may not be challenged under this provision. Any dispute over the contents of the record will be handled through informal discussions between the student and the Records Office manager or registrar. If such informal meetings are not satisfactory, the student has the right to a formal hearing before an appeals committee.

Release of Transcripts: To request T-VI transcripts, students must contact the Records Office on the Main Campus or the Admissions Office at the Montoya and Rio Rancho/Intel campuses. Students may request up to five T-VI transcripts, free of charge, per academic year. Additional transcripts will be issued for a fee of \$1 each. No transcript is issued until all institutional obligations are paid.

Transcripts from other institutions that are sent to T-VI are not copied or returned to students.

Change of Name: Name changes will be processed only for currently enrolled students. Students must bring appropriate documentation (at least two types of identification showing the new name) to the Records office on the Main Campus or the Admissions Office at the Montoya or Rio Rancho/Intel campuses. Examples of such documentation are: marriage certificate, birth certificate, driver's license, original social security card or court order for legal name change.

Change of Address: The student is expected to keep T-VI informed of his or her current address. Address changes are processed only for currently enrolled students. Changes must be reported in writing to the Records Office on the Main Campus or the Admissions Office at the Montoya or Rio Rancho/Intel campuses.

Student Right to Know and Campus Security Act: Student retention and completion data are available from T-VI's Institutional Planning and Research Office. Campus security statistics are published annually in the Student Handbook.

STUDENT SERVICES

T-VI provides a wide range of academic and other support services to help students meet their educational goals. Additional information about these services is in the T-VI Student Handbook, which is available in both campus bookstores, and from the campus deans.

Some services may not be available to students enrolled in Outreach & Transitional Programs classes (see page 14); those students should consult an instructor or the dean of Outreach & Transition.

Counseling and Other Support Services

Professional counselors in the admissions areas and individual departments* provide comprehensive support services to enhance students' educational experience at T-VI. The counseling staff also works with other T-VI departments to assist students. Among the services provided are:

- ◆ educational advisement to applicants and students
- ◆ individual counseling
- ◆ career exploration including aptitude, interest and personality assessment
- ◆ crisis intervention and referral

Counselors, academic advisors and others are listed in the Student Handbook.

*At Main Campus, counselors will be in the Student Services Building, 900 University SE, after February 1996.

Special Services

The Special Services staff works to meet the needs of students from a variety of backgrounds. Included among those who may need special assistance are students with physical or mental disabilities, those who are educationally or economically disadvantaged, displaced homemakers, single parents and others.

T-VI services to these students include career counseling, individual program planning, vocational assessment, ancillary services, coordination with community support agencies and individualized instruction. For students enrolled in developmental, certificate and associate degree courses, limited curriculum adjustments can be made to accommodate disabling conditions. Follow-up services such as counseling, tutoring and job-seeking help are also provided.

Referral to Special Services can be arranged through the student's department counselor or advisor, a support agency, an admissions counselor or advisor or directly by the student.

Academic Support Services

These services are available free to all students and, in most cases, to the public. Libraries and other facilities are generally open weekdays and, when classes are in session, evenings and Saturdays.

Libraries: The libraries at both T-VI campuses offer books, maps, pamphlets, newspapers, magazines, encyclopedias and dictionaries, as well as computerized information retrieval systems. Special collections are maintained in all T-VI occupational subjects. Services include help in locating materials, instruction in using a library, study facilities, interlibrary loans, magazine back issues and coin-operated copying machines.

The Main Campus Library is on the fourth floor of Jeannette Stromberg Hall; the Montoya Campus Library is in J Building.

When T-VI classes are in session the libraries are open from 7 a.m. to 9:30 p.m. weekdays except Friday, when they close at 5 p.m., and Saturdays from 8 a.m. to 5 p.m. When school is not in session, hours are 8 a.m. to 5 p.m. Monday through Friday.

Tutorial/Learning Centers: The T/LCs provide free individual tutoring services on a walk-in basis. Subjects covered are math, English, chemistry, physics and biology. Vocational tutors are available for Trades, Technologies, Health Occupations, computer programming and accounting courses. The centers also offer audio and video tapes which support T-VI's instructional programs as well as handouts for self-study. Self-paced programs are available in computer use, academic skills improvement and test preparation. Each center has computers for student and public use.

The Main Campus T/LC is adjacent to the library in Stromberg Hall. At Montoya, the T/LC is in H136. Hours are 7 a.m. to 9:30 p.m. Monday through Thursday, 7 a.m. to 5 p.m. Friday and 8 a.m. to 5 p.m. Saturday.

Adult Education Learning Centers: Individualized instruction and independent study in reading, math, language arts, English as a second language, GED and Spanish GED are

offered at these drop-in labs. Although special assistance is available for students who speak English as a second language and for those preparing to take the GED exam, the labs are open to all T-VI students.

The Main Campus lab is in BV20A, at 901 Buena Vista SE. The Montoya lab is in the H Building.

(Also see Business Occupations Learning Centers, page 94.)

Instructional Media Resources: This office maintains T-VI's film and videotape collections and all audiovisual equipment. Materials are available for classroom and individual viewing.

Instruction in the operation of AV equipment is available to students and staff. Other services include educational film location, preview arrangements and assistance in the design, preparation and application of audiovisual materials.

The Main Campus office is on the third floor of Jeannette Stromberg Hall; a satellite office is in Max Salazar Hall. At Montoya, it is in K Building.

Testing Services

T-VI's Testing Centers, in Stromberg Hall at Main Campus and Wiley Hall at Montoya, offer a variety of tests, most free of charge. Study guides for most exams are available in the Admissions offices. Testing accommodations for individuals with disabilities are available upon request; documentation and prior notice are required.

Among the examinations administered at T-VI are:

ASSET Exam: This exam is required for T-VI applicants who do not have a high school diploma or GED. T-VI is required by federal law to administer the exam under the ability-to-benefit guidelines. The exam contains sections on English, reading and math. No fee is required.

Career Advisement Tests: Aptitude, personality and interest tests are available to assist applicants and students in choosing a program of study. A current registration fee must be on file before the exams will be given.

Accuplacer Tests: Math, English and reading tests are administered on a computer. The exams are not timed and no prior computer knowledge is required. The tests help counselors determine the appropriate course placement for students.

Algebra and Trigonometry Placement Tests: The algebra placement test must be taken by all students who want placement in MATH 120 or above but have not taken the prerequisite course. Students wanting to enroll in MATH 162, Calculus I, must take both the algebra and trigonometry placement tests. No fee is required.

Nursing Basic Math Test: This exam is required of all applicants to petition for selection to the associate degree in nursing, medical laboratory technician and practical nurse programs. Referrals to take the exam must be obtained from the Health Occupations counseling office. The exam is not timed and no fee is required.

Spanish Placement Exam: This exam is intended for students wishing to enroll in SPAN 101 or above. No fee is required.

*After February 1996 in the Student Services Building, 900 University SE

ACT, SAT, AP and CLEP: The American College Test assessment tests for placement are not offered at T-VI. Students wishing to take the tests must register for a national test date; information and registration packets are available in the Testing Centers. T-VI accepts ACT scores from all students for placement in certain courses. T-VI also honors SAT, AP and CLEP scores but does not administer these exams; for further information contact the Testing Centers. (Also see page 21).

GED Exam

Anyone at least 17 years old who is not enrolled in high school may take the General Educational Development (GED) exam at T-VI for a high school equivalency certificate. The exam contains sections on writing, reading, science, social studies and math. No fee is required.

A 17-year-old may take the exam only if released from the state compulsory school attendance law and granted a GED Underage Permission Form. No currently enrolled high school student, and no one 16 years old or younger, may take the exam. A Spanish-language GED is offered, and special testing is available for disabled students.

Interested persons may pre-test to determine readiness for the five-part exam. Those who want or need more study before taking the test may enroll in free GED preparatory offered by T-VI's Adult Education (page 14) and Developmental Studies (page 56) programs.

Re-Testing and Time Limits

Placement exams can only be taken twice within one year. The GED can be taken only three times in one year. Career tests are not limited. Re-testing is not available for the NURS 110 challenge exam or the nursing mobility profile.

Students wishing to repeat an exam may do so after a waiting period has elapsed. A 10 calendar day waiting period applies to all exams except the GED, which is 60 days. There is no waiting period for career advisement or aptitude exams. Students are advised to brush up at the Tutorial/Learning Centers prior to re-testing.

Most test scores are good for one year from test date. ACT, SAT and GED scores used for course placement have a five-year limit.

Appeal Process: Questions and other matters related to testing and placement procedures should be addressed to the Director of Assessment Programs at Main Campus.

T-VI's Testing Centers endorse the Code of Fair Testing Practices in Education.

Job Placement

The Student Job Placement Services office provides job-seeking assistance to T-VI students and graduates.

Student Job Placement offers job listings (many not advertised in the newspaper) from employers who want to hire T-VI students and graduates. The listings are posted in labs and on bulletin boards and at the SJPS offices at both campuses. The Main Campus office is at 616 Buena Vista SE*, and the Montoya Campus liaison office is in Room H-128. Job openings also are available on the SJPS job hotline, 224-3061.

Other services include one-to-one counseling, resumé typing, mock interviews, reference materials, job market information and on-campus interviews.

(Also see internship and cooperative education courses in Business Occupations, Technologies and Trades & Service Occupations.)

Health Care

The Health Center, located in Room 126 of the A Building* on Main Campus, is open weekdays from 8 a.m. to 5 p.m. Basic primary care services are offered, including physical examinations, care for acute conditions, various laboratory tests and wellness information. Services are free except for complete physical exams and some immunizations. On a limited basis, counseling is provided for mental health concerns.

First aid is provided through the Health Center. If it is necessary to transport an ill or injured student to a medical facility, the student is responsible for transportation costs.

T-VI is not responsible for property loss or damage or for personal injuries. Students are encouraged to purchase health and property insurance. Details about private-provider health insurance are available from the Student Activities Office at Main Campus.

T-VI students may have prescriptions filled at the University of New Mexico Student Health Center Pharmacy.

Campus Life

Student Activities: T-VI students have the opportunity to participate in student government and numerous organizations, including sports clubs, campus chapters of professional societies and Phi Theta Kappa, the national academic honorary for two-year schools. Information is available from the Student Activities Office in the A Building on the Main Campus*. *The T-VI Times* is the student newspaper. For information about joining the staff or placing an advertisement, call 224-3255.

*After February 1996 in the Student Services Building, 900 University SE

Bookstores: The T-VI Bookstores sell all textbooks required for purchase by T-VI students as well as tools, equipment, supplies, workbooks and manuals. The stores also sell a full range of school and office supplies and miscellaneous items such as dictionaries, backpacks, sportswear, computer software and accessories and novelties. The Main Campus store is in the A Building*; the Montoya Campus store is in Tom Wiley Hall. Hours are published in the Schedule of Classes and the Student Handbook.

Child Care: Tres Manos Child Development Center, at 823 Buena Vista SE south of the Main Campus, offers daytime care to pre-school children of low-income students and neighborhood residents. Fees are on a sliding scale and preference is given to single parents. Information about application appears on page 35.

Parking: Student parking lots are provided free at both T-VI campuses. Handicapped parking spaces are designated, and there are areas for motorcycles and bicycles. The lots are unsecured, and T-VI is not liable for theft, vandalism or other losses.

A parking permit sticker is required in T-VI lots. Stickers are available free in the Admissions Offices, in Stromberg Hall* on Main Campus and in Tom Wiley Hall at the Montoya Campus. Violation of parking regulations may result in disciplinary action. Cars parked in fire lanes and in spaces reserved for the handicapped are subject to towing.

Bus Passes: Discounted passes for T-VI students are available for Suntran city buses. Students may purchase a regular bus pass for unlimited rides during one calendar month from the Cashier's Office at either Main or Montoya campus. Term bus passes are also available at a discounted price. Students attending at least half time (six credit hours) with a 2.0 grade point average or higher may purchase a discounted bus pass at the Cashier's Office.

Shuttle Buses: During construction of the Student Services Building at Main Campus, a free shuttle bus runs from the Dukes Stadium parking lot at University and Stadium SE to Salazar Hall and the S Building every 15 minutes.

A second free shuttle bus makes regular trips between the Main and Montoya campuses while classes are in session. (The Main-to-Montoya shuttle also stops at the University of New Mexico campus near Yale and Central.) Schedules are posted in the Admissions offices and are printed in the Student Handbook.

*After February 1996 in the Student Services Building, 900 University SE

Campus Conduct

Substance Abuse: T-VI is committed not only to maintaining a drug-free campus but also to helping students and staff solve drug- and alcohol-related problems. The unlawful manufacture, distribution, dispensing, possession or use of controlled substances or alcohol on T-VI property or as part of any of its activities by any member of the T-VI community is strictly prohibited. As a condition of continued registration and enrollment, all students shall abide by this policy. Violation of this policy shall result in disciplinary action, up to and including expulsion.

Details of T-VI's substance-abuse policy appear in the Student Handbook.

Disruptive Behavior: Unsafe or disruptive behavior anywhere on campus property is grounds for suspension or dismissal from T-VI. This policy applies to any field trip taken under the supervision of a T-VI employee.

Sexual Harassment: Sexual harassment constitutes an unacceptable and punishable offense at T-VI. The campus policy is stated in the Student Handbook.

Smoking: In accordance with Albuquerque City Council ordinances and T-VI Governing Board policy, smoking is prohibited in all T-VI buildings.

Plagiarism and Cheating: A student guilty of plagiarism and/or cheating will receive a grade of F or U in the course involved. A pattern of cheating will result in suspension.

Computer Crime: Under the state Computer Crimes Act, a person who intentionally and without authorization accesses, alters, damages, copies or destroys any computer system or data stored within is subject to criminal prosecution on charges ranging from misdemeanor to third-degree felony. Such conduct also will lead to suspension or dismissal.

Dangerous Substances: Carrying, possessing or storing dangerous substances or materials on campus is prohibited.

Weapons and Firearms: Carrying, possessing or storing weapons and firearms on campus is prohibited. Exceptions to this policy are law enforcement officers authorized by state law to carry firearms and students participating in law enforcement instruction requiring the use of firearms who are under the supervision of a certified law enforcement instructor.

Food and Beverages: Drinking and eating are prohibited in all classrooms, labs and libraries.

Animals: Animals except those assisting sensory-impaired persons are not allowed in T-VI buildings.

Children: Students are not permitted to bring children to classroom or laboratory settings. Children left unattended on campus will be brought to the attention of the appropriate law enforcement agency.

Graffiti and Vandalism: Anyone found defacing any T-VI property or committing any act of vandalism is subject to penalty. Graffiti is not acceptable.

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

DEVELOPMENTAL STUDIES

Main, Montoya, Rio Rancho/Intel
and University of New Mexico Campuses

There are many reasons why students are not ready for college-level studies. Some did not enroll in the right courses in high school. Others once had the skills but have been out of school for years and now need to “brush up.” Still others’ lives were full of responsibilities, circumstances or priorities that made it difficult for them to be successful students. And some have solid academic skills but lack confidence. But, for whatever reason people find themselves unprepared for college, college is not an impossibility.

The T-VI Department of Developmental Studies (DDS) works with students to develop the basic academic, study and life skills necessary for college success, whether those students choose to follow a liberal arts or a vocational path. Reading, writing, math and science courses are offered as are introductory courses to some vocational programs. The department also offers courses to help students develop useful strategies such as time management, stress management, calculator usage and test preparation. Students are placed in the appropriate courses based on their needs, interests and abilities.

The Department of Developmental Studies offers day and evening classes at four sites: the T-VI Main, Montoya and Rio Rancho/Intel campuses and the University of New Mexico. (Information about the Introductory Studies Program at UNM can be found in the current UNM catalog.)

Textbooks and supplies for Developmental Studies classes may be purchased at the bookstores at Main and Montoya campuses.

Eligible students may receive financial aid for up to 30 credit hours in Developmental Studies courses. Students using veterans’ benefits should check with VA advisors as some DDS courses are not eligible for benefits.

Developmental Studies courses do not use the traditional letter grading system (A,

B, C, D, F). To help students build up their skills without the added pressure of traditional grades, courses are graded CR (credit), PR (progress) and NC (no credit). While credit from Developmental Studies courses is not transferable to other degree-granting institutions, grades are recorded on students' permanent records, and these courses typically help students meet admissions requirements and program prerequisites.

Math Applications Learning Lab

DDS offers extra assistance in the Math Applications Learning Lab. For the many students who learn by doing, this lab provides the hands-on practice needed to understand principles and formulas commonly used in basic math and algebra classes. The lab is located in Rooms P-7 and P-9 of the Prep Building on the Main Campus. At Montoya, the Math Applications Learning Lab is located in J-117. For more information or operating hours, students should call 224-3931 at Main or 224-5691 at Montoya.

Writing and Reading Assistance Center (WRAC)

The department also offers students one-on-one and small-group help with writing and reading projects in the WRAC. This help includes instruction in pre-writing techniques, outlining strategies, essay organization, summary writing, grammar, vocabulary building, reading comprehension, test preparation, study skills and other concepts covered in DDS reading and writing courses. Resource materials and computers with writing and reading software are also available. This lab is located in room P-22 of the Prep Building on the Main Campus. At Montoya, the WRAC is located in J-117. For more information or operating hours, students should call 224-3954 at Main or 224-5692 at Montoya.

Course Descriptions

English

ENG 096 Special Topics 1-3 credit hours
Various topics in developmental English are presented. (Descriptions of regularly offered topics courses can be found at the end of the Developmental Studies section.)

ENG 098 Basic Writing and Reading Skills 3 credit hours
This course focuses on making reading and writing a part of everyday life. Students read and respond to short articles and other selections, write paragraph-length compositions, pay special attention to the construction of powerful sentences and review English grammar, usage and punctuation. (3 theory hours + 1 lab hour a week)

ENG 099 Practical Writing 3 credit hours
(Prerequisite: ENG 098 or equivalent skills as demonstrated by exam) In this course, students focus on a variety of practical writing tasks related to daily life, academics and

the workplace, including process writing, business letters, responses to reading, etc. Student writers polish skills of effective paragraphing and review English grammar, usage and punctuation. (3 theory hours + 1 lab hour a week)

ENG 100 Writing the Academic Essay 3 credit hours
(Prerequisite: ENG 099 or equivalent skills as demonstrated by exam) This course presents a variety of strategies for invention, organization, logical support, revision and editing of effective academic essays. Students review English grammar, usage and punctuation in the context of student writing and students' needs. Satisfactory completion of ENG 100 meets the prerequisite of ENG 101. (3 theory hours + 1 lab hour a week)

English as a Second Language

ESL 096 Special Topics 1-3 credit hours
Various topics for students learning English as a second language are presented.

ESL 098 Basic Writing and Reading in English as a Second Language 3 credit hours
This course is for students for whom American English is a second language or who have had limited exposure to the standard dialect of American English. The course covers the same writing tasks as its equivalent, ENG 098, but it also teaches students to use idiomatic English and to recognize and edit the grammatical errors that are often made by non-native speakers. (3 theory hours + 1 lab hour a week)

ESL 099 Practical Writing in English as a Second Language 3 credit hours
(Prerequisite: ENG 098, ESL 098 or equivalent skills as demonstrated by exam; corequisite: RDG 099) This course is for students for whom American English is a second language or who have had limited exposure to the standard dialect of American English. The course covers the same reading and writing tasks as its equivalent, ENG 099, but it also teaches students to use idiomatic English and to recognize and edit the grammatical errors that are often made by non-native speakers. (3 theory hours + 1 lab hour a week)

ESL 100 Writing the Academic Essay in English as a Second Language 3 credit hours
(Prerequisite: ENG 099, ESL 099 or equivalent skills as demonstrated by exam; corequisite: RDG 100) This course is for students for whom American English is a second language or who have had limited exposure to the standard dialect of American English. The course covers the same reading and writing tasks as its equivalent, ENG 100, but it also teaches students to use idiomatic English and to recognize and edit the grammatical errors that are often made by non-native speakers. Satisfactory completion of ENG 100 meets the prerequisite for ENG 101. (3 theory + 1 lab hour a week)

Mathematics

MATH 096 Special Topics **1-3 credit hours**
Various topics in developmental math are presented.

MATH 097 Introductory Mathematics **6 credit hours**
This course provides small-group instruction in basic mathematics: whole numbers, fractions, decimals, percents, and ratio and proportion. The course is offered in individualized and/or lecture formats. Satisfactory completion of MATH 097 meets the prerequisite for MATH 100. (5 theory hours + 3 lab hours a week)

MATH 099H Basic Math for Health Occupations **3 credit hours**
This course prepares students for the Nursing/Medical Laboratory Technician basic math test. Topics include basic arithmetic, the metric system and other measuring systems. Department approval is required for enrollment in this course.

MATH 099 Basic College Mathematics **4 credit hours**
This course, offered in individualized and/or lecture formats, is for students entering programs in Business Occupations, Technologies and Trades & Service Occupations or preparing for MATH 100. Topics include basic mathematics, geometric concepts and measurement. Satisfactory completion of MATH 099 meets the prerequisite for MATH 100. (4 theory hours + 1 lab hour a week)

MATH 100 Elementary Algebra for College Students **4 credit hours**
(Prerequisite: MATH 097 or MATH 099 or equivalent skills as demonstrated by exam.)
This course is offered in individualized and/or lecture formats. Topics include linear equations, polynomials, factoring, formulas, graphing and application problems. Satisfactory completion of MATH 100 meets the prerequisite for MATH 119 and MATH 120. (4 theory hours + 1 lab hour a week)

Reading

RDG 096 Special Topics **1-3 credit hours**
Various topics in developmental reading are presented.

ENG 098 Basic Writing and Reading Skills **3 credit hours**
This course focuses on making reading and writing a part of everyday life. Students read and respond to short articles and other selections, write paragraph-length compositions, pay special attention to the construction of powerful sentences and review English grammar, usage and punctuation. (3 theory hours + 1 lab hour a week)

RDG 099 Reading for the Workplace **3 credit hours**
(Prerequisite: ENG 098 or equivalent skills demonstrated by exam) Students are introduced to the reading required for success in occupational majors and the workplace. The focus is on comprehending and responding to occupational and workplace literacy.

Students read materials from their individual majors. (3 theory hours + 1 lab hour a week)

RDG 100 Reading and Critical Thinking 3 credit hours
(Prerequisite: RDG 099 or equivalent skills demonstrated by exam) Students are introduced to the reading required for success in liberal arts courses. Topics include comprehending liberal arts materials; thinking critically about what is read; developing note-taking, annotating, organizing and summarizing skills; and developing research skills including the use of technology. The relationship between reading and writing is emphasized. Successful completion satisfies the ACT reading requirement. (3 theory hours + 1 lab hour a week)

Science

SCIE 096 Special Topics 1–3 credit hours
Various topics in developmental science are presented.

SCIE 100 Basics of Chemistry 3 credit hours
(Recommended pre- or corequisite: MATH 100 or equivalent) The course focuses on preparing students for BIO 123, BIO 136 and CHEM 111. Content centers mainly on high-school-level chemistry but also includes reading, study and math skills. A credit grade satisfies the ACT science reasoning requirement. (3 theory hours + 1 lab hour a week)

Occupational Support Courses

OCC 096 Special Topics 1–3 credit hours
Various topics in occupational support courses are presented.

AA 100 Introduction to Keyboarding 3 credit hours
This course prepares students to type or use a keyboard at a minimum rate of 25 words per minute. It covers basic computer literacy foundations. It is recommended for students in Business Occupations, Business Computer Programming Technology and other majors requiring keyboarding skills. There is a \$5 fee for supplies.

ACCT 100 Introduction to Accounting 3 credit hours
This course is designed to provide students with knowledge of the basic accounting cycle. Additional topics such as payroll and taxes are covered as time permits. This class prepares students for entry-level accounting-related courses.

CMBO 100 Communications for Business Occupations 3 credit hours
A review of study, research and grammar skills is offered in this course. It develops business vocabulary and promotes letter writing, interpersonal communication, problem solving and employability skills.

CMHO 100 Communications for Health Occupations 3 credit hours

This course emphasizes reading, interpreting and summarizing health articles. Health terminology is introduced through vocabulary study and health literature. Group learning and study skills are utilized.

CMTT 100 Communications for Technologies and Trades 3 credit hours

Students learn about technology- and trades-related topics through reading and analyzing occupational literature. The course emphasizes critical reading, problem solving, technical writing and study skills. A considerable amount of time is spent on computer use and application.

CP 100 Introduction to Computer Programming 3 credit hours

This course provides preparation for first-term Business Computer Programming Technology and gives an overview of computer systems. Course content includes flowcharting, logic, data processing concepts and programming in QBASIC. Satisfactory completion of the course indicates the student is prepared for entry-level computer courses. (3 theory hours + 1 lab hour a week)

DRFT 100 Introduction to Drafting 3 credit hours

This course offers introductory concepts of drafting, including line weights, orthographic project, pictorials and applied drafting skills. Free-hand sketching, geometric constructions, lettering, drafting math and occupational information are also presented. The course prepares students for Architectural Engineering Drafting Technology, Construction Management and Design Drafting Engineering Technology. (3 theory hours + 1 lab hour a week)

ELEC 100 Introduction to Electronics 3 credit hours
for Technologies/Trades

This course offers instruction in electronics theory such as Ohm's, Kirchoff's and Watt's laws; circuit analysis; magnetism; the operation of generators and motors; and capacitance. Students learn to use their reasoning powers and applied mathematics to solve electrical problems. This course is recommended for Electronics Technology, Electronics Engineering Technology, Electrical Trades and Heating, Air Conditioning and Refrigeration. (3 theory hours + 1 lab hour a week)

HLTH 100 Introduction to Health Occupations 3 credit hours

This course offers an introduction to various health careers. Other topics include anatomy, physiology and pathophysiology of selected body systems.

Skills Improvement/Mini Courses

SSKL 096 Special Topics 1-3 credit hours

Various topics in study skills are presented.

SSKL 092 Introduction to the Scientific Calculator 1 credit hour

This course teaches the use of the functions on the calculator keyboard. Topics include

statistics, programming and graphing functions. The course is useful for math, science and Technologies courses. A co-enrollment in MATH 100 (or higher) is suggested. Calculators are provided. There is a \$5 fee for supplies. (2 theory hours + 1 lab hour a week)

SSKL 094 Reducing Math Anxiety 1 credit hour

This course offers students a chance to gain an understanding of math anxiety and modify related behaviors through the use of group discussion, journal entries and math study skills. This course is designed for math anxiety, not test anxiety.

SSKL 095 Study Skills 1 credit hour

Students identify and apply a variety of study skills by completing an inventory and implementing time-management strategies. In this 7.5-week course methods are presented for taking effective notes, using memory techniques, approaching test preparation and test taking and setting realistic goals.

SSKL 100 Student Success 2 credit hours

This 15-week course expands on the popular eight-week study skills mini-course and provides students with both theory and practice in learning how to learn. After determining their strengths and weaknesses, students develop and implement plans to improve skills, including study reading, test taking, managing time on larger projects and using resources on and off campus.

Special Topics Courses

A variety of courses are offered under special topics. In Developmental Studies, some topics courses are offered regularly; others are offered only occasionally. Students should check the course schedule each term. Listed below are topics courses regularly offered in the Department of Developmental Studies.

ENG 096 Spelling 1 credit hour

This four-week course, designed to help students overcome spelling difficulties, focuses on essential spelling skills. Topics include faulty pronunciation, consonant and vowel spellings, dictionary use, proofreading and spelling rules. This course may be taken concurrently with any other English courses and may be repeated up to three times for a total of three credit hours. (4 theory hours a week)

ENG 096 Intensive English Grammar: Sentence Combining 1 credit hour

This four-week course is particularly recommended for students who would like to add variety to their sentences and to invigorate their writing style. Students are given opportunities to apply grammar concepts to their own writing. Topics include sentence fragments, run-on sentences, coordination and subordination, and punctuation. This course may be taken concurrently with any other English courses. (4 theory hours a week)

ENG 096

**Intensive English Grammar: Sentence
Effectiveness**

1 credit hour

This four-week course is particularly recommended for students who are struggling with English grammar and would like to focus on writing effective sentences. Special attention is paid to sentence revision. Students are given opportunities to apply grammatical principles to their own writing. Topics include sentence coordination and subordination, punctuation, subject-verb agreement, pronoun usage and modifier usage. This course may be taken concurrently with any other English courses. (4 theory hours a week)

ARTS & SCIENCES

Arts & Sciences provides liberal arts courses to support degree and certificate programs and offers the associate of arts degree in liberal arts. All courses are transferable to other degree-granting institutions as freshman and sophomore electives or requirements.

All courses in Arts & Sciences have tuition charges. In addition, science, computer science and some math courses have course fees (see page 28.)

Some courses carry prerequisites or corequisites which are mandatory. Some descriptions list courses which it is recommended students take prior to enrollment, but these are not mandatory.

General Honors Program

The General Honors Program, by offering intensive interdisciplinary study, is designed to increase opportunities for liberal arts education. Taught in a small-group seminar format, Honors courses emphasize discussion, student participation and self-expression.

Enrollment in these courses is by application only; however, any student interested in the challenge these courses offer is encouraged to apply. Academic potential (as reflected in ACT scores), record of previous academic work and intellectual motivation are the main criteria used to select students.

For more information and an application, interested students should see the Arts & Sciences counselor.

Liberal Arts

Associate of Arts Degree

Main, Montoya and Rio Rancho/Intel Campuses

The associate of arts in liberal arts degree is designed to meet diverse educational interests. The degree provides the general curriculum of the first two years of baccalaureate study for transfer purposes or as an end in itself.

Students majoring in liberal arts are expected to meet prerequisites to enter MATH 120 and ENG 101. It is strongly recommended that applicants **at the time of admission to T-VI** provide proof of prerequisites for these two courses (or proof of their completion). Course descriptions for MATH 120 and ENG 101 below list these prerequisites.

Fulfillment of the degree requirements listed below and institutional requirements listed on page 45 of this catalog is required for graduation.

Some disciplines and courses not offered by the Arts & Sciences Department may be accepted in transfer toward the degree requirements. For information about transfer work, students should contact the Arts & Sciences office.

This degree includes a general education core curriculum of 33 to 35 semester hours adopted by member institutions of the New Mexico Council of Independent Community Colleges. This core is accepted in common among these institutions as meeting approximately half of an associate of arts degree. Each institution will specify additional graduation requirements beyond those included in the general education core for degree completion.

The colleges participating in this agreement are as follows: Albuquerque T-VI, Clovis Community College, New Mexico Junior College, Northern New Mexico Community College, San Juan College and Santa Fe Community College. Students should check with the registrars of the other colleges—such as Luna Vocational-Technical Institute, New Mexico Highlands University, New Mexico Military Institute, Southwestern Indian Polytechnic Institute and Tucumcari Area Vocational School—for updated information about this agreement.

Students seeking T-VI associate degrees in fields other than liberal arts should consult individual program requirements for liberal arts courses. Course prefixes are given for each discipline in the list on the next page. The following course descriptions are listed alphabetically by course prefix.

Note: Courses numbered in the 100s are considered college freshman-level work; courses numbered 200 and above are sophomore level and may require substantial reading, writing and research skills in addition to the prerequisites. Students should consult a counselor, academic advisor or faculty member for advice on course selection.

Course Descriptions

- ANTH 110 Language, Culture and the Human Animal 3 credit hours**
This is an introductory course for both the fields of linguistics and anthropology. Students learn about the systematic nature of language on the levels of phonology, morphology, syntax, semantics and pragmatics.
- ANTH 120 Archaeology: Discovering Our Past 3 credit hours**
This introductory course presents an overview of archaeological theory and methods including data from selected archaeological sites in various geographical areas and from different time periods.
- ANTH 130 Cultures of the World 3 credit hours**
This course introduces the basic concepts of cultural anthropology. Lectures include a survey of the characteristics of culture illustrated by a variety of existing cultures in their native environments. Societal examples are studied in cross-cultural comparisons.
- ANTH 150 Evolutionary Anthropology 3 credit hours**
An introduction to the world of biological anthropology and the concepts of organic evolution, this course emphasizes the fossil history of primates, the prehistory of man and human genetics within a paleoecological context. Modern primate behavior is presented in terms of its relevance to human evolution.
- ANTH 222 Ancient Mesoamerica 3 credit hours**
(Recommended: ANTH 120) Mesoamerican archaeology is traced from the earliest inhabitants through the Aztec period. Special emphasis is placed on cultural processes and the dynamics of cultural evolution.
- ANTH 231 North American Indians 3 credit hours**
(Recommended: ANTH 130) This course presents a comparative ethnology of North American Indian tribes on geographic, ecologic and cultural bases. The student will explore what life as a North American Indian was like before European influence and will consider the vast diversity of cultures existing on the North American continent.
- ANTH 238 Cultures of the Southwest 3 credit hours**
(Recommended: ANTH 130) This course introduces basic concepts related to cultural patterns of the American Southwest from AD 1600 to the present. Interactions of the ethnic groups that populate the Southwest are illustrated and analyzed.
- ANTH 255 Southwestern Anthropology 3 credit hours**
(Recommended: ANTH 120 or a familiarity with archaeology) The interpretations and dynamics of southwestern archaeology from the time of the earliest inhabitants until European contact are presented.
- ANTH 296 Topics in Anthropology 1-3 credit hours**
Various topics exploring an issue in anthropology or the works of an influential anthropologist are offered.

ART 101 Introduction to Art 3 credit hours
Students are introduced to the fundamental concepts of visual arts as well as the language of form and media of artistic expression. Instruction centers around readings and slide presentations. Some museum exhibition attendance may be required.

ART 151 Art of the American Southwest 3 credit hours
The interrelationships of three southwestern cultures are explored in slides, lectures and field trips—all of which emphasize major forms of expression in pottery, textiles, jewelry, architecture, painting and photography.

ART 201 History of Art I 3 credit hours
This course surveys Near Eastern, Egyptian, Greek, Roman, early Christian, Byzantine, early Medieval, Romanesque and Gothic art and architecture. Lectures are supplemented by slides. *Fall, summer terms.*

ART 202 History of Art II 3 credit hours
This survey covers Italian and Northern Renaissance, Baroque, Rococo and nineteenth-century Western European painting, sculpture and architecture. Slides and readings supplement lectures. *Spring, summer terms.*

ART 250 Modern Art 3 credit hours
Students are introduced to the major figures, movements and stylistic developments in Western art from 1850 to the present. Slides and readings supplement lectures.

ART 260 Architectural History: Ancient through Modern 3 credit hours
Lectures survey the history of Western architecture from the pyramid to the post-Modernist house. The technological, stylistic and functional characteristics of monuments within their cultural context are analyzed. Material is supplemented by slides.

ASTR 101 Introduction to Astronomy I 3 credit hours
This descriptive and historical introduction to the science of astronomy focuses on the solar system, including the sun, the planets, comets and meteors. Topics also include the space program and critiques of related pseudosciences, such as astrology. Successful completion of MATH 100 is the presumed math background for this course.

ASTR 102 Introduction to Astronomy II 3 credit hours
The life cycles of the stars and stellar systems and the structure of the universe are explored in this descriptive course. Starting with our own star—the sun, students study the births, lives and deaths of stars. The course then moves on to the nature of the Milky Way galaxy and to current concepts on cosmology and the large-scale structure of the universe. Successful completion of MATH 100 is the presumed math background for this course.

ASTR 111L Astronomy Laboratory 1 credit hour
(Pre- or corequisite: ASTR 102) An optional laboratory for investigation of the principles discussed in ASTR 102, this course includes laboratory experiments about the nature of light and laws of motion. The labs include an introduction to Internet and computer simulations of data taking and analysis that could occur at astronomical observatories. The labs may include use of data from NASA and other U.S. government data sets.

BIO 111 Environmental Science 3 credit hours
This course introduces the study of the environment, including basic principles of ecology, relationship of humans to the environment and solutions to local, regional and global environmental problems.

BIO 111L Environmental Science Laboratory 1 credit hour
An optional laboratory for investigation of the principles discussed in BIO 111, this course includes laboratory analyses of water, soil and air pollutants as well as field trips to sites of special interest. Field trips may be moderately strenuous and may occur outside the regularly scheduled laboratory periods.

BIO 121/121L Principles of Biology I 4 credit hours
(Recommended: Working knowledge of math at the level of MATH 100 and chemistry at the level of CHEM 111) This course introduces the basic principles of biology to students wishing to pursue majors in the sciences. The course stresses cellular level processes which include biological chemistry, cellular metabolism, photosynthesis, control and transmission of hereditary materials, and nucleic acid structure and function. The development of critical thinking skills and scientific methodology are emphasized. Students must enroll in both a three-hour lecture section and a three-hour lab.

BIO 122/122L Principles of Biology II 4 credit hours
(Prerequisite: BIO 121/121L) This is a continuation of the concepts developed in BIO 121/121L. The course stresses organism level processes which include taxonomy, comparative anatomy and physiology of plants and animals with emphases on evolutionary trends, embryology, behavior and ecology. Importance is placed on the development of scientific reasoning with an evolutionary perspective. Students must enroll in both a three-hour lecture section and a three-hour lab.

BIO 123 Biology for Health Sciences 3 credit hours
(Recommended: Working knowledge of math at the MATH 100 level and chemistry at the CHEM 111 level or SCIE 100) Principles of cell biology, cell chemistry, genetics and organismic biology are studied with an emphasis on human systems.

BIO 124L Biology for Health Sciences Laboratory 1 credit hour
(Pre- or corequisite: BIO 123) Laboratory exercises and demonstrations related to cell biology, biochemical processes and genetics are conducted.

BIO 136 Human Anatomy and Physiology for Non-Majors 3 credit hours
(*Recommended: Working knowledge of content in SCIE 100*) This one-semester course examines the structure (anatomy) and function (physiology) of the human body. Investigation involves the molecular, cellular, tissue and organ levels and a sequential study of organ systems.

BIO 139L Human Anatomy/Physiology for Non-Majors Lab 1 credit hour
(*Pre- or corequisite: BIO 136*) Laboratory exercises complement concepts presented in BIO 136. Exercise topics include histological study, biochemical processes, mammal organ dissections and use of models to illustrate anatomical arrangement.

BIO 200/200L General Ecology 4 credit hours
(*Prerequisite: BIO 122/122L or BIO 123/124L with permission of instructor*) Students are introduced to the interrelationships of organisms to their environments through the study of populations, communities, ecosystems and the biosphere. Students must enroll in both a three-hour lecture section and a three-hour lab. *Summer, fall terms only.*

BIO 221 Introductory Genetics 3 credit hours
(*Prerequisite: BIO 123/124L, BIO 121/121L or permission of instructor*) Emphasis is placed on the structure, function and transmission of hereditary factors. *Offered alternating terms.*

BIO 222 Introductory Genetics Problems 1 credit hour
(*Corequisite: BIO 221*) Recitation and problem solving techniques in genetic analysis related to topics covered in BIO 221 are handled. *Available on a credit/no-credit basis only.*

BIO 223L Introductory Genetics Laboratory 1 credit hour
(*Pre- or corequisite: BIO 221*) Lab exercises using fruit flies and lower organisms illustrate the principles introduced in BIO 221. *Offered alternating terms.*

BIO 224/224L Southwestern Natural History 4 credit hours
Lecture and labs or field trips (one or more overnight) present the natural history and identification of southwestern flora and fauna. Students must enroll in both a three-hour lecture section and a three-hour lab. *Summer and fall terms only.*

BIO 231L Applied Environmental Microbiology 4 credit hours
(*Prerequisite: BIO 121/121L or 123/124L*) In combined lecture and lab, students explore basic concepts and methods in microbiology and their applications to problems in hazardous waste management, environmental assessment and remediation.

BIO 237 Human Anatomy and Physiology I 3 credit hours
(*Prerequisites: Combination of either BIO 123/124L or BIO 121/121L and CHEM 111/112L or CHEM 121/121L*) This course is an integrated study of human structure and function that covers the integumentary, skeletal, muscular and nervous systems.

- BIO 238 Human Anatomy and Physiology II 3 credit hours**
(Prerequisite: BIO 237) This course covers the structure and function of the cardiovascular, respiratory, digestive, urinary, reproductive and endocrine systems.
- BIO 239 Microbiology 3 credit hours**
(Prerequisites: Combination of either BIO 123/124L or BIO 121/121L and CHEM 111/112L or CHEM 121/121L. Corequisite: BIO 239L) The concepts of microbiology, host-parasite relationships, infection and immunity are introduced.
- BIO 239L Microbiology Laboratory 1 credit hour**
(Prerequisites: BIO 115L taken prior to Summer 1993 or a combination of either BIO 123/124L or BIO 121/121L and CHEM 111/112L or CHEM 121/121L. Corequisite: BIO 239) Students learn a variety of techniques designed to facilitate the growth, identification and control of microorganisms.
- BIO 247L Human Anatomy and Physiology I Laboratory 1 credit hour**
(Prerequisites: Combination of either BIO 123/124L or BIO 121/121L and CHEM 111/112L or CHEM 121/121L. Pre- or corequisite: BIO 237) This course provides anatomical and physiological laboratory exercises which complement the topics covered in BIO 237. Specimen dissection and cadaver study are included.
- BIO 248L Human Anatomy and Physiology II Laboratory 1 credit hour**
(Prerequisites: Combination of either BIO 123/124L or BIO 121/121L and CHEM 111/112L or CHEM 121/121L. Pre- or corequisite: BIO 238) This course provides anatomical and physiological laboratory exercises which complement the topics covered in BIO 238. Specimen dissection and cadaver study are included.
- BIO 260/260L Botany 4 credit hours**
(Prerequisite: BIO 122/122L) This course introduces students to the diversity of the plant kingdom: Algae, Bryophyta, Pterophyta, Gymnosperms and Angiosperms. Plant morphology, anatomy, sexual and asexual reproduction are covered under each section. Students must enroll in both a three-hour lecture section and a three-hour lab.
- BIO 282 Parasites of the Southwest 3 credit hours**
(Prerequisite: One previous course in Biology) Students explore basic animal parasitology and focus on those organisms likely to be encountered by health workers in the Southwestern United States.
- BIO 296 Topics in Biology 1-3 credit hours**
 Various topics are offered.
- CHEM 101 Concepts of Chemistry 3 credit hours**
 This course is a non-mathematical introduction to chemistry as it applies to the world in which we live. In addition to a qualitative treatment of the chemical and physical properties of matter, topics of special interest are covered.

CHEM 111 Introduction to Chemistry **3 credit hours**
(Prerequisite: One of the following: Passing MATH 100 or higher or math ACT [see page XXX for scores] or satisfactory scores on all four parts of the T-VI math advisement test) In this one-semester introduction for students in the health sciences, both the qualitative and quantitative aspects of general chemistry are covered: atomic and molecular structure, the periodic table, acids and bases, mass relationships, solutions, equilibrium and a brief introduction to organic chemistry.

CHEM 112L Introduction to Chemistry Laboratory **1 credit hour**
(Pre- or corequisite: CHEM 111) While meeting for one three-hour period each week, students perform experiments and complete lab reports complementing the material covered in CHEM 111.

CHEM 121/121L General Chemistry I **4 credit hours**
(Prerequisite: MATH 121 or MATH 150) The first semester of a standard two-semester sequence in general chemistry for students majoring in the sciences, engineering or pre-med, this course stresses atomic and molecular structure, chemical periodicity, mass and energy relationships in chemical reactions, and the chemical and physical behavior of matter. Problem solving is emphasized. Students must enroll in both a three-hour lecture section and a three-hour lab.

CHEM 122/122L General Chemistry II **4 credit hours**
(Prerequisite: CHEM 121/121L) Continuing from CHEM 121L, students are given thorough quantitative coverage of acids and bases, chemical equilibrium, chemical kinetics, thermodynamics, solubility, electrochemistry and nuclear chemistry. Introductions to coordination chemistry and organic chemistry as well as a brief survey of the elements are included. Students must enroll in both a three-hour lecture section and a three-hour lab.

CHEM 130L Environmental Chemistry **4 credit hours**
(Prerequisite: CHEM 111/112L) Introducing students to the fundamentals of environmental chemistry, this course focuses on chemical and instrumental analysis, sampling and preservation techniques in water, wastewater, soil, air and food testing.

CHEM 212 Organic Chemistry and Biochemistry **4 credit hours**
(Prerequisite: CHEM 111/112L or CHEM 121/121L) A one-semester introduction to organic chemistry and biochemistry designed for students in health or environmental occupations, this course surveys organic functional groups in terms of structure and chemical/physical properties, followed by coverage of the chemistry of living organisms. A strong emphasis is placed on medical aspects of the material.

CHEM 296 Topics in Chemistry **1-3 credit hours**
Various topics are offered.

- COMM 110 Mass Media and Society 3 credit hours**
(Recommended: ENG 101) This course examines the role newspapers, TV, magazines and radio have in American society and their effects on other forms of communication. The course also introduces the economic and developmental history of mass media.
- COMM 130 Public Speaking 3 credit hours**
(Recommended: ENG 101) This course blends theory and practical application. Students prepare, present and critique their own and others' speeches to meet professional and personal goals.
- COMM 221 Interpersonal Communication Studies 3 credit hours**
(Recommended: ENG 101) Through group activities, discussion and lecture, this course introduces concepts of perception, emotions, nonverbal communication, listening, defensiveness and relational conflict. Students develop awareness of communication styles and skills to enhance their interpersonal effectiveness in professional and personal relationships.
- COMM 223 Introduction to Nonverbal Communication Studies 3 credit hours**
(Recommended: ENG 101) This course introduces nonverbal communication through lecture, discussion, small-group activities and observation. The course examines how the face and eyes, gestures, touch, voice, physical appearance, space, time and environment communicate in personal and professional interactions.
- COMM 225 Small-Group Communication Studies 3 credit hours**
(Recommended: ENG 101) This course teaches theory and skills involved in small-group processes through participation in small groups. The course includes group types, characteristics, dynamics, conflicts, norms, roles, leadership, problem solving and decision making.
- COMM 232 Business and Professional Communication Studies 3 credit hours**
(Recommended: ENG 101) This class introduces interpersonal and group principles and skills needed to communicate effectively in business and other professional settings. Emphasis is on developing, organizing and supporting ideas in interpersonal business encounters, groups and meetings, and platform presentations.
- COMM 240 Organizational Communication Studies 3 credit hours**
(Recommended: ENG 101) This course provides an introduction to communication and organizational theory. Communication networks, power and authority, manager/employee relationships, leadership and interviewing are examined.
- COMM 270 Communication Studies for Teachers 3 credit hours**
(Recommended: ENG 101) This course emphasizes a systems approach to classroom communication at any level and provides teachers with a means to analyze, develop and facilitate effective communication in the classroom. The course includes application of

- CSCI 296 Topics in Computer Science 1–3 credit hours**
 Various topics are offered.
- CST 150 Introduction to Cultural Studies 3 credit hours**
 This course covers a broad range of contemporary topics in global perspective. Students explore non-dominant cultures and non-traditional social issues. Topics include gender, race, class and ethnicity.
- ECON 101 Introduction to Economics 3 credit hours**
 Students are introduced to basic economic concepts and developments. Elementary economic theory is used to supplement a materialistic view of recent Western history. Topics include the origins of capitalism, transplantation and adaptation to the New World and new institutions of the 1800s and 1900s.
- ECON 200 Macroeconomics 3 credit hours**
 This course serves as an introduction to the theories and problems of economic policy. Topics include the contrast of the Classical and Keynesian models, money and banking, inflation, unemployment and economic growth.
- ECON 201 Microeconomics 3 credit hours**
 Students are introduced to the laws of demand and supply and the workings of the price system in a free market. Basic economic theory is applied to problems of production, monopoly, taxation, consumer welfare and the environment.
- ECON 296 Topics in Economics 1–3 credit hours**
 Various topics concerning economic theory, research or statistical analysis and economists are offered.
- ENG 101 College Writing 3 credit hours**
(Prerequisite: One of the following: minimum English ACT score, ASSET, passing ENG 100 or both passing English proficiency exam and first-day diagnostic exam) This is a course in text-based essay composition. Assignments include critical reading, summary writing and synthesis. *Students must earn a grade of C or higher on the final exam to pass the course; passing the final does not guarantee that students will pass the course.*
- ENG 102 Analytic and Argumentative Writing 3 credit hours**
(Prerequisite: ENG 101 or minimum English ACT score) This is a course in analytic and argumentative essay writing with readings in exposition and literature. Students prepare and submit research papers on topics of their own choosing. *Students must earn a grade of C or higher on the final exam to pass the course; passing the final does not guarantee that students will pass the course.*

- ENG 119 Technical Communications 3 credit hours**
(Prerequisite: ENG 101 or minimum English ACT score) This is an introductory study of the types of written and verbal communication needed in business and industry. Topics include descriptive and process analyses, informal reports and proposals, short logs/reports for lab and field work, basic production of graphics, letter writing and oral presentations.
- ENG 150 Study of Literature 3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) An introduction to the study and appreciation of literature, this course shows how understanding writers' techniques increases reading enjoyment and relates these techniques to literary conventions. *Fall term only.*
- ENG 210 Film as Literature 3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) Screenings and critical discussion of major films supplement this study of film as literature. Students survey major trends in the history of film.
- ENG 211 Topics in Literature 1–3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) Various topics—including the American novel, the short story, quest romances, Native American literature and women's fiction—are offered.
- ENG 212 Topics in Language and Writing 1–3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) Various topics are offered.
- ENG 213 Film Genres 3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) This course surveys various film genres or national cinemas.
- ENG 219 Technical Writing 3 credit hours**
(Prerequisite: ENG 102) A study of the most common types of writing in industry, research laboratories, business and other professional settings. Instruction includes correspondence and memos, abstracts, proposals, bibliographies and reviews and various formal and informal reports presented orally and in writing.
- ENG 220 Expository Writing 3 credit hours**
(Prerequisite: ENG 102) This is a study of advanced composition. It concentrates on critical reading of literary prose, writing expository and argumentative essays. *Fall term only.*
- ENG 221 Creative Writing: Fiction 3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) Student work is supplemented by texts and discussion of writing as a creative process.

- ENG 222 Creative Writing: Poetry 3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) Student poetry is supplemented by texts and discussion of writing as a creative process.
- ENG 240 Traditional Grammar 3 credit hours**
 This course is a survey of traditional grammar. Students are introduced to linguistic terminology and methods for identifying and understanding parts of speech, parts of sentences and basic sentence patterns.
- ENG 251 Introduction to Dramatic Literature 3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) This course introduces students to the structure and nature of drama as a literary form. Students read, analyze and discuss Greek, Renaissance, Enlightenment and modern plays. *Spring term only.*
- ENG 270 Modern Literature 3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) American and European literature of the twentieth century is introduced through works by authors such as Ibsen, Chekhov, Joyce, Camus, Conrad, Woolf, Faulkner and Hemingway.
- ENG 282 Modern Latin American Literature 3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) Chronicles, diaries, drama, poetry, essays and fiction of Latin America are surveyed with emphasis on cross-cultural relations between Latin American life and literature.
- ENG 294 Survey of Earlier English Literature 3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) As a survey of British literature from Old English to 1798, this course presents a study of the principal literary and intellectual movements and selected writers and literary works. *Fall term only.*
- ENG 295 Survey of Later English Literature 3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) From the romantic poetry of Burns and Wordsworth to the modernist writings of Hardy, Woolf and Eliot, this course surveys the best of English literature from the late eighteenth century to the present. *Spring term only.*
- ENG 296 American Literature 3 credit hours**
(Prerequisite: ENG 101 or permission of instructor) Students survey literature from colonial to present times. Short stories, poetry, drama and nonfiction are emphasized.
- FREN 101 Beginning French I 4 credit hours**
 Beginning French for students with no previous exposure to the language, this course develops all four language skills with emphasis on listening, comprehension and speaking.

FREN 102 Beginning French II 4 credit hours
(Prerequisite: FREN 101 or permission of instructor) This course continues developing the skills introduced in FREN 101.

FREN 103 Beginning French I Conversation 3 credit hours
(Pre- or corequisite: FREN 101, FREN 102 or permission of instructor) This course provides practice in speaking at the beginning level. It is designed to give students basic conversational skills.

FREN 201 Intermediate French I 3 credit hours
(Prerequisite: FREN 102 or permission of instructor) This course which builds upon FREN 102 is designed to polish acquired skills while broadening the student's knowledge of the language and culture of France.

FREN 202 Intermediate French II 3 credit hours
(Prerequisite: FREN 201 or permission of instructor) This course is a continuation of FREN 201.

FREN 203 Intermediate French II Conversation 3 credit hours
(Pre- or corequisite: FREN 201, FREN 202 or permission of instructor) This course encourages the use, development and strengthening of conversation by using the most recent materials available.

GEOG 101 Physical Geography 3 credit hours
This course introduces students to the geography of natural environment: weather systems, climatic regions, vegetation, soils, water resources, plate tectonics and volcanic, structural, erosional, fluvial, coastal, desert and glacial landforms.

GEOG 102 Human Geography 3 credit hours
Students are introduced to the cultural landscape: population, migration, languages, religions, folk customs, political units, economic development, agriculture, industry, urbanization and systematic analysis of global environmental issues.

GEOG 201 World Regional Geography 3 credit hours
This approach to global geography emphasizes regional characteristics, similarities and differences. All regions of the world are studied in terms of their landforms, climates, history, cultures and current economic and political problems.

GEOG 296 Topics in Geography 1-3 credit hours
Various topics are offered.

GNHN 121A General Honors: The Ancient Legacy 3 credit hours
(Prerequisite: Permission of instructor; see Arts & Sciences counselor for information.) Through discussion and writing, this seminar analyzes classic texts of the Greek, Hebrew, Roman and Christian traditions. Students consider ideas about virtue, knowledge, politics, religious faith and education. *Fall term only.*

- GNHN 121M General Honors: The Modern Legacy** **3 credit hours**
(Prerequisite: Permission of the instructor; see Arts & Sciences counselor for information.) This seminar reads classic texts of Western culture from the Renaissance through the nineteenth century. Students explore ideas about the individual, society, state, history, nature, progress and religion, which are characteristics of modernity. *Spring term only.*
- GNHN 221 Topics in General Honors** **1–3 credit hours**
 Various topics are offered.
- HIST 101 Western Civilization I** **3 credit hours**
(Recommended: ENG 101) Events, personalities, issues, rises and falls are the focus of this course which covers ancient times through 1648.
- HIST 102 Western Civilization II** **3 credit hours**
(Recommended: ENG 101) This course explores such topics as colonialism, the age of revolutions, expansionism and the Great Wars from 1648 to the present.
- HIST 161 History of the United States I** **3 credit hours**
(Recommended: ENG 101) This course is a survey of the economic, political, intellectual and social development of the United States from 1492 to 1877.
- HIST 162 History of the United States II** **3 credit hours**
(Recommended: ENG 101) A continuation of HIST 161, this course covers the period from 1865 to the present.
- HIST 230 20th Century Russia: Revolution, Repression, Reform** **3 credit hours**
(Recommended: ENG 101) This course leads students through this turbulent century of Russian history—from czarist absolutism through communist totalitarianism to the tentative introduction of a pluralist society.
- HIST 240 Vietnam: War, Politics, and Culture** **3 credit hours**
(Recommended: ENG 101) Students examine the causes of the war, the military and political aspects, its conduct and the consequences of the years of conflict in Vietnam on the Vietnamese people, on the U.S. and on the other nations. Students explore the issues surrounding U.S. involvement in Vietnam and assess the changes wrought in the culture, institutions and political thought of the U.S. during and after the war.
- HIST 260 History of New Mexico** **3 credit hours**
(Recommended: ENG 101) This course explores New Mexico's history from 1500 to the present. The contributions of and interactions among Native Americans, Hispanics, Anglos and others receive special attention.

HIST 270 The American West 3 credit hours
(Recommended: ENG 101) This course explores American settlement west of the Mississippi River through such topics as exploration, the fur trade, the overland trails, ranching, mining, contacts with Native Americans, frontier violence and environmental issues.

HIST 282 Modern Latin American History 3 credit hours
(Recommended: ENG 101) This course examines Latin American history from the beginning of the revolutionary period in 1810 to the present.

HIST 296 Topics in History 1-3 credit hours
Various topics are offered.

HUM 111 Comparative Civilizations 3 credit hours
This course introduces the history, art, literature, religion and ideas of early world civilizations, including Egypt, Mesopotamia, India, China, Greece, Rome, African and pre-Columbian America.

HUM 121 Western Culture from the Renaissance 3 credit hours
This course examines the history, art, literature, music and ideas of Western culture from the Renaissance to the present.

HUM 247 Topics in Humanities 1-3 credit hours
Various interdisciplinary topics are offered.

JOUR 151 Writing for the Media I 3 credit hours
(Prerequisite: ENG 101 or permission of instructor) This is a practical introduction to journalism which emphasizes journalistic conventions as well as gathering and writing news for the print and broadcast media.

JOUR 251 Writing for the Media II 3 credit hours
(Prerequisite: JOUR 151 or permission of instructor) This course offers advanced study in journalistic conventions, gathering and writing of news for print and broadcast media to include multi-source stories, hard news and complex features, obituaries, legal and police news, science reporting, persuasive writing and arts coverage as well as related topics such as libel law, freedom of information, invasion of privacy and journalistic ethics.

JOUR 253 Writing and Editing for the Media 1 credit hour
(Pre- or corequisite: JOUR 151) Although open to all, this course is targeted at students working for the mass media, including T-VI and UNM student publications, radio and television. It is a discussion course that reviews and critiques journalistic efforts and provides techniques for improving and strengthening writing style.

MATH 111 Mathematics for Elementary and Middle School Teachers I 3 credit hours

(Recommended: Familiarity with elementary algebra) Prospective and current teachers of mathematics are introduced to the intuitive and logical background of arithmetic, properties of sets, algorithms of arithmetic, other bases, properties of the integers, mathematical terminology, elements of number theory and problem solving.

MATH 112 Mathematics for Elementary and Middle School Teachers II 3 credit hours

(Prerequisite: MATH 111) Continuing from MATH 111, this course introduces the properties of the rational number system, extension to irrationals, decimal and fractional representation of real numbers and intuitive geometry and measurement.

MATH 119 Methods of Problem Solving 3 credit hours

(Prerequisite: One of the following: ACT, ASSET, MATH 100 or passing algebra placement exam) Strategies and techniques for solving general problems are developed. This development includes an introduction to sequences and enumeration systems and topics from symbolic logic, number theory, algebra and combinatorics.

MATH 120 Intermediate Algebra 4 credit hours

(Prerequisite: One of the following: ACT, ASSET, MATH 100 or passing algebra placement exam) This course reviews fundamental concepts and operations with real numbers; covers linear equations and inequalities, polynomials, exponents and radicals, rational expressions and equations; and includes graphing of lines. Lectures are supplemented by collaborative learning and directed problem solving.

MATH 121 College Algebra 3 credit hours

(Prerequisite: MATH 120 or algebra placement exam or minimum math ACT score) This course focuses on functions and their graphs. Linear, quadratic, polynomial, exponential and logarithmic functions are investigated.

MATH 123 Trigonometry 2 credit hours

(Prerequisite: MATH 121 or MATH 150 or permission of instructor or trigonometry placement exam or minimum math ACT score) Trigonometric functions, radian and degree measure, graphs, basic trigonometric identities and inverse trigonometric functions are covered.

MATH 129 The Art of Mathematics 3 credit hours

(Prerequisite: MATH 120 or algebra placement exam or minimum math ACT score) Problems, readings and discussion illustrate the creative nature of mathematics and its influence on Western thought. Students may research topics of individual interest.

MATH 139 Introduction to Finite Math 3 credit hours

(Prerequisite: MATH 119 or MATH 120) This is an introduction to finite mathematics. Topics include elementary mathematical logic, set theory, probability theory, vector and matrix theory, statistics and linear programming.

- MATH 145 Introduction to Probability and Statistics 3 credit hours**
(Prerequisite: MATH 119 or MATH 120 or algebra placement exam or minimum math ACT score) This course provides an introduction to basic concepts in probability and statistics—analysis of numerical data and descriptive statistics, probability and basic probability models, sampling and statistical inference—with applications from a variety of fields. Some outside computer assignments are required.
- MATH 150 Advanced Algebra 4 credit hours**
(Prerequisite: MATH 121 or algebra placement exam or minimum math ACT score) This course emphasizes polynomial, rational, exponential and logarithmic functions with the aid of graphing calculators and computers. Calculators are provided; no prior computing skills are necessary.
- MATH 162 Calculus I 4 credit hours**
(Prerequisites: MATH 150 or 150C or algebra placement exam and MATH 123 or trigonometry exam; or corequisite: MATH 123) This is a study of derivatives and integrals. Concepts include formal differentiation and theory of integration, limits, continuity, extrema and curve sketching.
- MATH 163 Calculus II 4 credit hours**
(Prerequisite: MATH 162) This course covers differentiation and integration techniques with applications involving transcendental functions, numerical integration techniques, solving simple differential equations and improper integrals. The course also includes the study of infinite series, including Taylor series.
- MATH 180 Elements of Calculus I 3 credit hours**
(Prerequisite: MATH 121, MATH 150 or 150C or algebra placement exam) Students briefly review functions and their graphs. Limits, derivatives as a rate of change, applications to graphing, maxima, minima, antiderivatives, definite integrals and exponential and logarithmic functions are introduced. Business and biological applications are emphasized.
- MATH 181 Elements of Calculus II 3 credit hours**
(Prerequisite: MATH 180) A continuation of MATH 180, this course covers integration by parts, numerical integration, multivariate calculus and simple differential equations. Additional topics include sequences, series and probability.
- MATH 215 Mathematics for Elementary and Middle School Teachers III 3 credit hours**
(Prerequisites: MATH 112) Continuing from MATH 112, this course introduces topics from the later elementary and middle school curriculum: probability and statistics, algebra, coordinate geometry, logic and LOGO software.
- MATH 245 Fundamentals of Probability and Statistics 3 credit hours**
(Prerequisite: MATH 180) This course covers some of the basic ideas in probability and

statistics: descriptive statistics, sample spaces, random variables, probability densities, variance, correlation, confidence intervals and hypothesis testing. Applications to business are emphasized.

MATH 245L Business Statistics Laboratory 1 credit hour
(Pre- or corequisite: MATH 245 or permission of instructor) This course applies probability and statistics topics developed in MATH 245 to management and administrative problems and processes.

MATH 264 Calculus III 4 credit hours
(Prerequisite: MATH 163) This continuation of MATH 163 covers vector representation of curves and surfaces, partial derivative, gradient, tangent planes, directional derivative, multiple integrals, cylindrical and spherical coordinates and applications.

MATH 296 Topics in Mathematics 1-3 credit hours
Various topics are offered.

MUS 103 Fundamentals of Music 4 credit hours
(Recommended: Experience with voice or instrument) A beginning course in the fundamentals of music, this course includes notation, scales, key signatures and intervals. Aural comprehension is introduced through singing intervals, scales and triads and dictating simple rhythmic and melodic patterns.

MUS 139 Music Appreciation I 3 credit hours
Through the study of basic musical elements and their development from early Greece to the Classical period, students expand their abilities to listen actively. This course is nontechnical and requires attendance at live musical performances.

MUS 140 Music Appreciation II 3 credit hours
Students expand their abilities to listen actively through the study of symphonic music, chamber music and vocal literature from the Romantic period to the twentieth century. The course content is different from MUS 139. Students are required to attend live musical performances.

MUS 296 Topics in Music 1-3 credit hours
Various topics are offered.

NUTR 120 Personal and Practical Nutrition 3 credit hours
As a practical application of nutrition principles for the non-science major, this course focuses on current issues and nutritional concerns to the consumer. Each topic emphasizes how nutritional needs vary within the stages of the life cycle.

NUTR 125 Nutrition 3 credit hours
An introduction to nutrition as it affects normal body functions and total health. Topics include basic nutrition, science concepts, consumer concerns and food selection, meta-

bolic processes, weight control, fitness and review of nutrition in the life cycle. Application of basic math and science principles is needed. A computerized dietary and activity analysis is a course requirement.

NUTR 293 **Topics in Nutrition** **1–3 credit hours**
Various topics are offered.

PHIL 110 **Introduction to Philosophical Thought** **3 credit hours**
This is a survey of the philosophical issues addressed by great thinkers of the Western tradition. Through reading of primary and secondary materials and class discussion, students are introduced to questions about knowledge, reality, goodness, the idea of God, government and society, and the self.

PHIL 156 **Logic and Critical Thinking** **3 credit hours**
This course provides the tools of reason which are helpful in everyday decision-making and introduces skills for argument analyses and effective communication of ideas. Informal fallacies and formal deductive systems are surveyed.

PHIL 241 **Topics in Philosophy** **1–3 credit hours**
Various topics on a major philosophic issue, system, movement or figure are offered.

PHIL 245B **Business Ethics** **3 credit hours**
Ethical problems in the field of business—such as corporate takeovers, insider trading, conflicts of interest, employer/employee relations and “whistle-blowing”—are examined from widely different ethical perspectives.

PHIL 245M **Biomedical Ethics** **3 credit hours**
Ethical problems in the fields of medicine and bio-research—such as euthanasia, genetic experimentation, informed consent and abortion—are examined from widely different ethical perspectives.

PHIL 245T **Ethics of Technology** **3 credit hours**
Ethical problems of modern technology in the fields of architecture, business, computer science, engineering, law and medicine are examined from widely different perspectives.

PHIL 250 **Philosophy of Education** **3 credit hours**
This course provides a critical examination of classical and contemporary educational theories espoused by such philosophers as Plato, Aristotle, Quintillian, Aquinas, Locke, Rousseau, Kant, Marx, Dewey, Krishnamurti and Friere. Philosophical movements in education—such as realism, idealism, Neo-Thomism, experimentalism and existentialism—are also investigated. Emphasis is placed on the relationship of philosophical theory and educational practice.

- PHIL 257 Formal Logic 3 credit hours**
 This course introduces formal deductive logic. Topics include propositional logic, truth tables, argument forms and fallacies, predicate (symbolic) logic and method of proof. A student may take this course after completing PHIL 156, but 156 is not a required prerequisite.
- PHYS 102 Introduction to Physics 3 credit hours**
 This general-interest course for non-science or science majors introduces the basic concepts and phenomena of physics. In conjunction with practical demonstrations and applications, the course is descriptive. Students use a minimum of elementary mathematics at the level of MATH 100.
- PHYS 151 Physics I 4 credit hours**
(Prerequisite: MATH 121, MATH 150 or MATH 180. Corequisite: PHYS 153L. Recommended: Working knowledge of trigonometry) Using lectures and demonstrations, this course is a non-calculus treatment of mechanics, sound and heat. This course satisfies premedical, pre dental, preoptometry and certain Technologies requirements.
- PHYS 152 Physics II 4 credit hours**
(Prerequisite: PHYS 151. Corequisite: PHYS 154L) Using lecture and demonstration, this non-calculus course presents the areas of electricity, magnetism and optics.
- PHYS 153L Physics I Laboratory 1 credit hour**
(Corequisite: PHYS 151) Real-time experiments give each student a better conceptual framework for understanding mechanics, heat and sound. Computers are used extensively for data collection and analysis.
- PHYS 154L Physics II Laboratory 1 credit hour**
(Corequisite: PHYS 152) This laboratory course features experiments in electricity, magnetism and optics. Computers are used for simulations and some data collection and analysis.
- PHYS 160 General Physics I 4 credit hours**
(Pre- or corequisite: MATH 162. Recommended: Coenrollment in PHYS 163L and PHYS 167) A calculus-based study of mechanics and sound waves is offered for science and engineering students. Topics and demonstrations include Newton's laws of motion, force, moments, friction, work, energy, power, momentum and mechanical wave properties.
- PHYS 161 General Physics II 4 credit hours**
(Prerequisite: PHYS 160. Pre- or corequisite: MATH 163. Recommended: Coenrollment in PHYS 168) Calculus-based treatment of heat, electricity and magnetism is supplemented by demonstrations.

- PSCI 260 Political Ideas 3 credit hours**
 Discussion of classical and contemporary political ideas and ideologies supplements an introduction to many of the enduring political issues which are presented in descriptive, analytical and normative terms. *Fall term only.*
- PSCI 296 Topics in Political Science 1-3 credit hours**
 Various topics are offered.
- PSY 105 Introduction to Psychology 3 credit hours**
 Students are introduced to psychology as a science: the study of behavior and mental processes. Topics surveyed include methodology, psychobiology, learning, memory, psychological disorders, therapy and social psychology.
- PSY 106L Introduction to Psychology Laboratory 1 credit hour**
(Pre- or corequisite: PSY 105) Laboratory projects relevant to topics covered in PSY 105 are conducted and analyzed with the goal of developing an understanding of methodology as applied to basic psychological concepts. Class meets for three hours each week.
- PSY 200 Statistical Principles 3 credit hours**
(Prerequisite: PSY 105) Students are introduced to basic statistical principles for description and interpretation of psychological data. Topics include frequency distributions, graphing, measures of central tendency, variability, regression, correlation, hypothesis testing and analysis of variance. *Fall and spring terms only.*
- PSY 220 Developmental Psychology 3 credit hours**
(Prerequisite: PSY 105) This course is a study of the stages and processes of the development of physical, social, emotional and intellectual aspects of human personality starting from conception and leading to old age. Emphasis is on pertinent research and practical applications.
- PSY 230 Psychology of Adjustment 3 credit hours**
(Prerequisite: PSY 105) Emphasizing processes of normal human adjustment and coping in personal and interpersonal arenas, this course presents topics in the applications of psychology to stress and mood management, self-esteem, social adjustment, communication and relationships.
- PSY 231 Human Sexuality 3 credit hours**
 The physiological, cultural, social and individual factors that influence sexual behavior, sex roles and sex identity are explored in this course.
- PSY 232 Clinical Psychology 3 credit hours**
(Prerequisite: PSY 105) This course introduces students to clinical psychology as a profession and area of research. Topics include psychometrics and assessment, systems of prevention and therapy, forensic psychology, program evaluation and professional and ethical issues.

- PSY 233 Psychology and Film 3 credit hours**
The changing perceptions of madness are investigated by screening popular films. Readings and lectures on psychiatric disorders are linked to films that offer students a unique opportunity to see realistic manifestations of “madness.” Cinema’s ability not only to reflect but also to affect our perceptions of mental illness and treatment is stressed.
- PSY 240 Brain and Behavior 3 credit hours**
(Prerequisite: PSY 105 or BIO 121/121L) This course surveys the role of the nervous system in the control of behavior and mental processes. *Fall term only.*
- PSY 260 Psychology of Learning and Memory 3 credit hours**
(Prerequisite: PSY 105) This course surveys the variety of laboratory learning situations, emphasizing applications to practical situations and ranging from simple processes such as conditioning to complex ones such as transfer, memory and concept formulation. *Fall term only.*
- PSY 265 Cognitive Psychology 3 credit hours**
(Prerequisite: PSY 105) This course presents theories and research on various mental processes: memory encoding, storage and retrieval; attention, comprehension, categorization, reasoning, problem solving, language and motor skills. *Spring term only.*
- PSY 271 Social Psychology 3 credit hours**
(Prerequisite: PSY 105 or SOC 101) This course presents topics on social interaction: communication, perception of the self and others, attitudes and leadership. *Spring term only.*
- PSY 296 Topics in Psychology 1–3 credit hours**
Various topics on the work of an influential psychologist, a school of psychology or an area in psychology are offered.
- PSY 299 Death and Dying 3 credit hours**
Designed to give students a deeper understanding of the psychological, emotional and sociological aspects of death in American culture, this course uses a variety of learning methods, including lectures, experiential exercises, class projects and guest speakers.
- RLGN 107 Living World Religions 3 credit hours**
Students are introduced to the academic study of religion. The focus is on major world religions—including Hinduism, Buddhism, Judaism, Christianity and Islam—with some attention also given to religion in primal cultures.
- RLGN 247 Topics in Religious Studies 1–3 credit hours**
Various topics are offered.
- SOC 101 Introduction to Sociology 3 credit hours**
This course covers the basic concepts and theories of contemporary sociology. Topics

include culture, socialization, social groups, deviance, sexuality, race and ethnicity, gender, age, family, medicine and religion.

SOC 111 Criminal Justice System 3 credit hours
An overview of the criminal justice processes is provided, including an exploration of law, law enforcement, prosecution, defense, trial and sentencing.

SOC 211 Social Problems 3 credit hours
(Prerequisite: SOC 101) This course provides an analysis from a sociological perspective of a range of problems in contemporary U.S. society: racism and prejudice, crime and delinquency, mental disorders, family changes, poverty and substance abuse.

SOC 212 Juvenile Delinquency 3 credit hours
(Prerequisite: SOC 101) Topics covered in this course include theories of juvenile delinquency, child abuse, the juvenile justice system, probation, treatment and corrections for juveniles.

SOC 213 Deviant Behavior 3 credit hours
(Prerequisite: SOC 101) Students focus on the theories of deviance and examine such behaviors as rape, murder, theft, drug use, alcoholism, prostitution, mental disorders and suicide.

SOC 214 Sociology of Corrections 3 credit hours
(Prerequisite: SOC 101) This course covers the theory, practice and legal basis for the investigation, treatment and supervision of offenders in custody and on probation or parole. Included are the history of penology and its relationship to various penal philosophies.

SOC 215 Criminology 3 credit hours
(Prerequisite: SOC 101) The causes of crime are covered with emphasis on sociological factors, the various faces of crime, the criminal and past and present criminology theory.

SOC 216 Ethnic and Minority Groups 3 credit hours
(Prerequisite: SOC 101) This course examines the relationships between majority and minority and ethnic groups. Prejudice, discrimination, stereotyping, pluralism and social mobility are explored.

SOC 225 Sociology of the Family 3 credit hours
(Prerequisite: SOC 101) This course addresses major theories of the family and the status of the modern family in an era of varied family forms.

SOC 230 Society and Personality 3 credit hours
(Prerequisite: SOC 101 or PSY 105) This course introduces topics in social psychology such as personality theories, concepts of self, human relationships, small group dynamics and organizational theories.

SPAN 202 Intermediate Spanish II 3 credit hours
(Prerequisite: SPAN 201 or Spanish placement exam) A continuation of SPAN 201, this course provides more conversational activities and more emphasis on writing skills.

SPAN 203 Intermediate Spanish II Conversation 3 credit hours
(Pre- or corequisite: SPAN 202 or permission of instructor) This course is designed to increase skills in speaking Spanish for those students who have previously completed or are currently enrolled in SPAN 202.

SPAN 275 Accelerated Beginning Spanish 3 credit hours
(Prerequisite: Spanish placement exam or permission of instructor) This course covers the material of SPAN 101 and 102 in one term. It is recommended for language enthusiasts or those who have had exposure to Spanish either in the home or from previous study.

SPAN 276 Accelerated Intermediate Spanish 3 credit hours
(Prerequisite: SPAN 102, SPAN 275, Spanish placement exam or permission of instructor) This course covers the material of SPAN 201 and 202 in one term. It is recommended for language enthusiasts or those who have had exposure to Spanish either in the home or from previous study.

SPAN 296 Topics in Spanish 1-3 credit hours
(Prerequisites vary.) Various topics in Spanish language and literature are offered.

THEA 122 Introduction to Theater 3 credit hours
Students examine the nature of theater art, exploring the aesthetic and practical dimensions of the unified work of a theater production to gain an appreciation for all aspects of a production. Discussion centers on such topics as acting, directing, audiences, stage craft, scenic and costume design and dramatic criticism.

THEA 296 Topics in Theater 1-3 credit hours
Various topics are offered.

Military Studies

Students may register at T-VI for University of New Mexico Military Studies courses in Aerospace Studies (Air Force). Because all courses are offered at the main campus of UNM, students should contact the UNM department before enrolling:

Keith W. Tounget, Lt. Col.
Commander
University of New Mexico
AFROTC Detachment 510
Aerospace Studies Building
1901 Las Lomas NE
Albuquerque, NM, 87131
277-4502

Credits in Military Studies courses may not be applied to the associate of arts in liberal arts.

Uniforms and textbooks are provided to students.

Aerospace Studies (Air Force) Option

AFAS 010 Leadership Laboratory 0 credit hours

Meeting weekly for one hour, this course provides students with progressively challenging leadership and management experiences within the cadet corps. Training includes physical fitness activities and lectures on military policies, ethics, customs and courtesies, military drill and ceremonies. Enrollment is required for admission into the cadet corps.

AFAS 120 Air Force Today 1 credit hour

Meeting once weekly, this course introduces students to the Air Force environment by focusing on organization and missions of the Air Force units, officership and military professionalism. *Fall term only.*

AFAS 121 Air Force Today 1 credit hour

Students are introduced to the Air Force environment by focusing on the organization and missions of Air Force units, officership and military professionalism. Meets once weekly. *Spring term only.*

AFAS 250 Development of Air Power 1 credit hour

This course examines factors contributing to the development of air power from its beginnings to the present and the evolution of air power concepts and doctrine. Meets once weekly. *Fall term only.*

AFAS 251 Development of Air Power 1 credit hour

Students examine factors contributing to the development of air power from its beginnings to the present and the evolution of air power concepts and doctrine. Meets once weekly. *Spring term only.*

BUSINESS OCCUPATIONS

T-VI's Business Occupations Department offers students a variety of ways to prepare for and advance in careers in the diverse world of business. In addition to certificate and degree programs, there are college credit courses, professional advancement courses and self-paced learning.

In 1995-96 the Business Occupations Department offers the following certificate/degree programs: Accounting; Administrative Assistant; Business Administration (with concentration options in international business, merchandising, small business management, real estate, tourism and hospitality, general business, and continuous quality improvement); Court Reporting; International Business Specialist; and Microcomputer Management Specialist.

The department also offers a one-term certificate program in sales and cashiering. Departmental certificates are available for short-term courses in entrepreneurship (one term), data entry (open entry, open exit, seven and one half weeks) and continuous quality improvement (CQI, six one-credit courses, five weeks each).

Associate degrees in Legal Assistant Studies and Pre-Management are available. Courses required and approved by the New Mexico Real Estate Commission and New Mexico Appraisers Board for pre-licensing and continuing education are offered.

The Business Occupations Learning Center (BOLC) at each campus offers non-credit, self-paced courses.

The Small Business Development Center (SBDC) offers business counseling and public workshops for small business owners and potential entrepreneurs.

Applications are accepted every term for all programs; however, not all programs are offered at all campuses. A student who registers for a Business Occupations program may be required to take English, reading and/or math placement tests. Advanced students may earn credit for on-the-job training through cooperative education and internship courses.

Albuquerque T-VI has an articulation program with several high schools in Albu-

querque through which students may earn T-VI credit for some of their high school courses. The credits will apply to an associate of applied science degree in Accounting, Administrative Assistant or Business Administration. The Business Occupations Department has several articulation agreements with other New Mexico postsecondary institutions. Students should see counselors and program advisors for details.

Credit by examination is available for selected courses. Challenge examinations are administered in the BOLC at each campus for a \$15 fee (see page 20). Counselors and program advisors have detailed information. Challenge exam credit may not be accepted by other postsecondary institutions.

All textbooks and consumable course materials must be purchased by students enrolled in credit courses and are available in the T-VI bookstores.

Business Occupations Learning Centers

Self-Paced, Non-Credit, Open-Entry Courses Main and Montoya Campuses

The Business Occupations Learning Centers (BOLCs) serve members of the public and T-VI students who want to review or learn a particular subject or skill on a self-paced basis.

Individuals may begin using these centers at any time during a term and stop when requirements have been met. The student is allowed 15 weeks to complete a course. Although college credit is not given for these courses, a certificate is granted upon completion of a course. Instruction is offered on up-to-date equipment including electronic calculators, transcribing machines, microcomputers and audiovisual training aids. Hours are arranged to suit individual needs. For certain courses, scheduled hours are dependent upon equipment availability. The \$40 fee per course includes textbooks for some courses.

The Main Campus center is located in Room 210 of Smith Brasher Hall. The Montoya Campus center is in Room H-127. Hours at both centers are 7:30 a.m. to 9 p.m. Monday through Thursday and 7:30 a.m. to 4:30 p.m. on Friday. The Montoya Campus center is open on Saturday from 9 a.m. to 1 p.m.

BOLC Subject/Skill Areas

Accounting Fundamentals
Business Mathematics Fundamentals
Electronic Calculators
English Review
Filing
Machine Transcription*
Medical Terminology
Medical Transcription*

Microcomputer Courses:
dBase IV*
Fundamentals of DOS 6.0*
Introduction to Microcomputers
Keyboarding
Keyboard Skill-building*
Lotus 1-2-3*
Macintosh Basics

Microsoft Windows 3.1
WordPerfect*
Proofreading
Shorthand Courses
Alphabetic Shorthand I

Gregg Shorthand I
Shorthand Review (ABC and Gregg)*
Spelling
Typing (see keyboarding courses listed
under microcomputer courses)

*See course descriptions below for prerequisites.

Course Descriptions

Accounting Fundamentals

Students are provided with a basic understanding of accounting principles and their application.

Business Mathematics Fundamentals

This course provides a review of the following fundamental arithmetic operations in solving business problems: addition, subtraction, multiplication, division, fractions, decimals, estimating, percentages, business formulas, commissions and bank reconciliation.

Electronic Calculators

Skill is developed on electronic calculators using the touch method. This course is designed to assist students in acquiring competence in mathematical applications.

English Review

Course content includes a review of grammar, spelling, punctuation, capitalization, abbreviations and number usage.

Filing

This course provides a hands-on approach to the fundamentals of filing. Students file a variety of business documents and learn different filing systems for the office.

Machine Transcription

(Prerequisites: demonstrated English proficiency and 50 net words per minute typing skill) Instruction is provided in the use of transcribing machines to prepare mailable business correspondence.

Medical Terminology

This course familiarizes students with medical terminology by means of a text and audio presentation. A vocabulary is developed through the learning of medical prefixes, roots and suffixes. Students also are shown various medical reports to learn formatting and emphasize medical terms.

Medical Transcription

(Prerequisites: machine transcription skill and 50 net words per minute typing skill) This course develops familiarity with medical terminology and transcription.

Microcomputer Courses

dBase IV

(Prerequisites: Introduction to Microcomputers or equivalent and 25 wpm keyboarding speed) This course is an individualized approach to database terminology, program management and applications.

Fundamentals of DOS 6.0

(Prerequisite: Introduction to Microcomputers or equivalent) This course uses an individualized, practical application approach to learning microcomputer systems, DOS commands and file management.

Introduction to Microcomputers

This course provides instruction for the first-time user and assumes no previous technical knowledge on the part of the learner.

Keyboarding

This course is an individualized approach to developing basic keyboarding and formatting skills. Goals emphasize mastery of the computer keyboard through correct techniques and accuracy. Students work at their own pace to achieve course objectives.

Keyboard Skill-building

(Prerequisite: BOLC Keyboarding or 30 wpm keyboarding speed) This course improves accuracy and speed using championship individual diagnostic methods.

Lotus 1-2-3 Release 2.3

(Prerequisite: Introduction to Microcomputers or equivalent) Lotus 1-2-3 is a spreadsheet applications program. It is an integrated package combining spreadsheet graphics and databases.

Macintosh Basics

This course offers general computer software training on the Macintosh Powermac.

Microsoft Windows 3.1

(Prerequisite: Introduction to Microcomputers or equivalent) This course provides an introduction to the basics of Windows.

WordPerfect

(Prerequisites: Introduction to Microcomputers or equivalent and 25 wpm keyboarding speed) This course is an individualized approach to learning WordPerfect 5.1.

Proofreading

An individualized approach provides rules, instruction and practice needed to improve proofreading skills.

Shorthand Courses

Alphabetic Shorthand I

This shorthand system uses alphabetic characters. Students learn to read, write and transcribe shorthand notes. A writing speed of 50 wpm should be reached upon completion.

Gregg Shorthand I

All theory and brief forms leading to the ability to read, write and transcribe Gregg shorthand are learned. A writing speed of 50 wpm should be reached upon completion.

Shorthand Review

This course is for students who have typing and shorthand skills but need review and speed-building. Materials are available for ABC and Gregg.

Spelling

This course consists of seven modules. Each modular lesson uses two cassette tapes: one for instruction and one for testing. The student listens, reads, answers questions, works exercises and spells words, and checks his or her answers.

Accounting

Associate of Applied Science Degree/
Certificate Program
Main, Montoya, Rio Rancho/Intel Campuses

Accounting is an excellent field for persons looking for a challenging career that has good potential for advancement.

Students in this program may earn a certificate and/or an associate of applied science degree in Accounting. A certificate is awarded to students who complete the occupational component. The degree is awarded to students who complete both occupational and Arts & Sciences courses. Several courses may be transferred to four-year institutions. Transfer agreements have been established with several four-year institutions. Students should consult the program advisor.

The associate of applied science degree in accounting is accredited by the Association of Collegiate Business Schools and Programs (ACBSP).

Many of T-VI's accounting courses are accepted for fulfillment of the education requirement for the Certified Public Accountant (CPA) and Certified Management Accounting (CMA) exams. A bachelor's degree is a requirement for both exams.

Students may select from a number of support courses, at least one of which must be an accounting course. A minimum of 12 students is required for a support course to be offered. A keyboarding skill of 25 words per minute is required of students before they enroll in some courses. Keyboarding courses are available in the Business Occupations Department, Business Occupations Learning Centers and Developmental Studies.

All occupational courses must be passed with a minimum grade of C to qualify for graduation. For students who are undecided about their major, occupational support courses are available in the Developmental Studies Department. In the Accounting program, *students do not have the option of taking Business Occupations courses on a credit/no credit basis.* All classes may be offered both day and evening if there is sufficient demand.

Course fees are charged for some courses.

A suggested schedule per term for the occupational component of the associate of applied science degree/certificate program in Accounting includes:

- Term 1: ACCT 101, ACCT 111, BA 113, BA 121, BA 131
- Term 2: ACCT 102, BA 122, BA 133, BA 150
- Term 3: ACCT 201, ACCT 240, ACCT 260, ACCT 254, BA 211
- Term 4: ACCT 202, ACCT 255, ACCT 280, ACCT elective
(one elective required for certificate only)

Accounting Program Certificate and Degree Requirements

			<i>Credit Hours</i>
ACCT	101A	Accounting Principles I	3
	and		
ACCT	101B	Accounting Principles I	3
	or		
ACCT	101	Accounting Principles I	6
ACCT	102A	Accounting Principles II	3
	and		
ACCT	102B	Accounting Principles II	3
	or		
ACCT	102	Accounting Principles II	6
ACCT	111	Accounting Math	3
ACCT	201	Intermediate Accounting I	4
ACCT	202	Intermediate Accounting II	4
ACCT	240	Tax Accounting I	3
ACCT	254	Electronic Spreadsheets	3
ACCT	255	Computerized Accounting	3
ACCT	260	Cost Accounting	3
ACCT	280	Managerial Accounting	3
BA	113	Introduction to Business	3

BA	121	Business Communications I	3
BA	122	Business Communications II	3
BA	131	Human Relations (7.5 weeks)	2
BA	133	Principles of Management	3
BA	150	Introduction to Computer Processing	3
	or		
CSCI	101	Computer Literacy	4
BA	211	Business Law	3
One elective (required for certificate only)			3-4
One ACCT elective			3
Total			64-66

Additional Degree Requirements

ENG	101	College Writing	3
MATH	120	Intermediate Algebra	4
MATH	145	Introduction to Probability and Statistics	3
COMM	130 or 221 or 232 or 240	.....	3
Social Science/Humanities Elective			3
Total			77-79

Accounting Electives

ACCT	241	Tax Accounting II	3
ACCT	270	Governmental Accounting	3
ACCT	271	Auditing	3
ACCT	272	Accounting Systems Design	3
ACCT	296	Accounting Topics	1-3

General Electives

BA	215	Money and Banking	3
BA	298	Internship	4
BA	299	Cooperative Education	4
BA	299A	Cooperative Education I	1
BA	299B	Cooperative Education II	1
BA	299C	Cooperative Education III	1
BA	299D	Cooperative Education IV	1
ECON	200	Macroeconomics	3
MMS Course(s)			3

Course Descriptions

ACCT 101 Accounting Principles I **6 credit hours**
(Prerequisites: MATH 099, RDG 099 or equivalent; pre- or corequisite: ACCT 111 or higher math or permission of advisor) This is an introductory course in the theory and

practice of accounting. It is intended for the beginning student of business. ACCT 101A plus ACCT 101B are equivalent to this course.

ACCT 101A Accounting Principles I 3 credit hours
(Prerequisites: MATH 099 or equivalent; RDG 099 or equivalent; pre- or corequisite: ACCT 111 or higher math or permission of advisor) This course is a slower-paced equivalent of the first half of ACCT 101. Principles of the double-entry accounting system including recording transactions, adjusting entries, preparing statements, closing accounts of proprietorships and corporations, merchandise and cash accounts, and accounting systems are covered. ACCT 101A plus ACCT 101B are equivalent to ACCT 101.

ACCT 101B Accounting Principles I 3 credit hours
(Prerequisites: ACCT 101A and ACCT 111 or permission of advisor) This course is the last half of a slower-paced version of ACCT 101. Accounts receivable, tangible and intangible assets, current and long-term liabilities and payroll accounting are studied. ACCT 101A and ACCT 101B are equivalent to ACCT 101.

ACCT 102 Accounting Principles II 6 credit hours
(Prerequisite: ACCT 101; pre- or corequisite: BA 150 or CSCI 101) This course examines accounting for corporations, installment notes and bonds, preparing and analyzing financial statements and controlling business operations by managerial and cost accounting, budgeting and tax considerations. ACCT 102A plus ACCT 102B are equivalent to this course.

ACCT 102A Accounting Principles II 3 credit hours
(Prerequisites: ACCT 101 or 101B and ACCT 111 or equivalent or permission of advisor; pre- or corequisite: BA 150 or CSCI 101) This course is the first half of a slower-paced version of ACCT 102. This course covers various aspects of corporate accounting, notes and bonds, departmental accounting and accounting for manufacturing. ACCT 102A plus ACCT 102B are equivalent to ACCT 102.

ACCT 102B Accounting Principles II 3 credit hours
(Prerequisites: ACCT 102A; pre- or corequisite: BA 150 or CSCI 101) This course is the second half of the slower-paced version of ACCT 102. Cost accounting, job orders, master budgets, profit analysis, standard costs and managerial decisions are studied. ACCT 102A plus ACCT 102B are equivalent to ACCT 102.

ACCT 111 Accounting Math 3 credit hours
(Prerequisite: MATH 099 or equivalent or permission of advisor) This course examines the basic arithmetic operations as they relate to business applications. It familiarizes the student with a wide range of accounting procedures for which math is required and develops touch method skills using electronic calculators.

- ACCT 201 Intermediate Accounting I 4 credit hours**
(Prerequisite: ACCT 102 or ACCT 102B) This course emphasizes accounting theory, concepts and their practical application. It focuses attention on the use of accounting data as a basis for decisions by management, stockholders, creditors and other users of financial statements and accounting reports. Emphasis is on the asset side of the balance sheet.
- ACCT 202 Intermediate Accounting II 4 credit hours**
(Prerequisite: ACCT 201) Accounting for current and long-term liabilities, capital stock transactions, dividends, retained earnings and cash flow statements and analysis are covered in this course.
- ACCT 240 Tax Accounting I 3 credit hours**
(Prerequisite: ACCT 101 or ACCT 101B) This course examines the fundamental characteristics of federal income taxes as applied to individuals.
- ACCT 241 Tax Accounting II 3 credit hours**
(Prerequisite: ACCT 240 or permission of advisor) This course examines the income tax aspects of corporations, partnerships, sub-chapter S corporations and fiduciaries. Also examined are the advanced concepts related to individual income taxes, tax planning and estate and gift taxation.
- ACCT 254 Electronic Spreadsheets 3 credit hours**
(Prerequisites: ACCT 102 or ACCT 102B, BA 150 or CSCI 101 or permission of advisor) This microcomputer lab uses Lotus 1-2-3 for accounting and business applications. A course fee of \$15 covers printer supplies. (2 theory + 3 lab hours a week)
- ACCT 255 Computerized Accounting 3 credit hours**
(Prerequisites: ACCT 102 or ACCT 102B, BA 150 or CSCI 101 or permission of advisor) This microcomputer course includes payroll, inventory control, accounts payable, accounts receivable and general ledger. Students use prepared integrated business software. A course fee of \$15 covers printer supplies. (2 theory + 3 lab hours a week)
- ACCT 260 Cost Accounting 3 credit hours**
(Prerequisite: ACCT 102 or ACCT 102B) This course emphasizes job order and process costing systems for construction and manufacturing.
- ACCT 270 Governmental Accounting 3 credit hours**
(Prerequisite: ACCT 102 or ACCT 102B) This course provides the student with training in fund accounting for governmental and other non-profit entities.
- ACCT 271 Auditing 3 credit hours**
(Prerequisite: ACCT 102 or ACCT 102B) This is a survey of auditing that includes audit standards, reports, professional ethics, legal liability, evidence accumulation, audit planning, internal control, transaction cycles, other engagements and operational auditing.

ACCT 272 Accounting Systems Design 3 credit hours
(Prerequisite: ACCT 102 or ACCT 102B) Students design a manual accounting system which includes a chart of accounts, an accounting manual, flow charts, control and support systems and reports to management.

ACCT 280 Managerial Accounting 3 credit hours
(Prerequisite: ACCT 102 or ACCT 102B) Students learn how accounting information can be interpreted and used for decision making by management in planning and controlling business activities.

ACCT 296 Accounting Topics 1-3 credit hours
Current topics in accounting are presented.

Administrative Assistant

Career in Office Technology

Associate of Applied Science Degree/
Certificate Program
Main, Montoya, Rio Rancho/Intel Campuses

More and more businesses are actively looking for office workers—both men and women—who have the potential to be promoted to administrative positions. Today's office professional must possess greater technical, administrative and interpersonal skills. The Administrative Assistant program offers training in organizational and interpersonal skills as well as office automation and written communication. Graduates are prepared to function in a highly productive office environment.

The associate of applied science degree in Administrative Assistant is accredited by the Association of Collegiate Business Schools and Programs (ACBSP).

Cooperative education is available. Students should see the program advisor for details.

All occupational courses must be passed with a minimum grade of C to meet prerequisite requirements and certificate or degree requirements. In the Administrative Assistant program, *students do not have the option of taking Business Occupations courses on a credit/no credit basis.* For students who are undecided about their major, occupational support courses are available in the Developmental Studies Department.

Students who want to enroll in a course by permission of the program advisor may obtain the necessary form from the department. Permission does not constitute waiver of a course, nor does it grant credit for another course. Students should see the program advisor for more information.

Individuals who have already attained a Certified Professional Secretary (CPS) rating may receive credit hours toward the Administrative Assistant associate of applied

science degree. Students may contact the program advisor at either campus for more information about advanced placement.

The associate degree may be transferred to the University of New Mexico for credit toward a bachelor's degree in training and learning technologies (see Administrative Assistant program advisor). All Administrative Assistant courses may be offered day and evening if there is sufficient demand.

Course fees are charged for some courses.

A suggested schedule per term for the occupational component of the associate of applied science degree/certificate in Administrative Assistant includes:

- Term 1: AA 101, AA 102, AA 111, AA 121, BA 131, BA 150
- Term 2: AA 143, AA 107, AA 112, AA 122, BA 113, MMS 150
- Term 3: AA 200, AA 202, AA 230, AA 250, AA 260, BA 133, BA 157, AA 205

Administrative Assistant Program
Certificate and Degree Requirements

			<i>Credit Hours</i>
AA	101	Beginning Keyboarding	3
AA	102	Keyboard Applications I	3
AA	107	Intermediate Keyboard Skill-building	2
AA	111	Business Math/Calculators	3
AA	112	Office Accounting Procedures	3
AA	121	Office Communications I	3
AA	122	Office Communications II	3
AA	143	Word Processing	4
AA	200	Advanced Word Processing	3
AA	202	Information Processing	3
AA	205	Advanced Keyboard Skill-building	2
AA	230	Office Communications III	3
AA	250	Machine Transcription	3
AA	260	Business Procedures	3
BA	113	Introduction to Business	3
¹ BA	131	Human Relations (7.5 weeks)	2
BA	133	Principles of Management	3
BA	150	Introduction to Computer Processing	3
	or		
CSCI	101	Computer Literacy	4
BA	157	Computer Accounting for Small Business (5 weeks)	1
Computer Elective			3
MMS	150	Microsoft Windows (5 weeks)	1
Total			57-58

Students with various levels of keyboarding skill may enroll in this course. Evaluation is based on individual speed and accuracy improvement. Skill-building software and personal computers are used. A \$10 course fee is charged for printer supplies. (5 lab hours a week)

AA 107 Intermediate Keyboard Skill-Building 2 credit hours
(Prerequisite: AA 102) A minimum typing speed of 40 words per minute on a five-minute timed writing is required in this course. Skill-building software and personal computers are used to build speed and accuracy. A \$10 course fee is charged for printer supplies. (5 lab hours a week)

AA 111 Business Mathematics/Calculators 3 credit hours
(Prerequisite: MATH 099 or equivalent) This course features a combined approach to teaching business mathematics and calculators. Students receive a thorough review of math fundamentals and their applications in solving business problems. Calculator instruction stresses use of the touch method. There is a \$5 course fee for calculator ribbon and tape.

AA 112 Office Accounting Procedures 3 credit hours
(Prerequisite: AA 111) This course is a study of the complete bookkeeping cycle including preparation of the balance sheet, income statement and worksheet. Emphasis is on journalizing, posting, accounts payable and accounts receivable.

AA 121 Office Communications I 3 credit hours
(Prerequisite: RDG 099 or equivalent and ENG 099 or equivalent) This course is an introduction to oral and written communications with emphasis on vocabulary building, spelling, grammar, punctuation, sentence structure, oral expression and listening skills.

AA 122 Office Communications II 3 credit hours
(Prerequisite: AA 121; pre- or corequisite: AA 102) This course is a continuation of AA 121 with greater emphasis on oral communication; punctuation and sentence and paragraph construction. Students receive an introduction to telephone techniques.

AA 143 Word Processing 4 credit hours
(Prerequisites: Minimum typing speed of 35 words a minute on a five-minute timing and BA 150 or CR 133) Students receive instruction in the use of word processing software on the microcomputer. Skillbuilding, formatting and word processing applications are emphasized. There is a \$15 course fee for printer supplies. (3 theory + 3 lab hours a week)

AA 200 Advanced Word Processing 3 credit hours
(Prerequisites: AA 143 and minimum typing speed of 50 words a minute on a five-minute timing) Students receive instruction in the use of advanced word processing applications. Emphasis is on practical office applications. There is a \$15 course fee for printer supplies. (2 theory + 3 lab hours a week)

AA 202 **Information Processing** **3 credit hours**
(Prerequisite: AA 143) Advanced instruction is provided in the use of microcomputers. Applications include computerized office applications, electronic spreadsheets and database management. There is a \$15 course fee for printer supplies. (2 theory + 3 lab hours a week)

AA 205 **Advanced Keyboard Skill-building** **2 credit hours**
(Prerequisite: AA 107) A minimum typing speed of 55 words per minute on a five-minute timed writing is required in this course. Skill-building software and personal computers are used to build speed and accuracy. A \$10 course fee is charged for printer supplies. (5 lab hours a week)

AA 207 **Law Office Technology** **4 credit hours**
(Prerequisites: AA 143 and CR 240) Instruction is provided on the preparation of mailable legal correspondence and forms from audio tape, typed copy and preprinted forms using the computer. Emphasis is on language usage and on introduction to a variety of formats and documents covering the major fields of law. There is a \$20 course fee for printer supplies. Offered fall term. (3 theory + 3 lab hours a week)

AA 230 **Office Communications III** **3 credit hours**
(Prerequisites: AA 102, AA 122) Principles of writing and composition of business correspondence are covered. Continued emphasis is on grammar, punctuation, spelling, oral communication and listening skills.

AA 250 **Machine Transcription** **3 credit hours**
(Prerequisites: AA 107, AA 122) Emphasis is on the development of speed and accuracy in transcribing mailable copy. There is a \$15 course fee for printer supplies. (2 theory + 3 lab hours a week)

AA 260 **Business Procedures** **3 credit hours**
(Prerequisites: AA 107, AA 122) Office procedures, records management, human relations and job portfolio preparation are included in this course. This course should be taken in the student's final term.

AA 299 **Cooperative Education** **4 credit hours**
(Prerequisites: AA 143 and AA 107, typing skill of 55 words per minute on a five-minute timed writing and permission of the instructor or academic advisor) Students work a minimum of 150 hours at office-related supervised work stations. The student trainee is paid by the cooperating firm and supervised jointly by T-VI and the employer. The student and employer determine the weekly contact hours. (1 theory + 9 lab hours a week)

Business Administration

Associate of Applied Science Degree/
Certificate Program
Main, Montoya, Rio Rancho/Intel Campuses

The Business Administration program is designed to provide students with the skills, knowledge and experience required in today's business. Each student receives a broad overview of business operations and should be prepared for several job options after successful completion of goals.

Early courses in the program emphasize written and verbal communications, management and accounting principles. Those students completing all core occupational courses may receive business administration certificates.

An associate of applied science degree in Business Administration is awarded to students who complete the occupational requirements, Arts & Sciences components and a concentration in one of six areas: international business, merchandising, small business management, real estate (also see page 137), tourism and hospitality, general business or continuous quality improvement (CQI). The associate of applied science degree is accredited by the Association of Collegiate Business Schools and Programs (ACBSP).

A structured sequence for the real estate and tourism and hospitality concentrations is necessary early in the program. One or two specialty courses should be taken each term. The tourism and hospitality concentration includes elective courses sponsored by the Educational Institute (EI), an educational foundation of the American Hotel and Motel Association. These courses may be used toward industry-recognized professional certification. All courses in the real estate concentration are approved by the New Mexico Real Estate Commission for either pre-licensing or continuing education requirements.

A typing skill of 25 words per minute is required before students can enroll in some courses. Typing courses are available in the Business Occupations Department, the Business Occupations Learning Centers and Developmental Studies.

Degree students select from the list of support courses in their specialty to prepare for their employment goals. Not all support courses are offered each term. A minimum of 12 students is required for a support course to be offered.

Most courses are offered in the evening as well as day. Several courses in the program may be transferred to four-year institutions (students should see the program advisor for details).

All occupational courses must be passed with a minimum grade of C to qualify for graduation. For students who are undecided about their major, occupational support courses are available in the Developmental Studies Department. In the Business Administration program, *students do not have the option of taking Business Occupations courses on a credit/no credit basis.* Course fees are charged for some courses.

A suggested schedule per term for the occupational component of the associate of applied science degree/certificate program in Business Administration includes:

- Term 1: ACCT 101 or ACCT 101A and ACCT 101B, ACCT 111, BA 113, BA 121, BA 131
 Term 2: ACCT 102 or ACCT 102A and ACCT 102B, BA 122, BA 133, BA 150
 Term 3: BA 211, BA 222, BA 284, ACCT 254, BA 157, elective
 Term 4: Concentration options

Business Administration Program
 Certificate and Degree Requirements

		<i>Credit Hours</i>
ACCT	101A Accounting Principles I	3
	and	
ACCT	101B Accounting Principles I	3
	or	
ACCT	101 Accounting Principles I	6
ACCT	102A Accounting Principles II	3
	and	
ACCT	102B Accounting Principles II	3
	or	
ACCT	102 Accounting Principles II	6
ACCT	111 Accounting Math	3
ACCT	254 Electronic Spreadsheets	3
BA	113 Introduction to Business	3
BA	121 Business Communications I	3
BA	122 Business Communications II	3
BA	131 Human Relations (7.5 weeks)	2
BA	133 Principles of Management	3
BA	150 Introduction to Computer Processing	3
	or	
CSCI	101 Computer Literacy	4
BA	157 Computer Accounting for Small Business (5 weeks)....	1
BA	211 Business Law	3
BA	222 Principles of Marketing	3
BA	284 Principles of Sales	3
	Approved Elective	3-4
	Total	48-50

Additional Degree Requirements

COMM	221 Interpersonal Communications	3
	or	
COMM	130 or 232 or 240.....	3
ECON	200 Macroeconomics or higher level	3
ENG	101 College Writing.....	3

MATH	120	Intermediate Algebra or higher level math	4
PHIL	245B	Business Ethics	3

Concentration Options for Degree (One Option Required)

International Business

IB	101	Introduction to International Business	3
IB	202	International Management	3
Approved International Business Elective			3
Total			73-75

Continuous Quality Improvement (CQI)

BA	101	Introduction to Quality Management	1
BA	102	Fundamentals of Continuous Quality Improvement	1
BA	103	Quality Tools	1
BA	104	Team Building for Quality	1
BA	105	Re-engineering for Quality	1
BA	106	Quality Leadership	1
Approved Elective			3-4
Total			73-76

Merchandising

BA	251	Retail Merchandising Management	3
BA	286	Advertising	3
Approved Elective			3-4
Total			73-76

Small Business Management

ENTR	101	Entrepreneurship	6
BA	286	Advertising	3
Total			73-75

Real Estate (also see page 137)

BA	270	Real Estate Law	3
BA	271	Real Estate Practice	3
Approved Real Estate Elective			3
Total			73-75

Tourism and Hospitality

BA	263	Tourism and the Hospitality Industry	3
BA	267	Hospitality Supervision	3
Approved Tourism Elective			3-4
Total			73-76

General Business

BA	299	Cooperative Education	4
Two Approved Electives			6
Total			74-76

Electives

ACCT	240	Tax Accounting I	3
ACCT	255	Computerized Accounting	3
ACCT	260	Cost Accounting	3
ACCT	272	Accounting System Design	3
ACCT	280	Managerial Accounting	3
BA	101	Introduction to Quality Management	1
BA	102	Fundamentals of Continuous Quality Improvement	1
BA	103	Quality Tools	1
BA	104	Team Building for Quality	1
BA	105	Re-engineering for Quality	1
BA	106	Quality Leadership	1
BA	215	Money and Banking	3
BA	251	Retail Merchandising Management	3
BA	256	Job Search Skills (7.5 weeks)	2
BA	260	Purchasing	3
BA	264	Front Office Procedures	3
BA	265	Marketing of Hospitality Services	3
BA	266	Hotel/Motel Law	3
BA	267	Hospitality Supervision	3
BA	268	Resort Management	3
BA	269	Hotel/Motel Security Management	3
BA	272	Real Estate Appraisal	3
BA	273	Real Estate Finance	3
BA	274	Real Estate Investment	3
BA	275	Property Management	3
BA	277	Real Estate Comprehensive Contracts	3
BA	278	Real Estate and Taxes	3
BA	279	Uniform Standards of Professional Appraisal Practice	2
BA	282	Appraising the Single Family Residence	3
BA	286	Advertising	3
BA	287	Delta Epsilon Chi Competition	1
BA	296	Business Topics	1-3
BA	298	Internship	4
BA	299	Cooperative Education	4
BA	299A	Cooperative Education I	1
BA	299B	Cooperative Education II	1
BA	299C	Cooperative Education III	1
BA	299D	Cooperative Education IV	1

BA 131 Human Relations 2 credit hours
(Available also for Technologies students) The importance of interpersonal relationships and the work ethic is stressed. Topics covered may include self-awareness, time management, stress management, communications, goal setting and personal management. Study skills are also covered. (7.5 weeks)

BA 133 Principles of Management 3 credit hours
(Prerequisites: RDG 099 or equivalent, BA 113 or permission of advisor) Students learn to apply the basic management functions of planning, organizing, staffing, directing and controlling. Human relations skills and group process and leadership skills are emphasized.

BA 150 Introduction to Computer Processing 3 credit hours
(Prerequisite: 25 words per minute typing skill) Students learn to use automated information systems, computer hardware, data entry and business software applications. Hands-on experience with microcomputers is provided. A \$15 course fee is charged for computer paper and printing costs. (2 theory + 3 lab hours a week)

BA 157 Computer Accounting for Small Business 1 credit hour
(Prerequisite: AA 112 or ACCT 101 or ACCT 101B or ENTR 101 or permission of advisor) Students use a comprehensive accounting software program for a small business. Students set up the records for a business, open accounts, enter transactions and print end-of-period reports. A \$5 course fee is charged for computer paper and printing costs. (5 weeks; 2 theory + 3 lab hours a week)

BA 211 Business Law 3 credit hours
(Prerequisites: RDG 099 or equivalent and ENG 099 or equivalent) This course provides a basic knowledge of law as it applies to all business dealings in our society. Particular emphasis is on contract law, Uniform Commercial Code, negotiable instruments and alternative dispute resolutions.

BA 215 Money and Banking 3 credit hours
(Prerequisite: ACCT 102 or ACCT 102B) This course covers the history, nature and function of money. Students learn to apply methods of institutional control and theories of monetary policy.

BA 222 Principles of Marketing 3 credit hours
(Prerequisites: BA 113 or permission of advisor) Students learn to apply total marketing concepts from the creation, pricing and promotion of the product to the distribution network.

BA 251 Retail Merchandising Management 3 credit hours
(Pre- or corequisite: BA 222 or permission of advisor) Students study and apply methods and practice of retail merchandising including target market decisions, buying, pricing, store locations and strategic planning.

- BA 278 Real Estate and Taxes 3 credit hours**
(Prerequisites: BA 270, BA 271) This course deals with government involvement in real estate and taxes. Units cover municipal and state taxes affecting real estate and the federal government's role in the sale and income derived from real estate.
- BA 279 Uniform Standards of Professional Appraisal Practice 2 credit hours**
 This course focuses on the requirements for ethical behavior and competent performance by appraisers. (7.5 weeks)
- BA 282 Appraising the Single Family Residence 3 credit hours**
(Prerequisite: BA 272) This course provides the student with a working knowledge of the procedures and techniques required to estimate the market value of vacant and improved single family residential property.
- BA 284 Principles of Sales 3 credit hours**
(Prerequisite: RDG 099 or equivalent) Students learn to demonstrate selling skills along with how to promote oneself, goods and services.
- BA 286 Advertising 3 credit hours**
(Prerequisite: BA 222 or permission of advisor) This course gives the student the opportunity to apply the many elements of advertising. The student develops an advertising plan, selects and schedules media, budgets, designs and produces advertisements and evaluates advertising effectiveness.
- BA 287 Delta Epsilon Chi Competition 1 credit hour**
 Students acquire skills needed to compete at state and national career development conferences. Students use sample written tests, role-playing case problems and classroom assignments involving salesmanship, marketing, problem solving and human relations. (2 lab hours a week)
- BA 296 Business Topics 1-3 credit hours**
 Current topics in business are presented.
- BA 298 Internship 4 credit hours**
(Prerequisites: ACCT 102 or ACCT 102B and permission of advisor) Students work a minimum of 150 hours at business or training related supervised work stations. Students are not paid for their work but are supervised jointly by T-VI and the company. (1 theory + 9 lab hours a week)
- BA 299 Cooperative Education 4 credit hours**
(Prerequisites: ACCT 102 or ACCT 102B and permission of advisor) Students work a minimum of 150 hours at business or training related supervised work stations. Student trainees are paid by the cooperating firm and supervised jointly by T-VI and the employer. (1 theory + 9 lab hours a week)

One of the main goals of the certificate and degree programs is to prepare students to pass the state certification test.

Course fees are charged for some courses.

A suggested schedule per term for the occupational component of the associate of applied science degree/certificate program in Court Reporting includes:

- Term 1: BA 121, CR 133, CR 121, CR 103L
- Term 2: CR 132, BA 131, CR 105, CR 104L
- Term 3: AA 143, CR 210L, AA 111, CR 240
- Term 4: CR 220L, CR 250L, ENG 240, BA 211
- Term 5: CR 231L, CR 232L, CR 260, CR 298

Court Reporting Program
Certificate and Degree Requirements

			<i>Credit Hours</i>
AA	101	Beginning Keyboarding	3
AA	102	Keyboard Applications I	3
'AA	111	Business Math/Calculators	3
AA	143	Word Processing	4
	or		
MMS	134	WordPerfect for Windows	3
	or		
MMS	135	Microsoft Word for Windows	3
BA	121	Business Communications I	3
'BA	131	Human Relations (7.5 weeks)	2
BA	211	Business Law	3
CR	103L	Machine Shorthand I	7
CR	104L	Machine Shorthand II	7
CR	105	Keyboard Skill-building	2
CR	121	Introduction to Court Reporting (7.5 weeks)	2
CR	132	Medical Terminology/Anatomy	5
CR	133	Information Processing Concepts (7.5 weeks)	2
	or		
BA	150	Introduction to Computer Processing	3
	or		
CSCI	101	Computer Literacy	4
CR	210L	Machine Shorthand III	8
CR	220L	Machine Shorthand IV	8
CR	231L	Machine Shorthand V (7.5 weeks)	4
CR	232L	Machine Shorthand VI (7.5 weeks)	4
CR	240	Legal Terminology/Procedures	3
CR	250L	Computer-Aided Transcription	3
CR	260	Court Reporting Procedures (7.5 weeks)	3

CR	298	Internship	2
CR	299	Cooperative Education (optional)	4
ENG	240	Traditional Grammar	3
Total			83-90

Additional Degree Requirements

COMM	221	Interpersonal Communications	3
ENG	101	College Writing.....	3
MATH	120 or higher	or biological and physical	
		science elective	3-4
Social science and behavioral science elective			3
Total			95-103

¹Required for certificate only

Electives

AA	207	Law Office Technology	4
CR	233L	Machine Shorthand Speed-building	3
CR	296	Topics Course	1-3
MMS	296	Microcomputer Topics	2
BOLC course: Medical Transcription			

Course Descriptions

CR 103L Machine Shorthand I 7 credit hours
(Prerequisites: RDG 099 or equivalent and AA 101 and AA 102 or equivalent; pre- or corequisite: CR 121) In this course the keyboard is learned. Computer-compatible, conflict-free machine shorthand theory is presented. Computer tutorials are available to reinforce the theory. A \$5 course fee is charged for transcription supplies. (5 theory + 5 lab hours a week)

CR 104L Machine Shorthand II 7 credit hours
(Prerequisites: CR 103L, CR 121, BA 121) Computer-compatible, conflict-free machine shorthand theory is reviewed in this course. Vocabulary building is emphasized. This is an open-exit course. Students may advance to CR 210L after reaching 100 wpm. Enrollment is limited to 45 weeks or 3 terms. (5 theory + 5 lab hours a week)

CR 105 Keyboard Skill-building 2 credit hours
(Prerequisite: AA 102) Students are required to take this course to fulfill NCRA's keyboarding requirement of 60 net words per minute with no more than five errors on a five-minute timed writing. Skill-building software and personal computers are used. A \$10 course fee is charged for printer supplies. (5 lab hours a week)

CR 121 Introduction to Court Reporting 2 credit hours
 This beginning course presents an overview of the court reporting profession. Informa-

tion is given on the certification process, testing requirements and the NCRA organization. (7.5 weeks)

CR 132 Medical Terminology and Anatomy 5 credit hours
(Prerequisite: RDG 099 or equivalent) This course involves a study in medical terminology, with an emphasis in learning 350 Greek and Latin prefixes, suffixes, word roots and combining forms through the use of videotapes. A concentrated study of the human anatomy is included.

CR 133 Information Processing Concepts 2 credit hours
This course provides the students with an understanding of computers—how they work, how they process data to produce useful information and how they can be integrated into the work environment. Students are introduced to word processing, spreadsheet and database applications software. A \$10 course fee is charged for computer paper and ribbons. (7.5 weeks; 2 theory + 3 lab hours a week)

CR 210L Machine Shorthand III 8 credit hours
(Prerequisite: CR 104L) Vocabulary building continues to be emphasized and the machine shorthand theory is reviewed. On-the-job considerations are introduced. Speed-building continues using testimony, literary and jury charge materials. This is an open-entry, open-exit course. Students may advance to CR 220L after reaching 140 wpm. Enrollment is limited to 45 weeks or 3 terms. (5 theory + 10 lab hours a week)

CR 220L Machine Shorthand IV 8 credit hours
(Prerequisites: CR 210L, CR 132) Medical terminology and dictation are emphasized. Vocabulary building and speed-building continue. This is an open-entry, open-exit course. Students may advance to CR 231L after reaching 160 wpm, literary; 170 wpm, jury charge; and 180 wpm, testimony. Enrollment is limited to 45 weeks or 3 terms. (5 theory + 10 lab hours a week)

CR 231L Machine Shorthand V 4 credit hours
(Prerequisite: CR 220L) Speed-building and vocabulary building are emphasized. This is an open-entry, open-exit course. Students may advance to CR 232L after reaching 180 wpm, literary; 180 wpm, jury charge; and 210 wpm, testimony. Enrollment is limited to 45 weeks or three terms. (7.5 weeks, 5 theory + 10 lab hours a week)

CR 232L Machine Shorthand VI 4 credit hours
(Prerequisite: CR 231L) Speed-building and vocabulary building are emphasized. This is an open-entry, open-exit course. Students may advance to CR 233L after reaching 200 wpm, literary; 200 wpm, jury charge; and 245 wpm, testimony. Enrollment is limited to 45 weeks or three terms. A mock Registered Professional Reporter exam is administered. (7.5 weeks, 5 theory + 10 lab hours a week)

CR 233L Machine Shorthand Speed-building 3 credit hours
(Prerequisite: CR 232L or approval of academic advisor) This self-paced, elective course

is designed for those students who have reached a minimum speed of 180 wpm literary and 225 wpm testimony and wish to increase speed in preparation for the state certification exam. Students take two-, three- and four-voice testimony and literary dictation from video and audio tapes. Tests are administered. This is an open-entry, open-exit course. (9 lab hours a week)

CR 240 Legal Terminology/Procedures 3 credit hours
Emphasis is on legal terminology, legal procedures and client relationships.

CR 250L Computer-Aided Transcription (CAT) 3 credit hours
(Prerequisites: CR 210L, AA 133) This course provides hands-on training in using the computer to produce transcripts. The student builds a personal dictionary. A \$10 fee is charged for computer-aided transcription hardware and software. (2 theory + 3 lab hours a week)

CR 260 Court Reporting Procedures 3 credit hours
(Prerequisites: CR 220L, CR 250L) Students apply procedures in general courtroom, free-lance reporting and transcript format. Instruction includes the reporting of depositions. Writing skills and techniques for computer-aided transcription are reviewed. Students prepare resumes and acquire interviewing skills. A \$10 course fee is charged for computer-aided transcription hardware and software and printer supplies. (6 hours a week for 7.5 weeks)

CR 296 Topics Course 1-3 credit hours
Current topics in court reporting are presented.

CR 298 Internship 2 credit hours
(Prerequisites: CR 220L and CR 250L and approval by academic advisor) Students acquire a minimum of 75 clock hours of practical experience under the supervision of a certified shorthand reporter. The student intern is required to record and transcribe a 40-page salable transcript. This course should be taken in the student's final term.

CR 299 Cooperative Education 4 credit hours
(Prerequisite: CR 210L) Students work a minimum of 150 hours in a paid, training-related position. Students are supervised by their employer and T-VI. (1 theory + 9 lab hours a week)

Data Entry

Main and Montoya Campuses

The wide use of computers in business and industry today has created a number of job opportunities for individuals with data entry skills.

The Data Entry course offers training designed to prepare students for entry level positions in this field. A department certificate is awarded upon completion of the course.

A keyboarding skill of 25 words per minute is required for entry into the program. Keyboarding courses are available in the Business Occupations Learning Centers, the Business Occupations Department and the Developmental Studies Department.

Most courses are offered in the evening as well as day. All occupational courses must be passed with a minimum grade of C to qualify for graduation. Students do not have the option of taking any Business Occupations courses on a credit/no credit basis.

Course fees are charged for some courses.

International Business Specialist Program

Certificate and Degree Requirements

			<i>Credit Hours</i>
ACCT	101	Accounting Principles I	6
ACCT	102	Accounting Principles II	6
ACCT	111	Accounting Math	3
BA	121	Business Communications I	3
BA	150	Introduction to Computer Processing	3
	or		
CSCI	101	Computer Literacy	4
ENTR	102	Entrepreneurship in a Global Setting	3
GEOG	102	Human Geography	3
	or		
COMM	291	Intercultural Communication Studies	3
GEOG	201	World Regional Geography	3
IB	101	Introduction to International Business	3
IB	201	International Marketing	3
IB	202	International Management	3
IB	203	International Finance and Trade	3
IB	205	Fundamentals of Exporting/Importing	3
		Foreign Language	3-4
		Foreign Language	3-4
		Foreign Language	3-4
		Total	54-58

Additional Degree Requirements

ENG	101	College Writing	3
ENG	119	Technical Writing	3
MATH	119	Methods of Problem Solving	3
	or		
MATH	120	Intermediate Algebra	4
MATH	145	Probability and Statistics	3
PHIL	245B	Business Ethics	3
		Total	69-74

Electives

BA	211	Business Law	3
BA	299	Cooperative Education	4

For other approved electives, see Business Administration.

Course Descriptions

IB 101 Introduction to International Business 3 credit hours

(Prerequisite: RDG 099 or equivalent) This is an integrated view of objectives, problems and challenges facing those who engage in business in foreign countries. Foreign organizations, cultural dynamics, trade channels, the legal environment and political considerations are examined.

IB 201 International Marketing 3 credit hours

(Prerequisite: RDG 099 or equivalent) This course provides a conceptual framework for analyzing marketing opportunities abroad. Development and implementation of marketing mixes in different cultures and nations are studied.

IB 202 International Management 3 credit hours

(Prerequisite: RDG 099 or equivalent) Students survey management practices within diverse international operations and learn to conduct business with people of different cultures.

IB 203 International Finance and Trade 3 credit hours

(Prerequisites: RDG 099 or equivalent, ACCT 101 and ACCT 102) This is an overview of international finance with emphasis on the multinational corporation. Emphasis is on foreign exchange risk management, investment analysis, capital asset management, working capital management, comparative advantage and trade restrictions. An overview of demographic, technical, social, political and business relationships among European, Asian, Latin American and third-world nations is provided.

IB 205 Fundamentals of Exporting/Importing 3 credit hours

(Prerequisite: RDG 099 or equivalent) The latest trends in the growing import and export area of traffic and transportation are covered, including forms, country regulations, methods of shipment and rates. Topics include the documents necessary in the conduct of foreign trade from the first inquiries through quotations, orders, banking, shipping and customs.

Legal Assistant Studies

Associate of Applied Science Degree
Main Campus

The Legal Assistant Studies program trains qualified men and women for entry into the legal profession. The Legal Assistant Studies program is approved by the American Bar Association (ABA).

Legal assistants are skilled professionals who perform substantive legal tasks under the supervision of a licensed attorney. Responsibilities include interviewing and assisting clients and witnesses, investigation, data analysis, drafting legal documents and correspondence, research, litigation support and case management.

Employment opportunities include placement in law firms, corporate legal departments, legal aid offices, public agencies, insurance companies and other commercial firms.

Students learn substantive and procedural law as well as legal skills. Studies cover the nature and philosophy of fundamental legal theory, the legal system and how that system relates to other disciplines, legal analytical skills, practice skills and the professional responsibilities of the legal assistant. The ethical and moral issues inherent in the practice of the profession are stressed.

To earn an associate degree, a student must successfully complete laboratory work, related legal theory and Arts & Sciences courses. All courses must be passed with a minimum grade of C to qualify for graduation. *Legal Assistant Studies students do not have the option of taking courses on a credit/no credit basis.*

Course fees are charged for some courses.

A suggested schedule per term for the associate of applied science degree program in Legal Assistant Studies includes:

- Term 1: LAS 101, LAS 123, CSCI 101 or BA 150, ENG 101, PSY 105
- Term 2: LAS 102, LAS 111, LAS 124, ENG 102, MMS 134 or MMS 135
- Term 3: LAS 201, LAS 203, LAS 204, PHIL 156, MATH 119
- Term 4: LAS 221, LAS 231, LAS 298 or 299, COMM 221 or COMM 225 or COMM 240, support course

Legal Assistant Studies Program

Degree Requirements

		<i>Credit Hours</i>
BA	150	Introduction to Computer Processing 3
	or	
CSCI	101	Computer Literacy 4
COMM	221	Interpersonal Communication Studies 3
	or	
COMM	225	Small Group Communication Studies 3
	or	

COMM	240	Organizational Communication Studies	3
ENG	101	College Writing	3
ENG	102	Analytic Writing	3
LAS	101	Introduction to Legal Assistant Studies	3
LAS	102	Business Organizations	3
LAS	111	American Law and Ethics	3
LAS	123	Torts	3
LAS	124	Legal Research and Writing I	3
LAS	201	Contract Law	3
LAS	203	Civil Litigation, Investigation and Discovery	3
LAS	204	Legal Research and Writing II	3
LAS	221	Wills, Probate and Estate Planning	3
LAS	231	Computers in Law Practice	3
LAS	298	Internship	4
	or		
LAS	299	Cooperative Education	4
LAS	elective (see list below)	.....	3
MATH	119	Methods of Problem Solving or higher math course	3
MMS	134	WordPerfect for Windows	3
	or		
MMS	135	Microsoft Word for Windows	3
PHIL	156	Logic and Critical Thinking	3
PSY	105	Psychology	3
		Total	61-62

Electives

*ACCT	101	Accounting Principles I	6
LAS	211	Real Estate Law for Legal Assistants	3
LAS	222	Criminal Procedure	3
LAS	223	Domestic Relations	3
LAS	224	Evidence	3
LAS	225	Constitutional Law: Rights and Liberties	3
LAS	230	Advanced Civil Litigation	3
LAS	232	Personal Injury: Legal and Medical Aspects	3
LAS	233	Law Office Management	3
LAS	234	Administrative Law	3
LAS	236	Discrimination/Labor/Employer-Employee Relations	3
LAS	240	Social Security Law and Practice	3
LAS	242	Indian Law	3
LAS	296	Topics Course	3
LAS	296A	Mediation	3
LAS	296B	Public Defender	3
MMS	151	DOS Fundamentals (5 weeks)	1

MMS	152	Lotus Fundamentals (5 weeks)	1
MMS	153	dBase Fundamentals (5 weeks)	1
MMS	154	Desktop Publishing Using WordPerfect (5 weeks)	1
MMS	155	WordPerfect Presentations (5 weeks)	1
MMS	156	Office Management Software (5 weeks)	1

*Pre- or corequisite: ACCT 111 or higher math or permission of advisor

Course Descriptions

LAS 101 Introduction to Legal Assistant Studies 3 credit hours
(Prerequisites: ENG 100 or equivalent, RDG 100 or equivalent) This course introduces the student to the definition and role of the legal assistant, ethical responsibilities, human relations, the legal system, legal research and analysis, the process of litigation, technology in the law and topics in substantive law.

LAS 102 Business Organizations 3 credit hours
(Prerequisites: BA 150 or CSCI 101, ENG 101, LAS 101, LAS 123) Various types of business entities including sole proprietorships, partnerships and corporations are examined. Also looked at are agency principles, franchising and regulatory requirements.

LAS 111 American Law and Ethics 3 credit hours
(Prerequisites: BA 150 or CSCI 101, ENG 101, LAS 101, LAS 123) The origins, nature, history and structure of the American judicial system are studied. Students explore principles of federalism under the Constitution. The rules of professional conduct for lawyers are emphasized.

LAS 123 Torts 3 credit hours
(Prerequisites: ENG 100 or equivalent, RDG 100 or equivalent) This is a course in substantive tort law, concentrating on negligence, products liability, non-physical injuries and their remedies and defenses. Students are given an overview of the trial process and complete a project designed to develop practice skills.

LAS 124 Legal Research and Writing I 3 credit hours
(Prerequisites: BA 150 or CSCI 101, ENG 101, LAS 101, LAS 123) The student is introduced to the principles and skills of writing case briefs and legal memoranda, with a focus on basic legal research sources and techniques, including Westlaw and other computer-assisted legal research. Significant time is spent at the law library.

LAS 201 Contract Law 3 credit hours
(Prerequisites: MMS 134 or MMS 135, ENG 102, LAS 102, LAS 111, LAS 124) This is an introduction to the law of contracts, rights and responsibilities, consideration, types of contracts, remedies and assignments. The study, analysis and application of cases are emphasized, and students draft a simple contract.

- LAS 203 Civil Litigation, Investigation and Discovery 3 credit hours**
(Prerequisites: MMS 134 or MMS 135, ENG 102, LAS 102, LAS 111, LAS 124) Students learn the process of litigation from initial client contact through post-trial procedures by preparing litigation documents. Rules of civil procedure and rules of the various courts are reviewed. Students develop a forms and procedures notebook.
- LAS 204 Legal Research and Writing II 3 credit hours**
(Prerequisites: MMS 134 or MMS 135, ENG 102, LAS 102, LAS 111, LAS 124) As a continuation of Legal Research and Writing I, this course is designed to provide training in more advanced legal research problems with a focus on analysis and writing. It requires the preparation of sophisticated legal memoranda and documents.
- LAS 211 Real Estate Law for Legal Assistants 3 credit hours**
(Prerequisites: LAS 201, LAS 203, LAS 204 or approval of the academic advisor) This course provides knowledge of the fundamental rights of property ownership, surveys, easements and licenses, deeds, titles, financing, closings and regulations.
- LAS 221 Wills, Probate and Estate Planning 3 credit hours**
(Prerequisites: LAS 201, LAS 203, LAS 204) This course covers drafting of wills and trusts, administration of estates, formal and informal probate proceedings and estate tax returns.
- LAS 222 Criminal Procedure 3 credit hours**
(Prerequisites: LAS 201, LAS 203, LAS 204 or approval of the academic advisor) This course focuses on criminal procedures, including search and seizure law and preparation of cases from both the prosecution and defense perspectives.
- LAS 223 Domestic Relations 3 credit hours**
(Prerequisites: LAS 201, LAS 203, LAS 204 or approval of the academic advisor) Legal issues in family relations are explored in this course, with emphasis on local procedures in the domestic relations court.
- LAS 224 Evidence 3 credit hours**
(Prerequisites: LAS 102, LAS 111, LAS 124 or approval of the academic advisor) Students study issues and problems of proof of facts in civil and criminal trials, with a focus on the rules of evidence in the state and federal courts. Emphasis is on constitutional considerations, interviewing witnesses and organizing documents.
- LAS 225 Constitutional Law: Rights and Liberties 3 credit hours**
(Prerequisites: LAS 201, LAS 203, LAS 204) This is a course in civil rights and liberties under the Constitution, covering free speech, religious freedom, racial discrimination, group rights, privacy and political participation.
- LAS 230 Advanced Civil Litigation 3 credit hours**
(Prerequisites: LAS 201, LAS 203, LAS 204 or approval of the academic advisor) Stu-

LAS 242 Indian Law 3 credit hours
(Prerequisites: LAS 201, LAS 203, LAS 204 or approval of the academic advisor) This is a course in basic Indian law with the primary purpose of preparing students to work in paraprofessional positions in private law firms that specialize in Indian law and in tribal courts and agencies.

LAS 296 Topics Course 3 credit hours
(Prerequisites: LAS 201, LAS 203, LAS 204 and approval of the academic advisor) The student chooses an area of study in consultation with an instructor and assists the instructor in documenting the agreed-upon responsibilities. A sophisticated legal research paper or project is completed. Offered each term.

LAS 296A Mediation 3 credit hours
(Prerequisites: LAS 201, LAS 203, LAS 204 and approval of the academic advisor) Students learn fundamental skills involved in mediating disputes. Training may be provided by local mediation organizations at a student rate. The student also presents a paper and is jointly evaluated by the mediation trainer and the instructor. Offered each term subject to availability of trainers.

LAS 296B Public Defender 3 credit hours
(Prerequisites: ENG 102, LAS 111, LAS 124, MMS 134 or MMS 135 and approval of the academic advisor) Students are assigned to a supervising attorney from the Public Defender's Office and jointly supervised by the attorney and an instructor. The student works 135 hours, documenting his or her time, and becomes familiar with all forms of case preparation with an emphasis on information gathering and investigation. Offered each term subject to availability of supervising attorney. (9 lab hours a week)

LAS 298 Internship 4 credit hours
(Prerequisites: LAS 201, LAS 203, LAS 204, all Arts & Sciences courses in the first three terms and approval of the academic advisor) Students work a minimum of 150 hours at legal assistant-related work stations. The student is jointly supervised by T-VI and the employer. (1 theory + 9 lab hours a week)

LAS 299 Cooperative Education 4 credit hours
(Prerequisites: LAS 201, LAS 203, LAS 204, all Arts & Sciences courses in the first three terms and approval of the academic advisor) Students work a minimum of 150 hours at legal assistant-related work stations. The student is paid by the cooperating firm and is jointly supervised by T-VI and the employer. (1 theory + 9 lab hours a week)

Microcomputer Management Specialist

Associate of Applied Science Degree/
Certificate Program
Main, Montoya, Rio Rancho/Intel Campuses

The Microcomputer Management Specialist program combines microcomputer concepts, computer applications, accounting skills and problem solving in a business environment. Students are prepared to advise employers on hardware and software and to serve as training assistants and/or liaisons.

The program is accredited by the Association of Collegiate Business Schools and Programs (ACBSP).

Early courses in the program emphasize written and verbal communications, accounting principles and basic computer skills. An associate of applied science degree is awarded to students who complete the occupational requirements and Arts & Sciences components.

A keyboarding skill of 25 words per minute is required for entry into the program. Keyboarding courses are available in the Business Occupations Department, Business Occupations Learning Centers and the Developmental Studies Department.

Courses are offered both day and evening. All occupational courses must be passed with a minimum grade of C to qualify for graduation. For students who are undecided about their major, survey courses are available in the Developmental Studies Department. In this program, *students do not have the option of taking any Business Occupations courses on a credit/no credit basis.*

Course fees are charged for some courses.

A suggested schedule per term for the occupational component of the associate of applied science degree/certificate program in Microcomputer Management Specialist includes:

- Term 1: ACCT 101, ACCT 111, BA 121, BA 150, MMS 151
- Term 2: ACCT 102, BA 113, MMS 257, MMS 134 or MMS 135, MMS 150, MMS 160
- Term 3: ACCT 254, ACCT 255, BA 111, BA 133, MMS 255
- Term 4: MMS 258, CP 213, MMS 296, MMS 260, MMS 261

Microcomputer Management Specialist

Certificate and Degree Requirements

			<i>Credit Hours</i>
ACCT	101	Accounting Principles I	6
ACCT	102	Accounting Principles II	6
ACCT	111	Accounting Math	3
ACCT	254	Electronic Spreadsheets	3
ACCT	255	Computerized Accounting	3

¹ BA	111	Communications (7.5 weeks)	2
BA	113	Introduction to Business	3
BA	121	Business Communications I	3
BA	133	Principles of Management	3
BA	150	Introduction to Computer Processing	3
	or		
CSCI	101	Computer Literacy	4
³ CP	213	dBase III/Programming and Concepts	4
MMS	134	WordPerfect for Windows	3
	or		
MMS	135	Microsoft Word for Windows	3
MMS	150	Microsoft Windows (5 weeks)	1
MMS	151	DOS Fundamentals (5 weeks)	1
MMS	160	Introduction to Internet (5 weeks)	1
MMS	255	Desktop Publishing	3
MMS	257	Microcomputer Graphics	3
MMS	258	Local Area Network (LAN) Systems Manager (10 weeks)	2
MMS	260	Word Processing Macro Programming (5 weeks)	1
MMS	261	Spreadsheet Macro Programming (5 weeks)	1
MMS	296	Microcomputer Topics (10 weeks)	2
	Total		57-58

Additional Degree Requirements

COMM	221 or 130 or 232 or 240	Communications	3
² ENG	101	College Writing	3
ENG	119	Technical Communications	3
MATH	120	Intermediate Algebra	4
MATH	145	Probability and Statistics	3
PHIL	245B	Business Ethics	3
	Total		74-75

¹Required for certificate only.

²This class should be taken in Term II for the degree.

³See advisor regarding prerequisites.

Electives

BA	157	Computer Accounting for Small Business (5 weeks) ...	1
MMS	152	Lotus Fundamentals (5 weeks)	1
MMS	153	dBase Fundamentals (5 weeks)	1
MMS	156	Office Management Software (5 weeks)	1
MMS	157	PowerPoint Fundamentals (5 weeks)	1
MMS	159	Access Fundamentals (5 weeks)	1
MMS	298	Internship	4
MMS	299	Cooperative Education	4

Course Descriptions

MMS 134 WordPerfect for Windows 3 credit hours

(Prerequisites: BA 150 or CSCI 101) Students receive instruction in the use of word processing software using Windows. The emphasis is on learning the functions and practical office applications. There is a \$15 course fee for printer supplies. (2 theory + 3 lab hours a week)

MMS 135 Microsoft Word for Windows 3 credit hours

(Prerequisites: BA 150 or CSCI 101) Students receive instruction in word processing using Microsoft Word for Windows. The emphasis is on learning the functions and practical office applications. There is a \$15 course fee for printer supplies. (2 theory + 3 lab hours a week)

MMS 150 Microsoft Windows 1 credit hour

(Prerequisites: BA 150 or CSCI 101) This course includes instruction on the basic elements of Windows, as well as these applications: program manager, file manager and desktop accessories. Emphasis is on software functions. There is a \$5 course fee for printer supplies. (5 weeks; 2 theory + 3 lab hours a week)

MMS 151 DOS Fundamentals 1 credit hour

(Prerequisite: 25 words per minute typing skill) Instruction includes the most important DOS commands. Students learn internal and external commands, directories, file management and batch files. A \$5 course fee is charged for printer supplies. (5 weeks; 2 theory + 3 lab hours a week)

MMS 152 Lotus Fundamentals 1 credit hour

(Prerequisite: 25 words per minute typing skill) Instruction is provided for non-accounting spreadsheet applications. Areas included are graphs, range names, strings and basic formulas. A \$5 course fee is charged for printer supplies. (5 weeks; 2 theory + 3 lab hours a week)

MMS 153 dBase Fundamentals 1 credit hour

(Prerequisite: 25 words per minute typing skill) This course explores the function and purpose of database software, in particular the hierarchy of data organization, structure and creation of databases and processing inquiries involving searches, screening and sequencing of records. A \$5 course fee is charged for printer supplies. (5 weeks; 2 theory + 3 lab hours a week)

MMS 154 Desktop Publishing Using WordPerfect 1 credit hour

(Prerequisites: knowledge of WordPerfect, BA 150 or equivalent or permission of advisor) Students learn to incorporate WordPerfect graphics and text to produce newsletters, instructional materials and other documents where figures, diagrams, logos and pictures are needed. A \$5 course fee is charged for printer supplies. (5 weeks; 2 theory + 3 lab hours a week)

MMS 156 Office Management Software 1 credit hour
(Prerequisites: BA 150 or permission of advisor) This course uses WordPerfect to aid in office automation. Software includes WordPerfect calculator, editor, file manager, notebook, mail and scheduler. A \$5 course fee is charged for printer supplies. (5 weeks; 2 theory + 3 lab hours a week)

MMS 157 PowerPoint Fundamentals 1 credit hour
(Prerequisite: 25 words per minute typing skill) Students are introduced to basic text charts and graph charts. Importing data to create these charts and exporting charts into documents are included. A \$5 course fee is charged for printer supplies. (5 weeks; 2 theory + 3 lab hours a week)

MMS 158 Excel Fundamentals 1 credit hour
(Prerequisite: 25 words per minute typing skill) This is an introductory course, and the focus is on business applications. Areas of instruction include creating, editing and enhancing worksheets; formatting cells; basic formulas and charts. A \$5 course fee is charged for printer supplies. (5 weeks; 2 theory + 3 lab hours a week)

MMS 159 Access Fundamentals 1 credit hour
(Prerequisite: 25 words per minute typing skill) This course focuses on hands-on applications that students can use to manage data effectively. Areas included are tables, queries, forms and reports. There is a \$5 course fee for printer supplies. (5 weeks; 2 theory + 3 lab hours a week)

MMS 160 Introduction to Internet 1 credit hour
(Prerequisite: MMS 150 or permission of advisor) Course content includes how to access the Internet, how to use Internet community tools to explore databases and other resources, and how to access and download information. Students are introduced to electronic mail and bulletin boards. (5 weeks; 3 theory + 2 lab hours a week)

MMS 255 Desktop Publishing 3 credit hours
(Prerequisite: BA 150 or CSCI 101 or CR 133 or permission of advisor) Students get hands-on experience in desktop publishing, using microcomputers to edit, typeset, design and do graphic production and page makeup. A \$15 course fee is charged for printer supplies. (2 theory + 3 lab hours a week)

MMS 257 Microcomputer Graphics 3 credit hours
(Prerequisite: BA 150 or CSCI 101 or CR 133 or permission of advisor) This course provides hands-on experience in graphics presentation software which emphasizes charting, drawing, organizing and displaying images. A \$15 course fee is charged for printer supplies. (2 theory + 3 lab hours a week)

MMS 258 **Local Area Network (LAN) Systems Manager** **2 credit hours**
(Prerequisites: BA 150, MMS 151 or permission of advisor) This course is an introduction to network systems management. It includes a brief overview of network layouts and topology and provides instruction on creating workable directories, login scripts, user accounts and menus. A \$5 course fee is charged for printer supplies. (10 weeks; 2 theory + 3 lab hours a week)

MMS 260 **Word Processing Macro Programming** **1 credit hour**
(Prerequisites: BA 150 or CSCI 101, 25 words per minute, MMS 134 or 135) The basic procedures for writing and running macros are covered. Students examine data manipulation, flow-of-control, interactive and screen control macros. The students also examine the syntax and structure of advanced macro commands. There is a \$5 course fee for printer supplies. (5 weeks; 2 theory + 3 lab hours a week.)

MMS 261 **Spreadsheet Macro Programming** **1 credit hour**
(Prerequisites: BA 150 or CSCI 101, ACCT 254) The basic procedures for writing and running a macro are covered. The students examine the five command categories: data manipulation, file manipulation, flow-of-control, interactive and screen control. The syntax or structure of advanced macro commands are covered. There is a \$5 course fee for printer supplies. (5 weeks; 2 theory + 3 lab hours a week)

MMS 296 **Microcomputer Topics** **2 credit hours**
(Prerequisites: BA 150 or CSCI 101) Topics include computer viruses, utilities software, DOS and Macintosh operating systems, installation of boards and software integration. There is a \$5 course fee for printer supplies. (10 weeks; 3 theory + 2 lab hours a week)

MMS 298 **Internship** **4 credit hours**
(Prerequisites: ACCT 254, ACCT 255, MMS 255 or MMS 257 and permission of advisor) Students work a minimum of 150 hours at business or training related supervised work stations. Students are not paid for their work but are supervised jointly by T-VI and the company. (1 theory + 9 lab hours a week)

MMS 299 **Cooperative Education** **4 credit hours**
(Prerequisites: ACCT 254, ACCT 255, MMS 255 or MMS 257 and permission of advisor) Students work a minimum of 150 hours at business or training related supervised work stations. Student trainees are paid by the cooperating firm and supervised jointly by T-VI and the employer. (1 theory + 9 lab hours a week)

Pre-Management

Associate of Arts Degree
Requirements for Admission to University of New Mexico
Anderson Schools of Management
Main and Montoya Campuses

This degree is designed to fulfill the freshman and sophomore course requirements for admission to the baccalaureate degree program at the Anderson Schools of Management, University of New Mexico.

The program is accredited by the Association of Collegiate Business Schools and Programs (ACBSP). The curriculum is based on an articulation agreement between T-VI and UNM which facilitates the transfer process. The agreement states that the student's cumulative grade point average (GPA) should be 2.0 and the GPA in the specific requirements should be 2.4. Specific requirements courses must be passed with a grade of C or better. The credit/no credit option is not available for specific requirements courses; students may select the option only for general education requirements courses. Transfer and non-traditional credit accepted by T-VI toward the completion of this program may not be accepted by UNM. Students who apply transfer and non-traditional credit toward the Pre-Management program at T-VI and/or enroll in specific requirements courses on a credit/no credit basis are not covered by this agreement.

Students should request program advisor's approval before registering each term. Advisors are located in the Business Occupations Department at Main and Montoya campuses. Students should also communicate with the Bachelor of Business Administration program director at the Anderson Schools of Management.

A suggested schedule per term for the associate of arts degree in Pre-Management includes:

Term 1: BA 113, ENG 101, PSY 105

Term 2: BA 150 or CSCI 101, ENG 102, ECON 200, MATH 121, PSY 200

Terms 3/4: Arts & Sciences requirements: 22 credit hours, ACCT 101, ECON 201

Term 4: MATH 162, ACCT 102, MATH 245 and MATH 245L

Associate of Arts in Pre-Management

General Education Requirements

Credit Hours

General Electives

COMM 130; ART 101, 151, 201 or 260; MUS 139 or 140; or modern languages, philosophy, humanities, literature, English above 102 except ENG 119	9
Social Science Electives	
Anthropology; history; political science	9

Lab Science Electives	
Biology; chemistry; physics (must include lab)	4
Subtotal	22

Specific Requirements

These courses are prerequisites. They must be passed with a grade of C or better and cannot be taken on a credit/no credit basis.

ENG	101 and 102 or equivalent	6
MATH	121 or 150 and 162 or 180	6-7
ECON	200 and 201	6
PSY	105 and 200 or higher or	
SOC	101 and 200 or higher	6
MATH	245 and MATH 245L	4
BA	150 or CSCI 101	3-4
ACCT	101 and 102	12
BA	113	3
Subtotal	46-48	
Total	68-71	

Real Estate

Main and Montoya Campuses

The Real Estate courses are for persons seeking licensing or continuing education credits in real estate and appraisal. All courses are approved by the New Mexico Real Estate Commission. Courses listed in this section may be used to meet requirements for the real estate concentration for the associate of applied science degree in Business Administration. Course descriptions are in the Business Administration section.

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

Credit courses which meet Real Estate Commission requirements are:

	T-VI Credit Hours	Cont Ed Contact Hours	Pre-Licensing Contact Hours
BA 270 Real Estate Law	3	20	30
BA 271 Real Estate Practice	3	20	30
BA 272 Real Estate Appraisal	3	20	30
			*37.5
BA 273 Real Estate Finance	3	20	30
BA 274 Real Estate Investment	3	20	30

cashiering and demonstrate techniques of retail salesmanship. Human and customer relations are covered extensively. Students demonstrate computer literacy skills of keyboarding, hardware and basic word processing by a proficiency test, which is available in the department computer laboratory. Tutorials and self-paced modules are also available. (5 theory + 10 lab hours a week)

SALE 299 Cooperative Education 4 credit hours

Students work a minimum of 150 hours at retailing-related, teacher-approved work stations. The student trainee is paid by the cooperating employer and supervised jointly by T-VI and the employer. There are times when it is impossible to place all students in work stations because of local employment requirements. (1 theory + 9 lab hours a week)

HEALTH OCCUPATIONS

Helping other people makes for a satisfying career, and the Health Occupations Department provides entry-level training and skill upgrading in a variety of medical fields as well as child development.

In 1995–96, associate degrees are offered in Child Development, Medical Laboratory Technology, Nursing and Respiratory Therapy. Certificates are offered in Health Unit Clerk, Nursing Assistant, Pharmacy Technician, Phlebotomy, Practical Nurse and Respiratory Therapy Technology.

Classes for most programs are held in Jeannette Stromberg Hall at Main Campus. The Helene Fuld Library and audiovisual collections, part of Main Campus Library Services, provide excellent learning resources.

Learning laboratories are equipped with hospital furnishings and supplies, respiratory therapy machines and life-like models which give students the chance to practice basic skills needed for clinical experiences. Students have supervised patient practicums and observations at different community agencies.

Textbooks: All Health Occupations programs require the student to purchase textbooks.

Enrollment: All Health Occupations programs except Nursing Assistant require a high school diploma or equivalent. All programs have, as a prerequisite, a math and reading skill requirement while others require examinations designated by the Health Occupations Department. In addition, all programs require prerequisite courses. Most Health Occupations programs require that students be in good physical condition and be free of health conditions that could endanger themselves or others. Students may be required to have a physical exam. The T-VI Health Center provides this exam for a fee if the student does not have a private physician.

Credit by examination (challenge) is available for selected courses. The Health Occupations counselor and program directors have detailed information.

Grading Policy: It is strongly recommended that all *required* courses be taken for

a traditional letter grade. Most courses within Health Occupations must be taken for a traditional letter grade; the credit/no credit option may be used for selected courses.

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

Computer Literacy: The T-VI computer literacy graduation requirement can be achieved either by completion of a computer course or by demonstration of basic computer literacy skills. Training and testing materials are available in the Health Occupations computer lab for students who do not complete a formal computer course.

Special Courses

Special courses available through Health Occupations are listed below. These courses do not lead to a program certificate although a certificate of completion is given. At least 12 students must sign up for a special course before it can be offered, and each student must meet all stated prerequisites. These courses may not be offered every year.

Special courses are:

- Emergency Medical Technician
- Licensed Practical Nurse Refresher
- Nursing Home/Home Health Attendant
- Perioperative Nurse Specialist
- Registered Nurse Refresher

Emergency Medical Technician

Special Course

15 Weeks, Main Campus

Fall, Spring, Summer Terms

This course trains ambulance attendants to recognize, stabilize and transport patients with life-threatening emergencies. The course is taught by New Mexico licensed emergency medical technician (EMT) instructors. The class includes theory, lab and practical experiences. Students may be required to put in additional hours in local medical facilities. Upon successful completion of the course, a T-VI and EMS (Emergency Medical System) Academy certificate is awarded. The students completing the course are eligible to take the state licensure exam to become licensed emergency medical technicians.

Each student must have current BLS provider CPR certification and must be a high school graduate or equivalent before being enrolled in EMS 160L.

The course is offered each term during evening hours. Participants pay the T-VI

registration fee, a \$30 uniform fee and a \$15 course fee, and purchase the required textbook. The uniform fee covers the cost of EMS certification, a pocket mask and gloves.

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

		<i>Credit Hours</i>
#EMS	160L Basic EMT Skills	6

#Course is offered in the evening.

EMS 160L Basic Emergency Medical Technician Skills 6 credit hours
(Prerequisite: high school diploma or equivalent) Emergency medical techniques currently used to provide emergency care with rescue squads or ambulances are covered in the class. Content includes use of airway adjuncts, oxygen therapy, splinting, patient assessment and treatment for shock. (4 theory + 4 lab hours a week)

Licensed Practical Nurse Refresher

Special Course
 7.5 Weeks, Main Campus
 Spring Term

This 196-hour course is designed to renew skills of inactive licensed practical nurses, introduce new trends and procedures and provide clinical experiences. It meets the New Mexico State Board of Nursing requirements of license renewal for practical nurses who have not worked in nursing for the past five years.

Theory classes and clinical experiences focus on medical and surgical nursing care including pharmacology. Students must receive a grade of C or better in theory and clinical to complete the program.

The refresher course is offered once a year in the spring term. Interested persons can contact the Health Occupations Department for more information. Enrollment is limited to 21 students on a first come, first served basis.

A physical examination and a current BLS CPR certificate are required before the first clinical day.

Participants pay the T-VI registration fee and a \$35 course fee. Students purchase required textbooks; white uniform, shoes, a stethoscope and a transfer belt are required for clinical practice. There are additional fees payable to the New Mexico State Board of Nursing for licensure endorsement and reinstatement if a nursing license has expired. A certificate of completion is awarded at the end of the course.

This program does not qualify students for Veterans Administration benefits or other financial aid.

		<i>Credit Hours</i>
LPNR	155L Refresher Theory/Lab	6
LPNR	165C Refresher Clinical Experience	2
	Total	8

LPNR 155L Refresher Theory/Lab **6 credit hours**
(Prerequisite: a valid LPN license; corequisite: LPNR 165C) Medical-surgical and specialty nursing trends, procedures and pharmacology are covered in the theory portion of the program. (4 theory +5 lab hours a week)

LPNR 165C Refresher Clinical Experience **2 credit hours**
(Corequisite: LPNR 155L) Medical and surgical clinical experiences include administration of medications.

Nursing Home/Home Health Attendant

Special Course
 11 Weeks, Main Campus
 Fall, Spring, Summer Terms

This 88-hour, eleven-week course is designed to teach basic nursing skills to individuals who wish to work or are working either in a nursing home as a nursing home attendant or in patients' homes as a home health attendant. It has been developed for people who would like to become state certified.

The theory portion of the course covers geriatrics, simple anatomy and physiology, rehabilitation, residents' rights and housekeeping chores. Lab experiences focus on personal care, vital signs and mobility skills.

This course is offered every term. Interested persons should contact the Health Occupations Department for more information. Twenty-four persons are enrolled in each course on a first come, first served basis. A certificate of completion is awarded at the end of the course.

Participants pay the T-VI registration fee and are required to purchase the textbook.

This course may not qualify students for Veterans Administration benefits or other financial aid.

		<i>Credit Hours</i>
NAHA	102L	Nursing Home/Home Health Attendant
		Theory/Lab 5
NAHA 102L	Nursing Home/Home Health Attendant	5 credit hours
	Theory/Lab	

This course teaches basic nursing skills necessary to work in a nursing home, rehabilitation center or private home. Personal care and restorative care skills are taught in a lab setting. (4 theory + 3 lab hours a week)

Perioperative Nurse Specialist

Special Courses

12 weeks, Main Campus

SummerTerm

These courses provide RNs and LPNs with the skills and knowledge to work in hospital operating rooms or free-standing day surgical units. The curriculum offers an introduction to the history, scope and role of the perioperative nurse; the concept of team management and collaboration; the surgical environment, including principles of asepsis, sterilization and safety; use and care of basic instruments and equipment; standards of practice and legal, moral and ethical issues; the nursing process; continuity of care; surgical pharmacological agents; wound healing; and management skills. Students have an opportunity to apply theory to practice in hospital operating rooms.

Written permission of the instructor is required for enrollment in these courses. Applicants should call the Health Occupations Department to schedule an interview with the instructor. Applicants must be current licensed nurses. During the first week of the course, students must submit proof to the instructor of current immunizations, New Mexico RN or PN license, CPR card and a physical exam.

There is a \$35 course fee which covers the cost of parking permits, name tags and preventive lab tests in case of needle stick exposure.

Students must make grades of C or better in all coursework to receive a certificate.

These courses are offered in *the summer term only*.

These courses may not qualify students for Veterans Administration benefits or other financial aid.

		<i>Credit Hours</i>
PRNS	255L	Perioperative Nurse Specialist
		Theory/Lab 8
PRNS	265C	Perioperative Nurse Specialist
		Clinical Experience 6
		Total 14

PRNS 255L Perioperative Nurse Specialist Theory/Lab 8 credit hours
(Prerequisite: written permission of the instructor; corequisite: PRNS 265C) This course covers the history and philosophy of perioperative nursing, the surgical environment, perioperative care, intraoperative care and postoperative care. Laboratory experiences in a mock operating room allow practice of skills. (6 theory + 6 lab hours a week)

PRNS 265C Perioperative Nurse Specialist Clinical 6 credit hours
Experience

(Corequisite: PRNS 255L) Students apply new and previously learned concepts to perioperative nursing in hospital operating rooms.

Child Development

Associate of Arts Degree
Main Campus

The Child Development program facilitates the learning of theory and skills required for working with children from infancy through adolescence. The two-year program includes classroom instruction and practical experience. Students observe and interact with children in child care facilities, elementary and secondary classrooms and health care settings.

The curriculum provides beginning education courses as well as specialty courses in child development and course work that promotes reading, writing, speech, math, English and science. The T-VI computer literacy requirement can be met by completion of a computer course such as CDV 211 or by completion of learning modules in the Health Occupations computer lab. This competency is required of all graduates of the Child Development Program.

Graduates of the program may find employment in the public school setting as educational assistants and Head Start teachers. They may also find jobs in child care centers or other child development programs. Note: Federal law requires a background check and a fingerprint check on all persons employed in child care centers.

Not all courses will be offered each term. Courses require a minimum enrollment of 12 students. Students are required to maintain a T-VI GPA of 2.0 and at least a C in all required courses.

Students interested in transferring to the University of New Mexico for a bachelor's degree in education or family studies must complete all UNM requirements and the College of Education application process. Advisement will be provided by the UNM College Advisement Center to clarify course selections and insure proper planning. Students should contact the center when they begin their studies at T-VI.

The enrollment requirement is a high school diploma or equivalent.

Child Development Program

		<i>Credit Hours</i>
CDV	103L	Pre-school Growth and Development..... 3
CDV	104	Theories of Child Development and Family Relations .3
CDV	105L	Infant Growth and Development, Theory and Lab 4
CDV	201	Middle Childhood Growth and Development 3
CDV	202	Adolescent Growth and Development 3
CDV	212	Special Issues In Childhood Development 3
CDV	214	Practicum in Childhood Development 3
CDV	Electives	..... 8

CDV 201 Middle Childhood Growth and Development 3 credit hours
(Pre- or corequisites: CDV 104 and ENG 101) This course presents the principles of growth and development for 6- to 11-year-old children in cognitive, physical and social-emotional areas.

CDV 202 Adolescent Growth and Development 3 credit hours
(Pre- or corequisites: CDV 104 and ENG 101) Students examine the development and communication patterns of adolescents within the family setting.

CDV 204 Introduction to Classroom Learning 3 credit hours
(Pre-or corequisites: CDV 104 and ENG 101) An introduction to educational psychology and learning with an emphasis on practical application is presented.

CDV 206 Education of the Exceptional Person 3 credit hours
(Pre- or corequisites: CDV 104 and ENG 101) The course examines the characteristics and educational needs of exceptional children. Definition, etiology, characteristics and various educational alternatives for each of the exceptionalites are surveyed.

CDV 207 Management of Early Childhood Programs 3 credit hours
(Pre- or corequisites: CDV 104 and ENG 101) The course provides students with knowledge and skills to develop an effective early childhood program. Students examine staff responsibilities, program development, scheduling, behavioral observation and evaluation techniques.

CDV 208 Child Abuse and Neglect 1 credit hour
(Pre- or corequisites: CDV 104 and ENG 101) A survey of research about the dysfunctional family is presented with an emphasis on identifying the potential victim of child abuse. Preventive methods are explored.

CDV 209 Early Childhood Learning Environments 3 credit hours
(Pre- or corequisites: CDV 104 and ENG 101) The course demonstrates how to set up and maintain healthy learning environments. Students learn to use space, relationships, materials and routines as resources for developing environments that encourage play and learning for children.

CDV 210 Guidance and Early Childhood Development 3 credit hours
(Pre- or corequisites: CDV 104 and ENG 101) This course covers positive guidance and discipline techniques. Emphasis is on providing appropriate experiences for the development of autonomy, self-esteem and social competency in children.

CDV 211 Microcomputer Awareness for Educators 1 credit hour
This course provides an introduction to microcomputers, software and several programming languages useful for educational applications.

CDV 212 Special Issues in Childhood Development 3 credit hours
(Prerequisite: must be in final term of courses for graduation or have permission of the program director) This special exit course is designed to present a balance of research findings, theory and application and to integrate these aspects of the study of child development for the graduating student. The seminar-style course focuses on critical contemporary issues in the field with an emphasis on the working applications of expert knowledge.

CDV 214C Practicum in Childhood Development 3 credit hours
(Prerequisite: permission of the program director) The course provides students with a supervised field experience (nine hours a week) in a childhood setting. Students work in such settings as head start, child care centers and public school classrooms.

CDV 296 Topics 1-3 credit hours
Various topics are offered.

Health Unit Clerk

Certificate Program
Main Campus
Spring, Summer Terms

The Health Unit Clerk program prepares persons to work in hospitals, elder care centers and out-patient clinics. Transcribing doctors' written orders, typing, ordering supplies, answering the telephone, working with computers and communicating with patients, visitors and staff are typical activities.

Enrollment in the Health Unit Clerk program requires a high school diploma or equivalent, the ability to read at the seventh-grade level and a passing score on the admissions math test. Prior to starting clinical in HUC 121C, students must have demonstrated keyboarding skills. Students also must be able to write clearly and accurately and have the ability to speak distinctly to others. The T-VI computer literacy requirement can be met by completion of a computer course or by completion of learning modules in the Health Occupations computer lab. This competency is required of all graduates of the Health Unit Clerk program.

There is a \$30 uniform fee which covers the required uniform top, parking fees and health tests. Neutral-colored slacks or skirts are required but are not covered by the fee.

The 375-hour program lasts 15 weeks, with nine weeks of classroom theory and six weeks of clinical practice in local health care facilities. A grade of C or better is required for all coursework. A certificate is awarded upon completion.

Health Unit Clerk is offered in the *spring and summer terms only*.

This program may not qualify students for Veterans Administration benefits or other financial aid.

Health Unit Clerk Program

		<i>Credit Hours</i>
HUC	101L	Health Unit Clerk Theory and Lab 8
HUC	131C	Health Unit Clerk Clinical Practice 4
		Total 12

Course Descriptions

HUC 101L Health Unit Clerk Theory and Lab 8 credit hours
(Prerequisite: enrollment in the program; corequisite: HUC 131C) This course combines a number of topics including orientation to the hospital, patient confidentiality, role of the health unit clerk, medical terminology, anatomy, abbreviations, communications, pharmacological terms, computerized patient information systems and data forms. (5 theory + 20 lab hours a week)

HUC 131C Health Unit Clerk Clinical Practice 4 credit hours
(Prerequisites: HUC 101L and keyboarding skills as shown by successful completion of a course or the ability to type 25 wpm) Supervised clinical experience takes place in local health care facilities during the last six weeks of the program.

Medical Laboratory Technician

Associate of Science Degree

Main Campus

Spring Term

The Medical Laboratory Technician program prepares students to perform laboratory procedures which aid the physician and pathologist in the diagnosis and treatment of disease. Medical laboratory technicians (MLTs) work under the supervision of a pathologist in clinics, hospitals, private laboratories and physician office labs, collecting blood specimens and performing test procedures in such disciplines as clinical chemistry, hematology, immunohematology, immunology, microbiology and urinalysis.

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences. Graduates are eligible to take both the American Society of Clinical Pathologists and the National Certification Agency exams to obtain Certified Medical Laboratory Technician credentials.

The clinical practicum experience at affiliated hospitals and laboratories provides experience in performing laboratory tests under the direction of a clinical instructor. Students must arrange for their own transportation to the hospitals or labs.

A grade of C or better must be earned in all courses to advance to the next term and

graduate with an associate of science degree. The T-VI computer literacy requirement can be met by completion of a computer course or by completion of learning modules in the Health Occupations computer lab. This competency is required of all graduates of the Medical Laboratory Technician program.

There is an uniform fee of \$55 for a lab coat, parking fees, name tag and preventive lab tests in case of needle stick exposure, as well as \$20 course fees for MLT 110L and Arts & Sciences lab courses.

Orientation sessions for the Medical Laboratory Technician Program will be scheduled regularly; students should contact the Health Occupations Department for dates and times. Orientation sessions will include detailed information about the petitioning and selection process, program requirements and general information about laboratory medicine as a career including the physical demands of the job. *Anyone interested in the Medical Laboratory Technician program is strongly encouraged to attend one of these orientation sessions. In addition, it is strongly recommended that applicants review prerequisites and program requirements with the Health Occupations counselor.*

Prospective MLT students should declare MLT as their major and submit a petition packet to the Health Occupations counselor between July 17 and August 25 to be considered for the MLT class beginning in January.

To be eligible to enroll in MLT courses a student must:

- ◆ Be a high school graduate or equivalent as stated on the T-VI application.
- ◆ Submit official transcripts of previous education including vocational school or college.
- ◆ Fulfill requirements in English, math, reading and science by qualifying scores on the ACT or SAT, or placement exams, or successful completion of 100-level courses or college course work.
- ◆ Provide proof of successful completion of MATH 121 or a higher level math course (completed with a C or better); MATH 121 may be waived with successful completion of CHEM 121L or math placement test indicating math proficiency.
- ◆ Provide proof of successful completion of CHEM 111/112L or a higher level college chemistry course with a lab (completed with a C or better).
- ◆ Score at least 85 percent on the Health Occupations Nursing/MLT Basic Math Test within the 12 months prior to the petition date. Students failing to score 85 percent may retake this exam once. Students with two failed attempts must successfully complete MATH 099H and then pass the Nursing/MLT Basic Math Test. Information is available from the Health Occupations counselor.
- ◆ Have a cumulative T-VI GPA of 2.0 or higher.

Students are responsible for meeting the eligibility requirements. Once all requirements are fulfilled, students may petition for enrollment in the core MLT curriculum. Required Arts & Science courses may be taken prior to enrollment in MLT courses. Should the number of students eligible to enroll exceed the class size, priority will be given to those who have completed all required Arts & Sciences courses. The program begins in the spring term of each year.

Physical exam forms will be given to students for completion after selection for the

MLT core courses. Students must submit completed health forms providing evidence of current immunizations and physical exam before enrolling in MLT 151C. This physical exam may be done at the T-VI Health Center for a fee or it may be completed by a private physician.

Students must submit evidence of current cardiopulmonary resuscitation (CPR) certification prior to enrolling into MLT 151C and MLT 205C. Students also must be immunized against hepatitis or sign a waiver prior to these clinical courses.

Medical Laboratory Technician Program

			<i>Credit Hours</i>
MLT	110L	Introduction to Medical Technology	4
MLT	114	Immunology	1
MLT	114C	Clinical Immunology	1
MLT	151C	Clinical Experience Urinalysis/Phlebotomy	4
¹ MLT	201L	Clinical Chemistry	7
¹ MLT	203L	Clinical Hematology/Coagulation	6
¹ MLT	204L	Clinical Immunohematology	3
MLT	205C	Clinical Experience	13
¹ MLT	206	MLT Microbiology	3
MLT	206C	Clinical MLT Microbiology	2

Required Arts & Sciences Courses¹

² BIO	123	Biology for Health Sciences	3
² BIO	124L	Biology for Health Sciences Lab	1
ENG	101	College Writing	3
CHEM	121L	General Chemistry I	4
³ BIO	136	Human Anatomy and Physiology for Non-Majors	3
³ BIO	139L	Human Anatomy and Physiology Lab for Non-Majors .	1
CHEM	122L	General Chemistry II	4
BIO	239	Microbiology	3
BIO	239L	Microbiology Lab	1
⁴ Humanities/Social Science Elective		.....	3
Total			70

¹Courses taught by University of New Mexico faculty at the Health Sciences and Service Building on the UNM campus. Students are charged T-VI tuition rates for these courses.

²BIO 121L may be substituted for BIO 123/124L.

³BIO 237/247L and BIO 238/248L may be substituted for BIO 136/139L.

⁴PHIL 245M, Biomedical Ethics, strongly recommended.

An agreement with the UNM Medical Laboratory Science (MLS) Department allows for the transfer of some or all credits earned at T-VI toward the UNM MLS bachelor's degree. Students should contact the program director for specifics.

In order to satisfy prerequisite and corequisite requirements, the following order of courses is recommended:

Prerequisite courses: MATH 121, CHEM 111/112L (or higher level chemistry)
Spring Term: MLT 110L, BIO 123/124L, ENG 101, CHEM 121L
Summer Term: MLT 151C, BIO 136/139L, CHEM 122L,
HUM/SOC elective
Fall Term: MLT 114L, MLT 114C, MLT 201L, BIO 239/239L
Spring Term: MLT 203L, MLT 204L, MLT 206, MLT 206C
Summer Term: MLT 205C

Medical Laboratory Technician Advanced Placement

Applicants seeking advanced placement to the Medical Laboratory Technician Program must meet *all* the admission requirements for the program and submit all required documentation by the end of the term preceding the desired term of entry. Applicants must also complete all the general college course requirements scheduled in the curriculum prior to the term of desired entry. Professional MLT courses must be challenged in the order in which they appear in the curriculum.

Applicants granted advanced placement must pay the required T-VI fees, including course fees and challenge fees, before the start of the term of entry. Documentation of a physical exam, CPR certification and hepatitis vaccination must be received by the program director prior to the next clinical experience. Advanced placement applicants will be allowed to enroll in MLT courses on a space-available basis.

Route One: transfer of credit for equivalent coursework completed at a regionally accredited technical-vocational school, college or university. Equivalent professional (MLT) courses must have been completed through a CAHEA accredited program in the last five years. Credit is given for courses completed with a grade of C or better with equivalent content and credit hours.

Official transcripts must be sent to the T-VI Records Office for consideration of transfer credit eligibility. Qualified applicants for advanced placement will be admitted on a space-available basis and will be required to complete at least Term V at T-VI in order to be awarded the associate of science degree.

Route Two: documented work experience in laboratory medicine on specimens from humans. MLT 110L and each subject area of the clinical experiences may be challenged through a skills competency test taken before the beginning of the anticipated clinical rotation. There is a \$15 fee for each exam. Applicants must be able to document at least 200 hours of work experience in the appropriate lab section in an accredited medical laboratory in the last five years.

Applicants challenging the clinical experience are required to complete all required MLT theory courses, with the exception of MLT 110L, at T-VI in order to be awarded the associate degree.

Route Three: Applicants may transfer credit for required coursework and challenge clinical experiences by the routes listed above. In order to be awarded the associ-

ate degree and receive verification for certification, these students must complete at least 15 credit hours of required MLT coursework at T-VI. These MLT courses may be theory and/or clinical experiences.

Registered medical technologists or medical laboratory technicians interested in auditing MLT courses for refresher should contact the program director and will be allowed to audit on a space-available basis with proof of certification.

Course Descriptions

MLT 110L Introduction to Medical Technology 4 credit hours

(Prerequisite: permission of the program director; corequisites: ENG 101, BIO 123/124L, CHEM 121L) The student is introduced to basic medical laboratory techniques emphasizing urinalysis. The course includes principles and procedures of the chemical and microscopic analysis of urine, laboratory mathematics and safety procedures. (3 theory + 3 lab hours a week)

MLT 114 Immunology 1 credit hour

(Prerequisite: MLT 151C; pre- or corequisites: BIO 239/239L, MLT 201L; corequisite: MLT 114C) This course offers a basic study of the body's immune response and an introduction to diseases involving deficiencies in the immune system.

MLT 114C Clinical Immunology 1 credit hour

(Prerequisite: MLT 151C; pre- or corequisites: BIO 239/239L, MLT 201L; corequisite: MLT 114) This course offers the students an opportunity to perform serological testing on specimens from hospital patients using current methodologies.

MLT 151C Clinical Experience Urinalysis/Phlebotomy 4 credit hours

(Prerequisite: MLT 110L; pre- or corequisites: BIO 136/139L, CHEM 122L, humanities/social science) This course is designed for students to practice procedures learned in urinalysis and phlebotomy by giving them practical experience at affiliated hospitals. This is a credit/no credit course.

MLT 112C Clinical Immunology 2 credit hours

(Prerequisite: MLT 151C; pre- or corequisites: BIO 239/239L, MLT 201L) This course offers a basic study of the body's immune response and serological methods used in testing for immunological reactions. (1 theory + 3 clinical hours a week)

MLT 201L Clinical Chemistry 7 credit hours

(Pre- or corequisites: MLT 114, MLT 114C, BIO 239/239L) The basic chemical reactions that occur in normal and disease processes of the body and the principles and methods used in testing for chemical components in blood and other body fluids are studied in this course. It includes basic instrumentation and laboratory experiences for performing the basic procedures used in a clinical chemistry laboratory. (5 theory + 6 lab hours a week)

MLT 203L Clinical Hematology/Coagulation 6 credit hours
(*Pre- or corequisites: MLT 204L, MLT 206, MLT 206C*) A basic study is presented of normal and abnormal blood cell enumeration and morphology and the coagulation mechanisms. Included are the principles of routine procedures performed in the hematology laboratory. (4 theory + 6 lab hours a week)

MLT 204L Clinical Immunohematology 3 credit hours
(*Pre- or corequisites: MLT 203L, MLT 206, MLT 206C*) This course is a basic study of theory, principles and test methods for determining blood group typing, antibody detection and identification, cross matching and component therapy. (2 theory + 3 lab hours a week)

MLT 205C Clinical Experience 13 credit hours
(*Prerequisites: MLT 203L, MLT 204L, MLT 206, MLT 206C*) Supervised clinical practice takes place in the clinical laboratories of affiliated hospitals with rotations through hematology/coagulation, microbiology, immunology, chemistry and immunohematology departments. Students practice procedures and apply theory learned in previous MLT courses. This course is offered for credit/no credit.

MLT 206 MLT Microbiology 3 credit hours
(*Prerequisite: MLT 201L; corequisites: MLT 203L, MLT 204L, MLT 206C*) A comprehensive study of clinical bacteriology, mycology and parasitology is presented including macroscopic and microscopic identification of organisms, antibiotics susceptibility testing, life cycles, and pathology and etiology of various diseases. Virology is introduced.

MLT 206C Clinical Microbiology 2 credit hours
(*Prerequisite: MLT 201L; corequisites: MLT 203L, MLT 204L, MLT 206*) This course offers the students an opportunity to identify microorganisms of clinical significance from specimens obtained from hospital patients. Students utilize current methodologies and identification techniques.

Nursing Assistant

Certificate Program
Main Campus
Fall, Spring, Summer Terms

This program trains students in nursing skills required for the care and comfort of the sick in hospitals, out-patient clinics, nursing homes, public health agencies, private medical offices and the home. Persons successfully completing the program with grades of C or better in all coursework receive certificates.

supervised practice of nursing skills in hospitals, long-term care centers and patient homes throughout the city.

NA 131 Health Communications 3 credit hours
(*Corequisites: NA 101, NA 110L, NA 161, NA 171*) This course includes introductions to medical terminology, anatomy and physiology and nutrition. The basic structure and normal functions of the body systems and some of the health problems which can occur in those systems are covered.

NA 161 Nursing Assistant Issues 2 credit hours
(*Corequisites: NA 101, NA 110L, NA 121C, NA 131, NA 171*) Special topics are covered such as nutrition labs, blood pressure practice, home health care post-conferences and clinical seminars.

NA 171 Nursing Assistant Applications 3 credit hours
(*Corequisites: NA 101, NA 110L, NA 131, NA 161*) Basic math is reviewed for part of the term with practice working selected problems. Tests cover eight areas of concentration. The other part deals with geriatric issues and the application of nursing assistant theory to them.

Practical Nursing

Certificate Program

Main Campus

Fall 1995, Summer 1996, Thereafter Summer Term Only

This program prepares practical nurses to care for patients in a variety of health care facilities under the supervision of registered nurses and physicians. The T-VI/Presbyterian Hospital School of Practical Nursing is accredited by the National League for Nursing and approved by the New Mexico State Board of Nursing (NMSBN).

Graduates of this program are eligible to take the licensing examination for practical nurses administered by the NMSBN. Following licensure, LPNs may find employment in long-term care facilities, hospitals, physicians' offices and other health care agencies.

Orientation sessions for the nursing programs are scheduled regularly. These sessions review levels of nursing, the petition process and program requirements. Individuals interested in nursing are strongly encouraged to attend one of these sessions. When ready to enter clinical courses, students must petition for selection. Petitions for selection to the clinical courses are accepted early in the term prior to the term of enrollment. Students should contact the Health Occupations Department for the dates and times of the orientation sessions and when petitions for selection will be accepted. In addition, it is strongly recommended that applicants review prerequisites and program requirements with the Health Occupations counselor.

To be eligible to enroll in Practical Nursing courses a student must:

- ◆ Be a high school graduate or equivalent as stated on the T-VI admissions application.
- ◆ Fulfill requirements in English, math, reading and science by qualifying scores on the ACT or SAT, or placement exams, or successful completion of 100-level courses or college course work.
- ◆ Score at least 85 percent on the Health Occupations Nursing/MLT Basic Math Test within the 12 months prior to the petition date. Students failing to score 85 percent may retake this exam once. Students with two failed attempts must successfully complete MATH 099H and then pass the Nursing/MLT Basic Math Test. Information is available from the Health Occupations counselor.
- ◆ Have a cumulative T-VI GPA of 2.0 or higher.
- ◆ Provide proof of completing the following courses with a C or better: BIO 237/247L, Human Anatomy and Physiology I/Lab and ENG 101, College Writing. Anatomy and physiology courses must be taken within five years from the date of application to the nursing program.

Students are responsible for meeting the prerequisite criteria and petitioning for selection into the clinical courses. Should the number of students eligible to enroll in the first clinical course exceed the class size quota, priority will be given to those students who have completed all of the required liberal arts courses including anatomy and physiology. If there are more people who have completed all the required liberal arts courses than there is space, the selection will be based upon the date of application to T-VI.

After selection into the first clinical course, students must submit:

- ◆ Completed physical examination and health forms with evidence of current immunizations before beginning clinical courses. It is advisable that the student be able to lift 50 pounds or more.
- ◆ Evidence of current certification in cardiopulmonary resuscitation (CPR) for health professionals before beginning clinical courses. CPR certification must be kept current throughout the program.

The Practical Nurse program includes Arts & Sciences courses for which college credit is awarded. The anatomy and physiology course must be completed within five years from the date of application to the nursing program. A minimum grade of C must be earned in all courses (Nursing and Arts & Sciences) to continue in the program and graduate. In addition, competency in dosage calculations, as tested by the PN calculation exam, must be maintained for progress in the program.

Students must arrange for their own transportation to attend all classes, observations and clinical experiences as scheduled. There may be some required evening clinical hours as well as daytime hours.

Fees totaling \$125 are charged for Practical Nursing courses. Students are responsible for the expenses of the physical examination, a watch with a second hand, uniform shoes, cap, graduation pin, textbooks and licensing exam fees.

The T-VI computer literacy requirement can be met by completion either of a com-

puter course or of learning modules in the Health Occupations computer lab. This competency is required of all graduates of the Practical Nursing program.

Information about Licensure as a Practical Nurse (P.N.)

The New Mexico Board of Nursing may deny, revoke or suspend any license held or *applied for* under the Nursing Practice Act, upon grounds that the licensee or applicant violates any of the following actions:

1. is guilty of fraud or deceit in procuring or attempting to procure a license or certificate of registration;
2. is unfit or incompetent;
3. is convicted of a felony subsequent to licensure;
4. is habitually intemperate or is addicted to the use of habit-forming drugs;
5. is mentally incompetent;
6. is guilty of unprofessional conduct; or
7. willfully or repeatedly violates any provisions of the Nursing Practice Act;
8. has had a license to practice revoked, suspended or denied in any jurisdiction, territory or possession of the United States or another country for acts of the license similar to acts described in this subsection.

(From BON Manual #91-2, 61-3-28)

Practical Nurse Program

Credit Hours

Required Liberal Arts Courses

BIO	237	Human Anatomy and Physiology I	3
BIO	247L	Human Anatomy and Physiology I Lab	1
BIO	238	Human Anatomy and Physiology II	3
BIO	248L	Human Anatomy and Physiology II Lab	1
ENG	101	College Writing	3
NUTR	125	Nutrition	3
¹ PSY	105	General Psychology	3

Practical Nurse Courses

NURS	115	Dosage Calculations	1
PN	124C	Fundamentals of Practical Nursing	7
PN	125C	Medical-Surgical Practical Nursing	8
² PN	131	Pharmacology	3
PN	146C	Maternal-Child/Medical-Surgical Nursing	16
Total			52

¹PSY 220 may be substituted.

²NURS 231 may be substituted.



Presbyterian Hospital School of Practical Nursing

The Presbyterian Healthcare Services (PHS) School of Practical Nursing was started in 1956 at Presbyterian Hospital. In 1965 T-VI assumed administrative responsibility for the school. Presbyterian continues to support the school by providing clinical facilities for patient care experiences. The T-VI/PHS School of Practical Nursing in 1972 became the first practical nursing program in New Mexico to be accredited by the National League for Nursing. The program was reaccredited in 1989. It is also included in T-VI's accreditation from the Commission on Higher Education of the North Central Association of Colleges and Schools.

Practical Nurse Advanced Placement

There are two ways in which advanced standing can be given to Practical Nurse applicants: credit granted for equivalent coursework and/or successful completion of a challenge exam.

The Arts & Sciences courses required in the Practical Nurse program must be transferred, taken or challenged through the Arts & Sciences Department. The nursing courses must be transferred, taken or challenged through the Health Occupations Department. All advanced placement students must complete NURS 201 prior to entry into the program.

Transfer Application: T-VI will grant credit for equivalent coursework completed at an accredited technical-vocational school or college when official transcripts show grades of C or better on equivalent courses. Students desiring to transfer nursing courses to T-VI's Practical Nurse Program should contact the program director. Nursing courses are only valid for three years from the date of application to T-VI. Transfer students are required to enroll a minimum of one term and complete 15 credit hours.

Challenge Application: Advanced placement by challenge exam is offered to students who meet one of the following criteria: completion of a formal course of study in a nursing-related field within a post-secondary educational institution (e.g. military corps member) or performance of basic nursing skills during employment in an in-patient setting within the last three years.

Individuals interested in challenging nursing coursework must make an appointment with the director of the nursing programs to determine eligibility and to discuss the procedure. The challenge procedure includes theory and practical exams. Challenge exams are available for NURS 115, NURS 124C and NURS 125C. The cost ranges from \$15 to \$40 per course.

Course Descriptions

PN 124C Fundamentals of Practical Nursing 7 credit hours

(Prerequisites: nursing director approval, BIO 237/247L, ENG 101; corequisites: BIO 238/248L, NURS 115, NUTR 125) The conceptual framework of the curriculum and nursing process are introduced. Key concepts are developed using a self-care model. Nursing skills are developed to meet the basic and developmental needs of adults across cultures. (4 theory + 9 clinical hours a week)

PN 125C Medical-Surgical Practical Nursing 8 credit hours

(Prerequisites: NURS 115, PN 124C, NUTR 125; pre- or corequisites: PSY 105, PN 131) Nursing process is used to identify ways to meet basic and higher order needs due to common illnesses or injuries of adult clients. The role of the nurse in promoting self-care in adult clients is presented. (4 theory + 12 clinical hours a week)

PN 131 Pharmacology 3 credit hours

(Prerequisites: BIO 238/248L, PN 124C; corequisite: PN 125C) Focus is on the effects of commonly used drugs on various body systems. Dosages, application, side effects and/or toxicity, laboratory tests performed to monitor actions, and effects of specific drugs are discussed. Nursing implications and responsibilities are integrated.

PN 146C Maternal-Child/Medical Surgical Nursing 16 credit hours

(Prerequisites: PN Calculation exam, PN 125C, PN 131)* A study, using nursing process, of ways to meet self-care needs due to developmental factors or more complex health conditions of maternal-child clients and adults. The legal/ethical role of the practical nurse is presented. (9 theory + 21 clinical hours a week)

* Calculation exams must be passed with a score of 90% or better.

Nursing

Associate of Science Degree
Main Campus
Fall and Spring Terms

The associate degree in nursing (ADN) program prepares technical nurses to provide nursing care to individuals or groups admitted to health care agencies. The clients have common, well defined health problems. Graduates work in structured health care settings where they provide and manage client care, teach and promote communication while participating as members of the nursing profession.

The ADN program is accredited by the National League for Nursing and approved by the New Mexico State Board of Nursing (NMSBN). Graduates are eligible to take the licensing examination for nurses administered by the NMSBN.

Orientation sessions for the nursing programs are scheduled regularly. These sessions review levels of nursing, the petition process, program requirements and curriculum changes. Individuals interested in nursing are strongly encouraged to attend one of these sessions, and continuing students are encouraged to attend a session at least once a year. *Students may declare the associate degree in nursing as their major at any time but must petition for selection into the clinical courses.* Students should contact the Health Occupations Department for the dates and times of the orientation sessions and to find out the dates petitions for selection will be accepted.

To be considered for enrollment in Nursing courses a student must:

- ◆ Be a high school graduate or equivalent as stated on the T-VI admissions application.
- ◆ Submit official transcripts of previous education including vocational school or college.
- ◆ Fulfill requirements in English, math, reading and science by qualifying scores on the ACT or SAT, or placement exams, or successful completion of 100-level courses or college course work.
- ◆ Score at least 85 percent on the Health Occupations Nursing/MLT Basic Math Test within the 12 months prior to the petition date. Students failing to score 85 percent may retake this exam once. Students with two failed attempts must successfully complete MATH 099H and then pass the Nursing/MLT Basic Math Test. Information is available from the Health Occupations counselor.
- ◆ Have a cumulative T-VI GPA of 2.0 or higher.
- ◆ Provide proof of completion of the following courses with a C or better: BIO 237/247L, Anatomy and Physiology I; BIO 238/248L, Human Anatomy and Physiology II; BIO 239/239L, Microbiology; PHIL 245M, Biomedical Ethics; PSY 105, General Psychology; PSY 220, Developmental Psychology; ENG 101, College Writing; NUTR 125, Nutrition; and an elective. Anatomy and physiology courses must be taken within five years from the date of application to the nursing program.

Once all criteria are fulfilled students must petition for enrollment in the first clinical course in nursing. Should there be more petitioners than available spaces, the date of admission to T-VI will be used as the final selection criterion. Should there be more than one person with the same date of admission competing for the same slot, the date of completion of all required liberal arts courses will be used as the final selection criterion. The date of completion will be the last day of the term in which the course was successfully completed.

Because of the high demand for this program the student may wait two years after petitioning to begin the nursing core coursework.

Prior to entering NURS 124C, students must submit to the nursing programs office:

- ◆ Completed physical examination and health forms with evidence of current immunizations before beginning clinical courses. It is advisable that the student be able to lift 50 pounds or more.
- ◆ Evidence of current certification in cardiopulmonary resuscitation (CPR) before beginning clinical courses (CPR certification must be kept current throughout the program).

Required anatomy and physiology and microbiology courses have prerequisites in chemistry and advanced biology, which may be waived by appropriate high school courses. In addition, required anatomy and physiology and microbiology courses must have been taken within five years of the date of application to the nursing programs.

Students must earn a minimum grade of C in all courses to advance to the next term and graduate. In addition, competency in dosage calculations, as tested by calculation exams, must be maintained for progress in the program. The T-VI computer literacy requirement can be met by completion of a computer course or by completion of learning modules in the Health Occupations computer lab. This competency is required of all graduates of the associate degree nursing program.

Students must attend classes, observation and clinical experiences as scheduled and must arrange for their own transportation to the agencies and hospitals. There may be some required evening clinical hours as well as daytime hours.

A \$90 uniform fee is charged in the first term for required uniforms, stethoscope, scissors, transfer belts, parking fees, identification tags, achievement tests and preventive lab test in case of needle stick exposure. Course fees are charged for achievement tests and parking in some courses. Students are responsible for the expenses of the physical examination, a watch with a second hand, uniform shoes, cap, graduation pin and licensing exam fees.

Information about Licensure as a Registered Nurse (R.N.)

The New Mexico Board of Nursing may deny, revoke or suspend any license held or *applied for* under the Nursing Practice Act, upon grounds that the licensee or applicant violates any of the following actions:

1. is guilty of fraud or deceit in procuring or attempting to procure a license or certificate of registration;
2. is unfit or incompetent;
3. is convicted of a felony subsequent to licensure;
4. is habitually intemperate or is addicted to the use of habit-forming drugs;
5. is mentally incompetent;
6. is guilty of unprofessional conduct; or
7. willfully or repeatedly violates any provisions of the Nursing Practice Act;
8. has had a license to practice revoked, suspended or denied in any jurisdiction, territory or possession of the United States or another country for acts of the license similar to acts described in this subsection.

(From BON Manual #91-2, 61-3-28)

Associate Degree in Nursing Program

			<i>Credit Hours</i>
Required Liberal Arts Courses			
BIO	237	Anatomy and Physiology I.....	3

BIO	247L	Anatomy and Physiology I Lab	1
ENG	101	College Writing	3
PSY	105	General Psychology	3
BIO	238	Anatomy and Physiology II	3
BIO	248L	Anatomy and Physiology II Lab	1
NUTR	125	Nutrition	3
PSY	220	Developmental Psychology	3
BIO	239	Microbiology for Health Sciences	3
BIO	239L	Microbiology for Health Sciences Lab	1
PHIL	245M	Biomedical Ethics	3
Elective ¹		.....	3

Required Nursing Courses

NURS	115	Dosage Calculations	1
NURS	124C	Fundamentals of Nursing	7
NURS	125C	Medical-Surgical Nursing	8
NURS	224C	Maternity Nursing	5
NURS	225C	Psychiatric Nursing	5
NURS	231	Pharmacology in Nursing	3
NURS	242	Nursing Trends and Issues	1
NURS	246C	Pediatric/Advanced Medical-Surgical Nursing	10
Total			70

¹May be outside of Arts & Sciences with departmental approval; may not be a lab/science course.

Associate Degree in Nursing: Advanced Placement

To apply for advanced standing in the Associate Degree Nursing program, individuals must meet the enrollment requirements for the program.

All advanced placement students must take NURS 201 prior to enrollment in the Nursing courses.

Advanced placement may be granted in three ways:

Challenge: challenge exam for students who meet one of the following criteria: Completion of a formal course of study in a nursing related field within a post-secondary educational institution (e.g. military corps member), or performance of basic nursing skills during employment in an in-patient setting within the last three years. Individuals interested in challenging nursing coursework must make an appointment with the director of the nursing program to determine eligibility and to discuss the procedure. The challenge process includes theory and practical exams. Challenge exams are available for NURS 115, NURS 124C and NURS 125C. There is a \$15–\$50 fee for each challenge exam.

Transfer: transfer from an approved associate degree or baccalaureate nursing pro-

gram with equivalent courses. To apply for transfer, the individual must submit evidence of completion of equivalent courses with minimum grades of C. Nursing courses are only valid for three years from the date of application. Transfer students are required to enroll a minimum of one term and complete 15 credit hours at T-VI. For specific information, students should contact the director of the nursing programs.

LPN Mobility: The associate degree program is designed to enroll qualified licensed practical nurses into the third term who meet the following requirements:

- ◆ Meet all enrollment criteria for the ADN program including official transcripts of previous education in a vocational school or college (for credit waiver for NURS 124C and NURS 125C students must provide proof of current LPN licensure)
- ◆ Pass the Nursing Mobility Profile I examination if an approved postsecondary practical nurse program has not been completed
- ◆ Provide proof of completion or challenge of the following courses with a minimum grade of C (anatomy and physiology and microbiology courses must be taken within five years from the date of application to the nursing program):
 - BIO 237/247L, Anatomy and Physiology I
 - BIO 238/248L, Anatomy and Physiology II
 - BIO 239/239L, Microbiology for Health Sciences
 - ENG 101, College Writing
 - PSY 105, General Psychology
 - PSY 220, Developmental Psychology
 - NUTR 125, Nutrition
 - NURS 115, Dosage Calculations (CR/NC)
 - NURS 201, Nursing Concepts

Students are responsible for meeting the prerequisites and notifying the nursing director of their readiness to enter advanced placement at the beginning of the term just prior to when they want to enter. Students will be notified by mail when they are selected to enter the clinical courses. Should the number of advanced placement students eligible to enroll exceed the class size, priority will be given to those students who have completed all of the required liberal arts courses. After selection for enrollment in the clinical courses, students must submit:

- ◆ Completed physical examination and health forms with evidence of current immunizations before beginning clinical courses. It is advisable that the student be able to lift 50 pounds or more.
- ◆ Evidence of current certification in cardiopulmonary resuscitation (CPR) before beginning clinical courses. CPR certification must be kept current throughout the program.

Students pay a total of \$75 in course fees for parking, name tags, achievement tests and preventive lab tests in case of needle stick exposure upon enrollment into nursing courses (fees are attached to specific courses). Students also are responsible for the expenses of physical exams, uniforms, transfer belts, shoes, watch with a second hand, stethoscope, bandage scissors, graduation pin and licensing fees.

-Course Descriptions

NURS 115 Dosage Calculations 1 credit hour
(Prerequisites: Nursing Basic Math Test and nursing director approval) Methods of dosage calculations for oral and parenteral medications, including intravenous therapy and pediatric dosages, are presented. The course is offered for CR/NC.

NURS 124C Fundamentals of Nursing 7 credit hours
(Prerequisites: nursing director approval, BIO 237/247L, ENG 101, PSY 105, NUTR 125; corequisites: NURS 115, BIO 238/248L, PSY 220) The conceptual framework of the curriculum and nursing process are introduced. Key concepts are developed using a self-care model. Nursing skills are developed to meet the universal and developmental needs of adults across cultures. (4 theory + 9 clinical hours a week)

NURS 125C Medical-Surgical Nursing 8 credit hours
(Prerequisites: BIO 238/239L, NURS 115, NURS 124C, PSY 220; pre- or corequisites: BIO 239, PHIL 245M) Nursing process is used to identify ways to meet self-care deficits due to common illnesses or injuries of adult clients. The role of the nurse in promoting health deviation self-care in adult clients is presented. (4 theory + 12 clinical hours a week)

NURS 201 Nursing Concepts for LPN/Transfer Students 2 credit hours
(Prerequisites: ENG 101, PSY 105, BIO 237/247L) An introduction to the conceptual framework of the nursing program and an in-depth study of the nursing process. This course is required for LPNs and all applicants who seek advanced placement in the practical nurse or associate degree program. Course is only offered two times per year.

NURS 224C Maternity Nursing 5 credit hours
(Prerequisites: Calculation Exam II*, BIO 239/239L, BIO 238/248L, NURS 125C, ENG 101, NUTR 125, PSY 220; pre- or corequisites: NURS 225C, NURS 231) This 7.5-week course presents a study of the child-bearing family with universal, developmental and health deviations self-care requisites. Content integrates the nursing process, client education, nursing care systems and assessment skills. (6 theory + 12 clinical hours a week)

NURS 225C Psychiatric Nursing 5 credit hours
(Prerequisites: Calculation Exam II*, BIO 239/239L, BIO 238/248L, NURS 125C, ENG 101, NUTR 125, PSY 220; pre- or corequisites: NURS 224C, NURS 231) This is a 7.5-week course in which the study of self-care deficits in clients with psychiatric health deviations is presented. The concept of therapeutic communication is developed as a framework for using the nursing process to provide care for these clients. (6 theory + 12 clinical hours a week)

NURS 231 Pharmacology in Nursing 3 credit hours
(Prerequisites: BIO 238/248L, NURS 124C; pre- or corequisite: BIO 239/239L) A study utilizing nursing process concepts necessary for nursing judgment in the use of chemical

agents and the theoretical base required to administer medications. Information covers drugs in current use, including pharmacokinetics, pharmacodynamics, therapeutic uses, adverse reactions, precautions and contraindications.

NURS 242 Nursing Trends and Issues 1 credit hour
(Corequisite: NURS 246C) Students discuss the role of the technical nurse in relation to trends, legal/ethical issues, professional relationships and health care delivery. The course is designed to develop critical thinking and application of principles of client-care management.

NURS 246C Pediatric Advanced Medical-Surgical Nursing 10 credit hours
(Prerequisites: Calculation Exam III*, NURS 224C, NURS 225C, BIO 239/239L, NURS 231; corequisites: NURS 242, Arts & Sciences elective) A study, utilizing nursing process, of ways to meet the self-care needs of children as well as adults with complex health problems, including modifications to meet universal, developmental and health deviation needs of children and their families. (5 theory + 15 clinical hours a week)

NURS 296 Topics in Nursing 1-10 credit hours
(Prerequisites: may vary) Various topics in nursing are presented.

*Calculation exams must be passed with a score of 90% or better.

Pharmacy Technician

Certificate Program
Main Campus
Fall Term

The Pharmacy Technician Program is a two-term certificate program that prepares persons to assist pharmacists in the community or hospital. Students learn to prepare, mix, assemble and label medications. They also learn to prepare sterile products including irrigations and intravenous admixtures. Instruction is provided in the classroom, in laboratories on campus and in local health care facilities.

Enrollment in the Pharmacy Technician program requires a high school diploma or equivalent, the ability to read at the eighth-grade level and a passing score on the admissions math test.

Arts & Sciences courses listed in the curriculum may be taken prior to entering the program. These courses must be completed with a grade of C or better. The T-VI computer literacy requirement is met by completion of CSCI 101. This competency is required of all graduates of the Pharmacy Technician program.

There is a \$35 uniform fee for one lab coat, name tag and parking. Students are also required to purchase their own textbooks.

Pharmacy Technician Program

Pharmacy Technician Courses

			<i>Credit Hours</i>
PT	110	Introduction to Pharmacy Technology	3
PT	111L	Pharmacy Technician Lab I.....	3
PT	115	Pharmacy Technician Anatomy and Physiology	3
PT	116L	Pharmacy Calculations	2
PT	120	Advanced Pharmacy Technology	3
PT	121L	Pharmacy Technician Lab II	3
PT	122C	Pharmacy Technician Practicum	5
PT	125	Pharmacology for Pharmacy Technicians	3

Arts & Sciences Courses

*CHEM	111/112	Introduction to Chemistry	4
CSCI	101	Computer Literacy	4
COMM	221	Interpersonal Communication Studies	3
Total			36

*Check prerequisite.

Course Descriptions

PT 110 Introduction to Pharmacy Technology 3 credit hours
(Prerequisite: enrollment in the program; corequisites: PT 111L, PT 115; pre-or corequisites: CHEM 111/112L, CSCI 101) This beginning course provides a discussion of the pharmacy technician's role, the Pharmacy Practice Act, ethics, prescription preparation and institutional drug distribution systems.

PT 111L Pharmacy Technician Lab I 4 credit hours
(Corequisites: PT 110, PT 115, PT 116L; pre- or corequisites: CHEM 111/112L, CSCI 101) This campus lab provides opportunities for skill development in prescription preparation including oral, parenteral and IV preparation. Medical terminology and infection control, including universal precautions, are also emphasized.

PT 115 Pharmacy Technician Anatomy and Physiology 3 credit hours
(Corequisites: PT 110, PT 111L, PT 116L; pre- or corequisites: CHEM 111/112L, CSCI 101) This is an integrated study of the structures and function of the human body. Common disease entities related to body systems are presented.

PT 116L Pharmacy Calculations 2 credit hours
(Corequisites: PT 110, PT 111L, PT 115; pre- or corequisites: CHEM 111/112L, CSCI 101) This math lab provides skill in pharmaceutical calculations for oral, parental and IV preparations.

PT 120 **Advanced Pharmacy Technology** **3 credit hours**
(Prerequisites: PT 110, PT 111L, PT 115, PT 116L, CHEM 111/112L, CSCI 101;
corequisites: PT 121L, PT 122C, PT 125; pre- or corequisite: COMM 221) This course
covers compounding and packaging of drugs, preparation of intravenous admixtures,
inventory maintenance, clerical skills and institutional drug distribution processes.

PT 121L **Pharmacy Technician Lab II** **3 credit hours**
(Corequisites: PT 120, PT 122C, PT 125; pre- or corequisite: COMM 221) This campus
lab provides opportunities for skill development in compounding/reconstitution, label-
ing, aseptic technique, use of laminar flow hoods and use of the computer.

PT 122C **Pharmacy Technician Practicum** **5 credit hours**
(Corequisites: PT 120, PT 122C, PT 125; pre- or corequisite: COMM 221) Students are
assigned to institutional and community pharmacies for practical experience in applying
what they have learned in classrooms and labs.

PT 125 **Pharmacology for Pharmacy Technicians** **3 credit hours**
(Corequisites: PT 120, PT 121L, PT 122C; pre- or corequisite: COMM 221) This is a
study of therapeutic drug categories.

Phlebotomy

Certificate Program
Main Campus
Fall, Spring Terms

The primary work of a phlebotomist is to draw blood specimens from health care clients for testing. A phlebotomist works full or part time in a medical laboratory under the supervision of a registered medical technologist.

The job includes establishing a professional relationship with the client, selecting and preparing the blood collection site, collecting specimens, preparing and maintaining equipment used to obtain blood specimens, caring for the client after specimen collection, entering data into the computer for the testing process and performing clerical duties related to laboratory test record keeping. The job also requires a lot of walking, bending and standing.

Enrollment in the Phlebotomy program requires a high school diploma or equivalent, the ability to read at the seventh-grade level and a passing score on the admissions math test. Applicants must present evidence of current certification in cardiopulmonary resuscitation (CPR) before beginning the clinical part of the course. Students should possess the ability to communicate verbally with clients, basic math skills for timing tests and manual dexterity required to handle laboratory equipment. Students must be able to read orders and labels associated with medical procedures.

To receive a certificate, a student must complete the 15-week, 375-hour program, which includes six weeks of classroom instruction in theory and lab and nine weeks of experience in local hospital and/or clinics, with a grade of C or better in all courses. The T-VI computer literacy requirement can be met by completion of a computer course or by completion of learning modules in the Health Occupations computer lab. This competency is required of all graduates of the Phlebotomy program.

A \$50 uniform fee covers the cost of a lab coat, health tests, name tags, parking fees and preventive lab tests in case of needle stick exposure. Students are also required to purchase textbooks.

This program does not qualify students for Veterans Administration benefits or other financial aid.

Phlebotomist Program

			<i>Credit Hours</i>
PHLB	101L	Phlebotomist Theory and Lab	7
PHLB	121C	Phlebotomist Clinical Practice	5
Total			12

Course Descriptions

PHLB 101L Phlebotomist Theory and Lab **7 credit hours**
(Prerequisite: enrollment criteria for the program; corequisite: PHLB 121C) During this six-week class students learn the procedures for collecting blood and other specimens from patients. Theory associated with the procedures is stressed. An introduction to the anatomy and physiology of the major body systems, computer processes and laboratory clerical duties is also included. (10 theory + 15 lab hours a week)

PHLB 121C Phlebotomist Clinical Practice **5 credit hours**
(Prerequisite: CPR certification; corequisite: PHLB 101L) This is a nine-week class in which students practice skills and apply the theory learned in class during supervised clinical practice in city hospitals and/or clinics.

Respiratory Care Programs

Respiratory care is a health profession which specializes in diagnostic testing, therapeutic treatment and critical care support for patients suffering from life-threatening or chronically disabling cardiopulmonary disorders.

A **respiratory therapy technician** is a graduate of a 12-month certificate program and is capable of performing at the entry level of respiratory care practice.

A **respiratory therapist** is a graduate of a two-year associate of science degree or four-year bachelor of science degree program and is capable of performing at the advanced level of respiratory care practice.

Under medical direction, the respiratory care practitioner must apply medical and scientific knowledge to the assessment and treatment of clinical problems in respiratory care. Respiratory care practitioners monitor and evaluate cardiorespiratory function, perform diagnostic tests and treatments, research treatment effectiveness in cardiopulmonary disease and act as consultants to physicians, nurses and other health care specialists concerning application of respiratory care to cardiopulmonary pathology. Respiratory care practitioners manage respiratory care departments in hospitals and supervise other practitioners in the delivery of pulmonary care. The respiratory care practitioner also serves as educator to patients and the public and in formal training programs.

Employment opportunities for respiratory care practitioners are available in urban and rural health care facilities nationwide, including veteran and military base hospitals. Employment opportunities also exist with medical equipment suppliers and agencies providing home health care and rehabilitation services for pulmonary patients.

The T-VI computer literacy requirement will be met by completion of CSCI 101. This competency is required of all graduates of the Respiratory Care programs.

Respiratory Therapy Technology

Certificate Program
Main Campus
Fall Term

The Respiratory Therapy Technology (RTT) program teaches the knowledge and skills required for diagnosis, treatment and care of patients with breathing problems. The one-year program includes classroom and laboratory instruction and supervised clinical experiences at local hospitals and other health care facilities.

The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Joint Review Committee for Respiratory Therapy Education (JRCRTE). Graduates are eligible to take the National Board for Respiratory Care certification exam to obtain Certified Respiratory Therapy Technician (CRTT) cre-

dentials. Successful completion of this exam also allows individuals to be recognized as licensed Respiratory Care Practitioners (RCP) in New Mexico.

Orientation sessions for the Respiratory Therapy Technology Program will be scheduled regularly; students should contact the Health Occupations Department for dates and times. Orientation sessions will include detailed information about the petitioning and selection process, program requirements and general information about respiratory care as a career including the physical demands of the job. *Anyone interested in the Respiratory Therapy Technology program is strongly encouraged to attend one of these orientation sessions. In addition, it is strongly recommended that applicants review prerequisites and program requirements with the Health Occupations counselor.*

To be *eligible to petition to enroll* in RTT courses students must:

- ◆ Declare RTT as their major at T-VI.
- ◆ Achieve a T-VI cumulative GPA of 2.0 or higher.
- ◆ Be a high school graduate or equivalent as stated on the T-VI application.
- ◆ Fulfill requirements in English, math, reading and science by qualifying scores on the ACT or SAT, or placement exams, or successful completion of 100-level courses or college course work.
- ◆ Complete BIO 123/124L (or its equivalent) with a grade of C or better.

Students are responsible for meeting the eligibility requirements. Once all requirements are fulfilled, students may petition for enrollment in the core RTT curriculum.

If the number of eligible students exceeds the number of positions available, preference will be given to those who have completed all required Arts & Sciences courses for the RTT curriculum. If necessary, petitioners will then be ranked by date of completion of eligibility requirements. Additional positions may be made available for individuals with established residence in rural communities of New Mexico and the desire to return there for employment in respiratory care. The policy for admission to the program under this condition is available from the director of Respiratory Care Programs.

Arts & Sciences courses listed in the curriculum may be taken prior to entering the program. It is highly recommended that students complete as many of the Arts & Sciences courses as possible prior to entering RTT core courses. *Priority for selection is based upon the number of required Arts & Sciences courses completed.*

Students selected to enroll in RTT courses for the fall term must have a physical exam and submit a completed health form with evidence of current immunizations before beginning clinical courses.

Students pay a \$90 uniform fee when they begin the program to cover the cost of the required uniform, stethoscope, identification badges, CPR certification, parking fees and preventive lab tests in case of needle stick exposure. Students also pay a \$25 course fee when they begin their last clinical course to cover the cost of assessment exams to prepare for national board tests. Students keep their exams and scoring analyses for study after graduation. Additional student costs include purchase of bandage scissors, graduation pin, pre-entrance physical exam and textbooks.

Students must earn a minimum grade of C or better in all courses to advance to the next term and graduate. A 2.0 GPA is required to graduate from the program.

Graduates of the Respiratory Therapy Technology program may continue their training by completing a second year of coursework in the Respiratory Therapy associate degree program. In addition, students who complete Terms I and II of the Technology Program may enter Respiratory Therapy courses under advanced placement (See Respiratory Therapy Advanced Placement).

Respiratory Therapy Technology Program

		<i>Credit Hours</i>
RTT	110	Respiratory Therapy Principles and Practices I 3
RTT	111	Respiratory Therapy Principles and Practices II 3
RTT	112	Respiratory Therapy Principles and Practices III 3
RTT	115L	Respiratory Therapy Lab I 1
RTT	116L	Respiratory Therapy Lab II 1
RTT	117L	Respiratory Therapy Lab III 1
RTT	121C	Clinical Experiences I 5
RTT	122C	Clinical Experiences II 5
RTT	123C	Clinical Experiences III 5
¹ RTT	131	Physics of Respiratory Therapy 3
RTT	132	Cardiopulmonary Physiology 3
RTT	133	Pharmacology of Respiratory Therapy 3
 Required Arts & Sciences Courses		
² BIO	136/139L	Human Anatomy and Physiology with Lab 4
CSCI	101	Computer Literacy 3-4
Total		43-44

¹A college physics course may be substituted for RTT 131.

²BIO 237/247L and BIO 238/248L may be substituted for BIO 136/139L.

Note: Additional college courses may be substituted for transfer credit if completed at a regionally accredited college or university with a grade of C or better and equivalent content coverage of subject and credit hours. Official transcripts must be sent to the T-VI Records Office for consideration of transfer credit eligibility prior to admission to the program.

In order to satisfy prerequisite and corequisite requirements along with RTT courses, the following order of coursework is recommended:

Fall term: RTT 110, RTT 115L, RTT 121C, RTT 131 and BIO 136/139L

Spring term: RTT 111, RTT 116L, RTT 122C, RTT 133 and CSCI 101

Summer term: RTT 112, RTT 117L, RTT 123C, RTT 132

Respiratory Therapy Technology Advanced Placement

There are two ways in which advanced standing can be granted to Respiratory Therapy Technology applicants: transfer and challenge. Advanced placement means enrollment in RTT coursework above the level of RTT 110. Persons wanting to transfer or challenge RTT courses should contact the Health Occupations Department.

Transfer: transfer credit for equivalent arts and science courses completed at a regionally accredited technical-vocational school, college or university. Transfer credit may be awarded for respiratory therapy technology courses completed at a CAAHEP/JRCRTE accredited program. Credit may be given when the T-VI Records Office receives official transcripts showing grades of C or better on equivalent courses.

Challenge: challenge exams may be administered for people with documented respiratory care work experience. There is a \$15 fee for each challenge exam.

Challenge and transfer students accepted must submit transcripts of prior education and be a high school graduate or possess a GED diploma. They must also meet all eligibility requirements for selection into the program and have acceptable ACT scores if applicable. They must meet all requirements for selection to the program, including arts and science courses if applicable. They must pay required T-VI fees, purchase school uniforms and other needed equipment, have current CPR certification and have a physical examination before admission. Entry will be granted on a space-available basis.

Course Descriptions

RTT 110 Respiratory Therapy Principles and Practices I 3 credit hours
(*Prerequisite: permission of program director; pre- or corequisite: BIO 136/139L; corequisites: RTT 115L, RTT 121C, RTT 131*) This course covers respiratory therapy as a health sciences profession. It also covers practices of basic respiratory care including cardiopulmonary assessment, medical gas administration, oxygen therapy, microbiology, infection control, equipment maintenance, incentive breathing exercises and chest physiotherapy.

RTT 111 Respiratory Therapy Principles and Practices II 3 credit hours
(*Prerequisites: BIO 136/139L, RTT 110, RTT 115L, RTT 121C, RTT 131; pre-or corequisite: CSCI 101; corequisites: RTT 116L, RTT 122C, RTT 133*) Additional theory of respiratory therapy procedures is presented with emphasis on positive pressure breathing treatments, airway management, pulmonary function testing, arterial puncture and blood gas analysis. The procedure of administering medicated aerosol therapy is taught.

RTT 112 Respiratory Therapy Principles and Practices III 3 credit hours
(*Prerequisites: BIO 136/139L, CSCI 101, RTT 111, RTT 116L, RTT 122C; corequisites: RTT 117L, RTT 123C, RTT 132*) Concepts and principles of critical care are introduced for treating patients with life-threatening diseases. Emphasis is on learning mechanical ventilatory support for neonatal, pediatric and adult patients. Concepts and theories of critical care medicine are introduced.

RTT 115L Respiratory Therapy Lab I 1 credit hour
(*Corequisites: RTT 110, RTT 121C, RTT 131*) Students practice basic respiratory care procedures learned in RTT 110, using state-of-the-art equipment in the learning laboratory under simulated patient situations.

RTT 116L Respiratory Therapy Lab II 1 credit hour
(*Corequisites: RTT 111, RTT 122C, RTT 133*) Students practice additional respiratory care procedures learned in RTT 111. Students use equipment in simulated patient situations.

RTT 117L Respiratory Therapy Lab III 1 credit hour
(*Corequisites: RTT 112, RTT 123C, RTT 132*) Students practice procedures learned in RTT 112. Advanced respiratory therapy procedures are simulated in lab sessions including extensive work with mechanical ventilation devices.

***RTT 121C Clinical Experiences I 5 credit hours**
(*Corequisites: RTT 110, RTT 115L, RTT 131*) Supervised clinical experiences in the hospital setting allow students to apply knowledge and skills learned in classroom and laboratory sessions. Students apply basic respiratory therapy skills in direct patient contact situations supervised by clinical faculty members.

***RTT 122C Clinical Experiences II 5 credit hours**
(*Corequisites: RTT 111, RTT 116L, RTT 133*) Supervised clinical experiences continue in area hospitals and health care facilities. Students also visit patients in the home setting.

***RTT 123C Clinical Experiences III 5 credit hours**
(*Corequisites: RTT 112, RTT 117L, RTT 132*) Supervised clinical experiences in the hospital, home care, transitional care and rehabilitation settings continue. More emphasis is placed on caring for patients in critical care settings with special concentration on maintaining life support systems.

RTT 131 Physics of Respiratory Therapy 3 credit hours
(*Corequisites: RTT 110, RTT 115L, RTT 121C*) Basic concepts of physics are covered relating to physiology of the lungs, gas laws, gas flow and mechanics of breathing. Concepts are applied to operation of respiratory therapy equipment. Basic math calculations are covered relating to respiratory physiology.

RTT 132 Cardiopulmonary Physiology 3 credit hours
(*Prerequisites: BIO 136/139L; corequisites: RTT 112, RTT 117L, RTT 123C*) More advanced knowledge of the physiologic processes of the circulatory, pulmonary, renal and nervous systems and their relationships to each other is emphasized. Basic principles of chemistry are covered as they relate to blood chemistry and blood gas analysis.

RTT 133 Pharmacology of Respiratory Therapy 3 credit hours
(Prerequisites: BIO 136/139L, RTT 110, RTT 115L, RTT 121C, RTT 131; corequisites: RTT 111, RTT 116L, RTT 122C) Concepts and principles of pharmacologic agents used in cardiopulmonary care are presented. Coursework includes study of biologic interactions, dosage calculations, side effects and indications for using drugs in cardiopulmonary diseases. Application to respiratory care, therapeutic and diagnostic procedures is covered. Ethical and legal issues of drugs in health care are covered.

*RTT 121C, RTT 122C, RTT 123C: During each term, students meet for formal lectures on the pathophysiology of the cardiopulmonary system. The lectures are given by the Respiratory Therapy Program's medical director, physicians from the UNM School of Medicine or other physicians in the community. Clinical pathologic disorders which require respiratory therapy diagnosis, treatment and care are covered. Students are required to develop written and verbal communication skills by completing case studies, article reviews and pathology reports. They must also present oral reports to the class and the medical director. Students develop interpersonal communication skills through patient interactions in the clinical settings. They must also develop appropriate interactive communication skills during physician rounds supervised by the program's medical director.

Respiratory Therapy

Associate of Science Degree
Main Campus
Summer Term

The Respiratory Therapy (RT) Program includes theory, laboratory and clinical coursework progressing from technician or entry level through the advanced practitioner level. The curriculum includes basic and advanced instruction in cardiorespiratory anatomy, physiology and pathophysiology. Coursework includes the study of critical care medicine, evaluation of cardiopulmonary function, respiratory home care, pulmonary rehabilitation and emphasis on developing problem-solving and decision-making skills for the advanced practitioner.

The program includes extensive instruction by faculty from the University of New Mexico Medical Center and School of Medicine. An associate of science degree is awarded in respiratory care upon completion of the therapist curriculum, which includes Arts & Sciences requirements.

The Respiratory Therapy Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Joint Review Committee for Respiratory Therapy Education (JRCRTE). Graduates of this program are eligible to take the National Board for Respiratory Care Certification and Registry examinations to obtain Certified Respiratory Therapy Technician (CRTT) and Registered Respiratory

Therapist (RRT) credentials. Successful completion of the certification exam qualifies individuals to become recognized as licensed Respiratory Care Practitioners (RCP) in New Mexico.

Orientation sessions for the Respiratory Therapy Program will be scheduled regularly; students should contact the Health Occupations Department for dates and times. Orientation sessions will include detailed information about the petitioning and selection process, program requirements and general information about respiratory care as a career including the physical demands of the job. *Anyone interested in the Respiratory Therapy program is strongly encouraged to attend one of these orientation sessions. In addition, it is strongly recommended that applicants review prerequisites and program requirements with the Health Occupations counselor.*

To be *eligible to enroll* in RT courses students must:

- ◆ Achieve a T-VI cumulative GPA of 2.0 or higher.
- ◆ Be a high school graduate or equivalent as stated on the T-VI application.
- ◆ Fulfill requirements in English, math, reading and science by qualifying scores on the ACT or SAT, or placement exams, or successful completion of 100-level courses or college course work.
- ◆ Provide documented evidence of completed respiratory therapy technology level courses and prerequisite arts and science courses. Courses completed in an approved respiratory care program will be applied toward the associate of science degree.

Students are responsible for meeting the eligibility requirements. Once all requirements are fulfilled, students may petition for enrollment in the core RT curriculum.

If the number of eligible students exceeds the number of positions available, preference will be given to those who have completed all required Arts & Sciences courses for the RT curriculum. If necessary, petitioners will be randomly selected.

Arts & Sciences courses listed in the curriculum may be taken prior to entering the program. It is highly recommended that students complete as many of the Arts & Sciences courses as possible prior to entering the RT core courses. *Priority for selection is based upon the number of required Arts & Sciences courses completed.*

Students selected to enroll in RT courses in the summer term must have a physical exam and submit a completed health form with evidence of current immunizations before beginning clinical courses.

Respiratory Therapy students pay a \$20 course fee when they begin the major courses. This covers the cost of the identification badges, parking fees and preventive tests in case of needle stick exposure. Students also pay a \$50 course fee when they begin their last clinical course to cover the cost of assessment exams to prepare for national board tests. Students keep their exams and scoring analyses for study after graduation. In addition, students are required to purchase their textbooks, have a current CPR certification, lab coats, a stethoscope, bandage scissors and a pre-entrance physical exam prior to the first clinical course. Students may purchase a graduation pin from the program upon completion of all coursework.

Students must earn a minimum grade of C or better in all courses to advance to the next term and graduate. A 2.0 GPA is required to graduate from the program.

Respiratory Therapy Program

Credit Hours

Technology Level

RTT	110	Respiratory Therapy Principles and Practices I	3
RTT	111	Respiratory Therapy Principles and Practices II	3
RTT	115L	Respiratory Therapy Lab I	1
RTT	116L	Respiratory Therapy Lab II	1
RTT	121C	Clinical Experiences I	5
RTT	122C	Clinical Experiences II	5
¹ RTT	131	Physics of Respiratory Therapy	3
RTT	133	Pharmacology of Respiratory Therapy	3

Therapy Level

RT	210	Advanced Respiratory Therapy I	3
RT	215L	Advanced Respiratory Therapy Lab I	1
RT	221C	Advanced Clinical Experiences I	4
RT	211	Advanced Respiratory Therapy II	3
RT	216L	Advanced Respiratory Therapy Lab II	1
RT	222C	Advanced Clinical Experiences II	4
RT	212	Advanced Respiratory Therapy III	3
RT	217L	Advanced Respiratory Therapy Lab III	1
RT	223C	Advanced Clinical Experiences III	4

Required Arts & Sciences Courses

² BIO	136	Human Anatomy & Physiology	1
² BIO	139L	Human Anatomy & Physiology Lab	3
CSCI	101	Computer Literacy	3-4
MATH	120	Intermediate Algebra	3-4
ENG	101	College Writing	3
CHEM	111	Introduction to Chemistry	3
CHEM	112L	Introduction to Chemistry Lab	1
PHIL	245M	Biomedical Ethics	3
BIO	239	Microbiology	3
BIO	239L	Microbiology Lab	1
Elective: PSY 105 or SOC 101			3

Total 75-77

¹A college physics course may be substituted for RTT 131.

²BIO 237/247L and BIO 238/248L may be substituted for BIO 136/139L.

Suggested order of coursework: In order to satisfy prerequisite and corequisite requirements along with RTT and RT courses, the following order of coursework is recommended:

Fall Term: RTT 110, RTT 115L, RTT 121C, RTT 131 and BIO 136/139L
 Spring Term: RTT 111, RTT 116L, RTT 122C and RTT 133, CSCI 101
 Summer Term: RT 210, RT 215L, RT 221C and MATH 120, ENG 101
 Fall Term: RT 211, RT 216L, RT 222C and CHEM 111/112L, PHIL 245M
 Spring Term: RT 212, RT 217L, RT 223C and BIO 239/239L, Elective

Respiratory Therapy Advanced Placement

There are two ways in which advanced placement can be granted to Respiratory Therapy applicants: transfer and challenge. Advanced placement means enrollment in RT coursework above the level of RT 210. Persons wanting to transfer or challenge RT courses should contact the Health Occupations Department.

Transfer: transfer credit for equivalent coursework completed at a regionally accredited technical-vocational school, college or university.

Transfer credit awarded for technician or therapist courses completed at other CAAHEP/JRCRTE accredited programs or for arts and science coursework from other institutions will be given when the T-VI Records Office receives official transcripts showing a grade of C or better on equivalent courses.

Challenge: Technology graduates with documented work experience in respiratory care may apply to challenge portions of the RT curriculum. There is a \$15 fee for each challenge exam.

Challenge and transfer applicants must submit transcripts of prior education and proof of high school graduation or GED. They must also meet all prerequisites for admission to the RT program including arts and science courses required for the associate of science degree in respiratory therapy. Entry will be granted on a space available basis.

Course Descriptions

RT 210 Advanced Respiratory Therapy I 3 credit hours
(Prerequisites: permission of program director, CSCI 101, RTT 111, RTT 116L, RTT 122C, RTT 133; corequisites: RT 215L, RT 221C; pre- or corequisites: MATH 120, ENG 101) The course presents an integrated study of cardiopulmonary assessment and diagnosis for the advanced practitioner. Correlation of cardiopulmonary anatomy, physiology and pathophysiology with evaluation of cardiac and pulmonary function is presented.

RT 211 Advanced Respiratory Therapy II 3 credit hours
(Prerequisites: RT 210, RT 215L, RT 221C; corequisites: RT 216L, RT 222C; pre- or corequisites: CHEM 111/112L, PHIL 245M) This course presents concepts of adult critical care medicine for the advanced practitioner. Topics cover adult intensive care and pathophysiology of diseases which require critical care medicine for adults.

RT 212 Advanced Respiratory Therapy III 3 credit hours
(Prerequisites: RT 211, RT 216L, RT 222C; pre- or corequisites: BIO 239/239L, elective; corequisites: RT 223C and RT 217L) This course presents concepts of critical care medicine for children and infants. An integrated study in the concepts of rehabilitative practice and home health care for patients with chronic cardiopulmonary diseases is provided.

RT 215L Advanced Respiratory Therapy Lab I 1 credit hour
(Corequisites: RT 210, RT 221C) Students are taught clinical assessment techniques, cardiopulmonary anatomy and physiology, pulmonary function testing and hemodynamic monitoring, using state-of-the-art equipment in the learning laboratory under patient simulated situations and using computer simulation programs. Instruction in advanced cardiac life support is provided.

RT 216L Advanced Respiratory Therapy Lab II 1 credit hour
(Corequisites: RT 211, RT 222C) Students practice mechanical ventilation procedures related to critical care medicine for adults. Activities include simulated patient situations using state-of-the-art equipment in the learning laboratory and the use of computer simulation programs.

RT 217L Advanced Respiratory Therapy Lab III 1 credit hour
(Corequisites: RT 212, RT 223C) Students practice mechanical ventilation procedures related to critical care medicine for children and infants. Activities include simulated patient situations using state-of-the-art equipment in the learning laboratory and the use of computer simulation programs.

***RT 221C Advanced Clinical Experiences I 4 credit hours**
(Corequisites: RT 210, RT 215L) Students are supervised in the applications of advanced respiratory care in clinical settings with emphasis on problem-solving and decision-making skills. Experiences include cardiopulmonary function and evaluation activities. Related activities correlate the cardiopulmonary system in health and disease.

***RT 222C Advanced Clinical Experiences II 4 credit hours**
(Corequisites: RT 211, RT 216L) Students are supervised in the clinical application of respiratory care in adult critical care environments. Emphasis is placed on development of problem-solving and decision-making skills, patient evaluation skills and the evaluation of therapeutic care plans.

***RT 223C Advanced Clinical Experiences III 4 credit hours**
(Corequisites: RT 212, RT 217L) Students are supervised in the clinical application of respiratory care in pediatric and neonatal critical care environments and for home health care and pulmonary rehabilitation. Additional experiences are provided in special clinical areas chosen by each student.

TECHNOLOGIES

The high-skilled, high-tech jobs of the 21st century will demand specialized entry-level training and skill upgrading, and the Technologies Department offers both, along with state-of-the-art equipment to support them. Programs in the Technologies Department are among the longest at the Institute. The time necessary to complete most of the Technologies programs varies from 16 to 24 months depending on the student's course load.

To enter Technologies courses, the student must meet the prerequisites of MATH 099 or equivalent, reading at a minimum of eighth-grade level and CP 176L or equivalent.

Students in Electronics Technology, Business Computer Programming Technology and Architectural/Engineering Drafting Technology may choose to complete an associate of applied science degree or a certificate. Students in Electronics Technology must choose one of the four options: Consumer Electronics/Communication, Digital Computer Networking, Laser Electro-Optics or Process Control (replaces Instrumentation and Control Technology). Students in Architectural/Engineering Drafting Technology must choose one of two options: Engineering or Housing.

Because the Technologies programs are in high demand, interested persons should apply as early as possible. **It is strongly recommended that all beginning students meet with the program academic advisor to plan an individual course of study and to review prerequisites.**

Electronics Engineering Technology courses are offered at the Montoya Campus only. The Business Computer Programming Technology program is offered at both campuses. Some courses are offered at the Rio Rancho/Intel Campus. Other Technologies programs are offered only at the Main Campus. There are beginning groups in most Technologies majors each term.

Some credit courses are offered in the evening; students should consult the current schedule of classes.

Challenge examinations are available for most courses numbered below 200. The cost is \$15 per examination.

RT Elective

RT 296 Special Topics in Respiratory Care 1-6 credit hours

(Prerequisite: permission of program director) Students participate in supervised learning activities of advanced, specialized practices. Areas of focus include rural health care, interdisciplinary problem-based learning, cardiopulmonary diagnostics, specialized perinatal/pediatric or adult critical care and expanded practices of Respiratory Care.

*RT 221C, RT 222C, and RT 223C: During each term, students meet for formal lectures on the pathophysiology of the cardiopulmonary system. These lectures are given by the program's medical director and physicians from the UNM School of Medicine or other physicians in the community. Clinical pathologic disorders which require respiratory therapy diagnosis, treatment and care are covered. Students are required to develop written and verbal communication skills by completing case studies, article reviews and pathology reports. They must also present oral reports to the class and the medical director. Students develop interpersonal communication skills through patient interactions in the clinical settings. They must also develop appropriate interactive communication skills during physician rounds supervised by the program's medical director.

A number of optional courses are available to enhance the education of those students meeting prerequisites. Optional courses and courses numbered 200 or above may not be offered every term and are subject to cancellation before the first day of the term due to insufficient enrollment; a minimum of 12 students is required.

Students enrolled in Technologies courses must purchase their textbooks; some courses have a fee. Students needing financial support should contact the Financial Aid Office.

Students working toward an associate degree or a certificate must earn a grade of C or better in each Technologies course. Credit/no credit is not a grading option except in Manufacturing Specialist.

Because of today's increased use of computers, graduates of 15-week or longer certificate and associate degree programs must have basic computer literacy. To receive a certificate or associate degree, students are required to demonstrate skills in keyboarding, hardware basics and word processing basics. Students may demonstrate these skills by completing a computer course or by passing a proficiency test available in the department computer laboratory. Tutorials and self-paced modules are also available.

Architectural/Engineering Drafting Technology

Associate of Applied Science Degree/
Certificate Program
Main Campus

Architectural/Engineering Drafting Technology offers career preparation for persons with a strong interest in building design and construction. Following a general preparation in architectural drafting, the student chooses either the Engineering or Housing option. Students in both options devote their final term to an intensive study of the A/E uses of computer-assisted drafting (CAD).

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

Graduates are prepared for entry-level jobs as architectural or engineering drafting technicians in residential and commercial construction, and for estimating and sales positions with contractors, fabricators and suppliers. The potential for advancement into jobs with increasing responsibility and wider scope is good.

To enter Architectural/Engineering Drafting Technology courses the student must meet the prerequisites of TECH 101 (Mathematics for Technologies), reading at a mini-

min of eighth-grade level, CP 176L or equivalent and ENG 100. If a student takes MATH 099 or TECH 101 it is recommended that he or she also take ART 260 and/or ENG 101.

ARDR 130 is not a required course and does not meet the requirements for ARDR 107L. ARDR 180, 181 and 182 cannot be substituted for ARDR 213 and ARDR 214L.

To receive an associate degree in Architectural/Engineering Drafting Technology a student must complete all required ARDR courses and the required Arts & Sciences courses. A grade of C or better in each ARDR course is required for either a certificate or degree. Students must purchase their own drafting tools.

It is strongly recommended that all beginning students meet with the program academic advisor to plan an individual course of study. Optional courses and courses numbered 200 or above may not be offered every term and are subject to cancellation before classes start due to insufficient enrollment. Optional courses are used to enhance the education of the student. These courses may be taken at any time when prerequisites are met.

Entry into a course without the prerequisite may be allowed with the permission of the academic advisor.

Architectural/Engineering Drafting Technology Program
Certificate and Degree Requirements

			<i>Credit Hours</i>
Term 1			
ARDR	107L	Architectural Drafting I	7
ARDR	108	Architectural Mathematics	4
*ARDR	109	Building Materials and Methods I	4
*ARDR	176	Orientation to the Construction Industry	2
Term 2			
ARDR	113	Site Analysis	2
ARDR	114	Specifications and Estimating	2
ARDR	115	Building Materials and Methods II	4
ARDR	119L	Architectural Drafting II	7
Subtotal			32
Required Courses Common to Both Options			
ARDR	213	CAD Analysis	4
ARDR	214L	Architectural CAD	6
ARDR	221	Architectural/Engineering Drafting Seminar	1
Subtotal			11

Engineering Option

ARDR	201	Structural Systems Analysis.....	4
ARDR	203L	Structural Systems Drafting	7
ARDR	204L	Civil Drafting	3
ARDR	212L	M/E Systems Drafting.....	5
ARDR	215	M/E Systems Analysis	6
ARDR	217	Project Management	3
Subtotal			28

Housing Option

ARDR	174	Housing	2
ARDR	206	Environmental Systems Analysis.....	3
or			
ARDR	275	Design Applications for Interiors	3
ARDR	209L	Architectural Design	5
ARDR	210L	Sketching and Rendering	5
ARDR	211	Housing Construction Analysis	4
ARDR	219	Housing Construction Management	3
ARDR	220L	Housing Drafting	7
Subtotal			29

*CP 176L is a prerequisite for this course!

Additional Courses Required for Certificate

BA	111	Communications (7.5 weeks).....	2
or			
ENG	101	College Writing	3
BA	131	Human Relations (7.5 weeks)	2
or			
PSY	105	Introduction to Psychology	3
Total Credits for Certificate			75-78

Additional Courses Required for Degree

ART	260	Architectural History: Ancient through Modern.....	3
COMM	221	Interpersonal Communications	3
or			
ENG	101	College Writing	
MATH	120	Intermediate Algebra	3
PHIL	245T	Ethics of Technology	3
or			
PSY	105	Introduction to Psychology	
PHYS	102	Introduction to Physics	3
Subtotal			15
Total Credits for Degree			86-87

Optional Courses

ARDR	130	Drafting Fundamentals	3
ARDR	175	General Contractor Preparation	3
ARDR	180	Fundamentals of Computer Assisted Drafting	3
ARDR	181	Intermediate Computer Assisted Drafting	3
ARDR	182	Advanced Computer Assisted Drafting	3
ARDR	183	Fundamentals of Microstation Computer Assisted Drafting	3
ARDR	184	Intermediate Microstation Computer Assisted Drafting	3
ARDR	261L	Construction Surveying	3
ARDR	295	CAD for Professional Drafters	5
ARDR	296	Topics	variable
ARDR	297	Special Problems	variable
ARDR	298	Internship	3
ARDR	299	Cooperative Education	3
CP	177L	Introduction to Computer Graphics	3
CP	178L	Computer Animation	3

Course Descriptions

ARDR 107L Architectural Drafting I **7 credit hours**
(Pre- or corequisites: ARDR 108, ARDR 109, ARDR 176) The fundamentals of architectural graphic representation are introduced as the foundation of all A/E drafting courses. Basic common assembly systems are explored and schedules are introduced. (3 theory + 12 lab hours a week) Course fee: \$15. Note: Students must provide their own drafting kit.

ARDR 108 Architectural Mathematics **4 credit hours**
(Prerequisite: TECH 101) Basic concepts of geometry and trigonometry are covered with an emphasis on architectural and engineering applications and calculator use. Students must provide a full function scientific calculator with a ten-digit display. (4 theory + 1 lab hours a week)

ARDR 109 Building Materials and Methods I **4 credit hours**
(Prerequisites: CP 176L, ENG 100 and TECH 101 or equivalent; corequisites: ARDR 108, ARDR 176) Basic common materials, systems and assemblies with wide applications in the building industry are examined. (4 theory + 1 lab hours a week)

ARDR 113 Site Analysis **2 credit hours**
(Prerequisites: ARDR 107L, ARDR 108, ARDR 109, ARDR 176) Analytical factors of site design are examined, such as orientation and view, sound and light intrusions, contours and grading, drainage and foliage. Planning aspects of site size are introduced. (1 theory + 4 lab hours a week)

ARDR 114 Specifications and Estimating **2 credit hours**
(Prerequisites: ARDR 107L, ARDR 108, ARDR 176; pre- or corequisites: ARDR 113, ARDR 115) The theory and structure of specifications, data systems and sources, testing and code referencing are introduced, providing a background for exercises in specification writing and analysis. Estimating systems, takeoffs, coordination of specifications with costing systems and bidding decisions are then covered. (2 theory + 1 lab hours a week)

ARDR 115 Building Materials and Methods II **4 credit hours**
(Prerequisites: ARDR 107L, ARDR 108, ARDR 109, ARDR 176) This course is a continuation of ARDR 109 with an intensified examination of interior and exterior finish materials and systems and an introduction to structural materials and systems. (4 theory + 1 lab hours a week)

ARDR 119L Architectural Drafting II **7 credit hours**
(Prerequisites: ARDR 107L, ARDR 108, ARDR 176; pre- or corequisite: ARDR 115) In this continuation of ARDR 107L, the student develops representative architectural working drawings using the appropriate conventions of graphic, dimensioning and notation systems. (3 theory + 12 lab hours a week) Course fee: \$15

ARDR 130 Drafting Fundamentals **3 credit hours**
This course covers the basics of technical drafting. (3 theory + 2 lab hours a week)
Course fee: \$15

ARDR 174 Housing **2 credit hours**
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L) Design considerations that affect housing forms are studied, including U.S. housing styles, site considerations and various arrangements of activity spaces. Drawings and models are made to show the effects of different spatial organizations. (1 theory + 3 lab hours a week)

ARDR 175 General Contractor Preparation **3 credit hours**
The class is designed for people interested in becoming general contractors in New Mexico. Licensing requirements, rules and regulations, business and law, the Uniform Building Code, construction methods and contract management are covered. (2 theory + 3 lab hours a week)

ARDR 176 Orientation to the Construction Industry **2 credit hours**
(Prerequisites: CP 176L, ENG 100 or equivalent) Students are introduced to the industry and the variety of jobs available. Topics include the construction environment, the related disciplines of architects, engineers, landscape architects, interior designers, contractors, suppliers, insurers and other consultants, and the drawings typical of each discipline. (1 theory + 3 lab hours a week)

ARDR 180 Fundamentals of Computer Assisted Drafting 3 credit hours
(Prerequisite: CP 176L) This course introduces the student to the fundamentals of computer assisted drafting using AutoCAD. (2 theory + 3 lab hours a week) Course fee: \$15

ARDR 181 Intermediate Computer Assisted Drafting 3 credit hours
(Prerequisite: ARDR 180) Topics covered include customized menu making, attribute editing and extracting, and the drawing of isometrics using AutoCAD. (2 theory + 3 lab hours a week) Course fee: \$15

ARDR 182 Advanced Computer Assisted Drafting 3 credit hours
(Prerequisite: ARDR 181) This course is an introduction to three-dimensional CAD modeling using AutoCAD to enhance graphic representation and visualization. (2 theory + 3 lab hours a week) Course fee: \$15

ARDR 183 Fundamentals of Microstation CAD 3 credit hours
(Prerequisite: CP 176L) The student is introduced to the fundamentals of computer assisted drafting using Intergraph's Microstation CAD. (2 theory + 3 lab hours a week) Course fee: \$15.00

ARDR 184 Intermediate Microstation CAD 3 credit hours
(Prerequisite: ARDR 183) This course continues the study of Intergraph's Microstation software. Topics covered include user interface development and introduction to three-dimensional design. (2 theory + 3 lab hours a week) Course fee: \$15.00

ARDR 201 Structural Systems Analysis 4 credit hours
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L; corequisite: ARDR 203L) The basic principles of physics as they apply to construction and structural analysis are covered. Students are introduced to structural design in wood, steel and concrete. Students learn to set up and solve elementary beam design problems. (3 theory + 3 lab hours a week)

ARDR 203L Structural Systems Drafting 7 credit hours
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L; corequisite: ARDR 201) Students are introduced to the conventions of structural drafting. They develop representative drawings of pre-cast and site-cast concrete, structural steel and heavy timber structures. Development of graphic skills in a variety of media is emphasized. Non-mathematical concepts of building structures and methods of construction are covered. (3 theory + 12 lab hours a week) Course fee: \$15

ARDR 204L Civil Drafting I 3 credit hours
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L) This course provides an introduction to the concepts and practice of civil drafting as they relate to architecture, including an exploration of contours, grading, cut and fill, cross sections, boundaries and subdivisions. (1 theory + 5 lab hours a week)

- ARDR 206 Environmental Systems Analysis 3 credit hours**
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L) Students explore current energy conservation techniques, including passive solar design. Concepts of comfort zones, building orientation, heat transfer, thermal mass and overall energy efficiency calculations are introduced. (2 theory + 3 lab hours a week)
- ARDR 209L Architectural Design 5 credit hours**
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L; Pre or corequisite: ARDR 174) The student executes two- and three-dimensional abstract exercises that teach basic design concepts. These concepts are applied to various built environment circumstances. Sketch drawings and study models are made to develop and explain design concepts in specific applications. (3 theory + 6 lab hours a week) Course fee: \$15
- ARDR 210L Sketching and Rendering 5 credit hours**
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L) Students make various drawings to develop perception, awareness of their environment and freehand drawing skills. Students explore basic forms, perspective, still life and figure drawing as applications of drafting problems. Large-scale drawings are executed in a variety of black and white media. Techniques of rendering and illustration are explored. Students work with perspective drawings in color media. (3 theory + 6 lab hours a week) Course fee: \$15
- ARDR 211 Housing Construction Analysis 4 credit hours**
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L) This course provides an application of previous building materials and methods concepts to housing of all kinds including an investigation of local and regional materials and practices. (3 theory + 3 lab hours a week)
- ARDR 212L M/E Systems Drafting 5 credit hours**
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L; corequisite: ARDR 215) The student receives instruction in conventional drafting methods of mechanical and electrical systems including overlaying electrical, heating, ventilation and plumbing systems on architectural views. Engineering drawings are developed and engineering graphic skills are emphasized. (3 theory + 6 lab hours a week) Course fee: \$15
- ARDR 213 CAD Analysis 4 credit hours**
(Prerequisite: completion of Engineering or Housing option; corequisite: ARDR 214L) This course covers beginning to advanced CAD concepts and commands as they apply to the production and coordination of A/E working drawings. (1 theory + 9 lab hours a week)
- ARDR 214L Architectural CAD 6 credit hours**
(Prerequisite: completion of Engineering or Housing option; corequisite: ARDR 213) The student develops representative working drawings using CAD software commonly employed in the A/E industry. (2 theory + 12 lab hours a week) Course fee: \$15

- ARDR 215 M/E Systems Analysis 6 credit hours**
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L; corequisite: ARDR 212L)
 General theory and layout information and code requirements for non-residential systems are studied. Topics include lighting, plumbing and air conditioning. (4 theory + 6 lab hours a week)
- ARDR 217 Project Management 3 credit hours**
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L; pre- or corequisite: ARDR 215) The student is introduced to the skills required to manage a building project. Topics include contracts, fees, bidding, scheduling and drawing coordination. (2 theory + 3 lab hours a week)
- ARDR 219 Housing Construction Management 3 credit hours**
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L; pre- or corequisite: ARDR 211) This course covers basic management systems required for effective project planning and scheduling; cost estimating, budgeting and cost control accounting; quality assurance; materials management; and the interrelationships among them. (2 theory + 3 lab hours a week)
- ARDR 220L Housing Drafting 7 credit hours**
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L; pre- or corequisites: ARDR 211) Students develop architectural working drawings for a variety of housing types. (3 theory + 12 lab hours a week) Course fee: \$15
- ARDR 221 Architectural/Engineering Drafting Seminar 1 credit hour**
(Prerequisite: completion of Engineering or Housing option; pre- or corequisites: ARDR 213, ARDR 214L) The student develops a resume and presents a cumulative portfolio to a review committee. Needs, requirements, personnel procedures, and expectations of employers and trends of the professional community are examined. (1 theory + 1 lab hour a week)
- ARDR 261L Construction Surveying 3 credit hours**
(Pre- or corequisite: ARDR 204L or permission of academic advisor) The student is introduced to the basic techniques and equipment used in surveying including tape, level and theodolite. Note-keeping methods are emphasized. Field work and related computations cover leveling, distance and angle measurement and traversing related to mapping. (1 theory + 6 lab hours a week)
- ARDR 275 Design Applications for Interiors 3 credit hours**
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L; pre- or corequisites: ARDR 174, ARDR 209L) This course provides an introduction to basic color systems and psychology, light and lighting, space planning, code applications of finish selections, fabrics and furniture styles.

ARDR 295 CAD for Professional Drafters 5 credit hours
(Prerequisite: CP 176L and completion of a postsecondary architectural drafting program or permission of the academic advisor) This class assumes professional drafter's skills and knowledge. The course covers CAD concepts and skills from a beginner's level to an advanced level. Course fee: \$15

ARDR 296 Topics variable credit hours
(Prerequisite: permission of the academic advisor) Topics offered depend on requests from the community and available instructors.

ARDR 297 Special Problems variable credit hours
(Prerequisites: ARDR 113, ARDR 114, ARDR 115, ARDR 119L and permission of the academic advisor) The student and instructor define a specific problem in the area of the student's interest and directly related to the program. The student then develops and executes a solution using analytical and drafting techniques appropriate to the problem. An oral presentation may be required.

ARDR 298 Internship 3 credit hours
(Prerequisite: permission of the academic advisor) In cooperation with local industry, the student works for one term on a cooperative basis in an appropriate, defined training program. The position held by the student is not a paid position.

ARDR 299 Cooperative Education 3 credit hours
(Prerequisite: permission of the academic advisor) In cooperation with local industry, the student works for one term on a cooperative basis in an appropriate, defined training program. The position held by the student is a paid position.

TECH 101 Mathematics for Technologies 4 credit hours
(Prerequisite: Math 099 or equivalent) Basic concepts of mathematics including introductory algebra, ratio and proportion, unit conversions, logarithms, scientific notation and calculator usage are covered as a preparation for Technologies applied mathematics courses. (4 theory hours + 1 lab hour a week)

Business Computer Programming Technology

Associate of Applied Science Degree/
Certificate Program
Main and Montoya Campuses

In this program, students learn to solve information and management problems using computer hardware and software. Graduates are prepared for jobs as entry-level business applications programmers, which can be the first step to a career in the computer programming field.

Computers currently used at T-VI are the IBM ES-9000 and AS400 and IBM microcomputers and compatible. Mainframe, mini- and microcomputers and local area networks are used in Business Computer Programming Technology courses.

Courses numbered below 200 give students a sound background in fundamental skills used on a wide variety of computers and computer-related equipment. Courses numbered above 200 continue to build computer application skills with emphasis on problem solving techniques and the interaction between people and machines/computers/technology. A mainframe environment is used to teach three widely used business programming languages while three additional languages are taught on microcomputers. Optional courses also are available.

Students entering Computer Programming Technology courses must satisfy the prerequisites of TECH 101, Mathematics for Technologies, and reading at a minimum of eighth grade level. If a student takes MATH 099 or TECH 101, it is recommended that the student also take the computer programming course from the Developmental Studies Department and CP 176L before taking courses within the major.

A grade of C or better in each Business Computer Programming course is required for a certificate or Associate Degree.

Some courses require a supply fee at the beginning of the term, and students purchase their own textbooks.

It is strongly recommended that all beginning students meet with the program academic advisor to plan an individual course of study.

Optional courses and courses numbered 200 or above may not be offered every term and are subject to cancellation before classes start due to insufficient enrollment. Some advanced courses may be offered at only the Main Campus or at the Montoya Campus but not both. Optional courses may not be used to replace technical electives.

Entry into a course without prerequisite classes may be allowed with the permission of the academic advisor.

Business Computer Programming Technology

Certificate Requirements

			<i>Credit Hours</i>
CP	103	Mathematics for Computer Programmers	4
CP	104	Data Processing Accounting I	4
CP	105	Fundamentals of Computer Programming	6
+CP	101A	ANSI COBOL	3
		and	
+CP	101B	ANSI COBOL	3
		or	
+CP	101L	ANSI COBOL	6
CP	115	Internal Storage and File Structure	3
CP	116	Business Systems Analysis	3
CP	214L	RPG III/400 Programming	3
CP	272L	C Language Programming	3
CP	283	Introduction to Computer Networks	3
		or	
ELEC	218	Computer Networking	3
CP	213	Database Programming and Concepts	3
Required elective courses			21
Subtotal			59

Required Elective Courses[#]

+CP	111A	Advanced ANSI COBOL	3
		and	
+CP	111B	Advanced ANSI COBOL	3
		or	
+CP	111L	Advanced ANSI COBOL	6
CP	201L	Interactive Programming Techniques	3
CP	202L	Assembler Language Programming	6
CP	216L	Computer Operating Systems	3
CP	217L	Personal Computer Assembler Language	3
CP	218	Introduction to Client/Server Technology	3
CP	274L	Introduction to the UNIX Operating System	3
CP	278	Advanced C Language Programming	3
CP	280L	Advanced RPG II/400	3

Additional Certificate Requirements

BA	111	Communications (7.5 weeks)	2
		or	
ENG	101	College Writing	3
BA	131	Human Relations (7.5 weeks)	2
		or	

PSY	105	Introduction to Psychology	3
Total Credits for Certificate			63-65

*Students may take either the A and B courses or the L course. To be given credit for the entire course, both the A and B courses must be passed with a C or better.

Associate of Applied Science Degree Requirements

ENG	101	College Writing.....	3
ENG	119	Technical Communications	3
MATH	150	Advanced Algebra	3
or			
MATH	180	Elements of Calculus I	3
MATH	145	Fundamentals of Probability and Statistics	3
Humanities Elective			3
Social Science Elective			3
Subtotal			18

Total Credits for Degree 77

Recommended Arts & Sciences Electives

COMM	221	Interpersonal Communication Studies	3
PHIL	156	Logic and Critical Thinking	3
PSY	105	Introduction to Psychology	3
MATH	180	Elements of Calculus I	3

Optional Courses*

CP	174L	BASIC Language Programming	3
CP	175L	C Language Programming	3
CP	176L	Introduction to Microcomputers	3
or			
CSCI	101	Computer Literacy	3
CP	177L	Introduction to Computer Graphics.....	3
CP	178L	Computer Animation	3
CP	276	ADA Language Programming.....	3
CP	279L	Advanced BASIC Language Programming	3
CP	281L	C++ Language Programming	3
CP	284L	Introduction to Visual Basic	3
CP	296	Topics	variable
CP	297	Special Problems	variable
CP	298	Internship	3
CP	299	Cooperative Education	3
GIS	201	Introduction to Geographic Information Systems	3

GIS	202	Geographic Information Systems Software Applications I.....	3
GIS	203	Geographic Information Systems Software Applications II	3

*Optional courses are used to enhance the education of the student. These courses may be taken at any time when prerequisites are met.

Course Descriptions

CP 101A ANSI COBOL 3 credit hours
(Prerequisite: CP 105 or permission of academic advisor) Elementary structured programming projects directly related to business and accounting applications are designed, coded, debugged and executed. (2 theory + 3 lab hours a week) Course fee: \$10

CP 101B ANSI COBOL 3 credit hours
(Prerequisite: CP 101A) This course is a continuation of CP 101A. More advanced, structured programming projects are designed, coded, debugged and executed. (2 theory + 3 lab hours a week)

CP 101L ANSI COBOL 6 credit hours
(Prerequisite: CP 105) Students are required to write structured programming projects directly related to business and accounting applications. The projects are designed, coded, debugged and executed using a mainframe computer system. (4 theory + 6 lab hours a week) Course fee: \$10

CP 103 Mathematics for Computer Programmers 4 credit hours
(Prerequisite: TECH 101) Algebra fundamentals are covered in this course along with selected applications in business and management math. BASIC language programming is used to program some of the applications. (4 theory + 1 lab hours a week)

CP 104 Data Processing Accounting I 4 credit hours
(Prerequisite: TECH 101) Students are introduced to accounting theory, practice and terms and to their relation to business computer programming. (4 theory + 1 lab hours a week)

CP 105 Fundamentals of Computer Programming 6 credit hours
(Prerequisite: RDG 099 or equivalent, CP 176L) This course includes computer vocabulary, operating system concepts, structured programming techniques, programming logic and control using BASIC. (4 theory + 6 lab hours a week) Course fee: \$10

CP 111A Advanced ANSI COBOL 3 credit hours
(Prerequisite: CP 101L) This course continues the development of structured programming skills developed in CP 101L with emphasis on indexed file processing. (2 theory + 3 lab hours a week) Course fee: \$10

- CP 178L Computer Animation 3 credit hours**
(Prerequisite: CP 177L) Extensive instruction in the use of sophisticated computer graphics software involving modeling, rendering, morphing, animation, texture mapping and image processing leads to the production of a VHS taped final project. Certification as an Alias software user is awarded. Additional lab participation hours outside of the class meeting time are required. (2 theory + 3 lab hours a week)
- CP 201L Interactive Programming Technique 3 credit hours**
(Prerequisites: CP 111L, CP 115) Students develop interactive business applications on the IBM mainframe in the VSE environment. Command level CICS and VSAM file structures are used in teaching the special requirements of interactive processing. (2 theory + 3 lab hours a week)
- CP 202L Assembler Language Programming 6 credit hours**
(Prerequisites: CP 105, CP 115) Techniques necessary to write Assembler language programs are introduced on an IBM mainframe. (4 theory + 6 lab hours a week)
- CP 213 Database Programming and Concepts 3 credit hours**
(Prerequisite: CP 111L or permission of academic advisor) General concepts and organization of database systems are included along with practical application of database management systems through the use of networks, telecommunication lines, hardware and a database programming language. Microcomputers are used. (2 theory + 3 lab hours a week) Course fee: \$10
- CP 214L Report Program Generator III/400 3 credit hours**
(Prerequisites: CP 105, CP 103) Students are introduced to the RPG III/400 programming language used in business organizations. Students become familiar with the basic coding parameters and code a variety of business functions. (2 theory + 3 lab hours a week)
- CP 216L Microcomputer Operating Systems 3 credit hours**
(Prerequisite: CP 202L) This course covers topics designed to increase understanding of the use of microcomputers. It includes the study of operating systems and macro assembler programming. (2 theory + 3 lab hours a week) Course fee: \$10
- CP 217L Personal Computer Assembler Language 3 credit hours**
(Prerequisite: CP 202L) This course introduces the student to Assembler language programming using the microcomputer. (2 theory + 3 lab hours a week) Course fee: \$10
- CP 218 Introduction to Client/Server Technology 3 credit hours**
(Prerequisite: CP 116 or permission of academic advisor) The student is introduced to the concepts of client/server technology. (2 theory + 3 lab hours a week)
- CP 272L C Language Programming 3 credit hours**
(Prerequisite: CP 105, CP 101L or permission of academic advisor) An introduction to

C language using microcomputers is the focus of this course. It is assumed that students know the principles of structured computer program planning and programming. (2 theory + 3 lab hours a week) Course fee: \$10

CP 274L Introduction to the Unix Operating System 3 credit hours
(Prerequisite: CP 115 or permission from the academic advisor) Basic commands, mail, inter-terminal communication, the file system, redirected I/O, pipes and shell programming are covered. (2 theory + 3 lab hours a week) Course fee: \$10

CP 276 ADA Language Programming 3 credit hours
(Prerequisite: CP 111L or permission of the academic advisor or work experience as a computer programmer) This is an introductory course in ADA language programming. (2 theory + 3 lab hours a week) Course fee: \$10

CP 278 Advanced C Language Programming 3 credit hours
(Prerequisite: CP 272L or permission of the academic advisor) A continuation of CP 272L, this class assumes considerable programming experience. Students write programs working with data structures such as stacks, linked lists, binary search trees and self-balancing trees. (2 theory + 3 lab hours a week) Course fee: \$10

CP 279L Advanced BASIC Language Programming 3 credit hours
(Prerequisite: CP 105) Emphasis is on interactive programming, menu selection, search and retrieval routines and binary functions. (2 theory + 3 lab hours a week) Course fee: \$10

CP 280L Advanced RPG III/400 3 credit hours
(Prerequisite: CP 214L) This course is a continuation of CP 214L with emphasis on file processing and interactive techniques. (2 theory + 3 lab hours a week) Course fee: \$10

CP 281L C++ Language Programming 3 credit hours
(Prerequisite: CP 272 or permission of the academic advisor) Programming principles of the computer language C++ are covered. This is an advanced programming class. (2 theory + 3 lab hours a week) Course fee: \$10

CP 283 Introduction to Computer Networks 3 credit hours
(Prerequisite: CP 176L or permission of the academic advisor) This course covers hardware, software and the concepts used in various networking schemes including token ring, Novell, Starlan and others. (2 theory + 3 lab hours a week)

CP 284 Introduction to Visual Basic 3 credit hours
(Prerequisite: CP 105 or permission of academic advisor) Students are introduced to the capabilities of the development environment, and common programming techniques required to create simple, useful applications. (2 theory + 3 lab hours a week)

Design Drafting Engineering Technology

Associate of Applied Science Degree
Main Campus

Design Drafting Engineering Technology is a complex field for persons with a strong interest in electronics and/or mechanical design. The program places a heavy emphasis on mechanical design.

The program integrates the concepts of mathematics and science into the technical courses. The use of computer-assisted design drafting (CADD) is emphasized and applied throughout the program.

A well-rounded curriculum enables graduates to seek employment with engineering and scientific research or manufacturing organizations. Modern drafting stations, drafting machines and other typical drafting equipment are used along with microcomputers. Students are encouraged to join the T-VI chapter of the Society of Manufacturing Engineers (SME) and attend local SME seminars.

A grade of C or better in each design drafting course is required for a degree. Students must buy their own textbooks, drafting tools and a full function scientific calculator.

It is strongly recommended that all beginning students meet with the program academic advisor to plan an individual course of study. Optional courses and courses numbered 200 or above may not be offered every term and are subject to cancellation before classes start due to insufficient enrollment. Entry into a course without prerequisites may be allowed with the permission of the academic advisor.

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

Design Drafting Engineering Technology Program

			<i>Credit Hours</i>
DDET	101	Introduction to Engineering Technology	1
DDET	102L	Manufacturing Methods	3
*MATT	173	Machine Tool Technology Skills	3
DDET	106L	Basic CADD	3
DDET	111L	Mechanical Detailing	3
DDET	114L	Structured Computer Programming	3
DDET	115L	Intermediate CADD	3
DDET	116L	Basic Electronic Drafting	3
DDET	201L	Descriptive Geometry	3
DDET	205L	Machine Design	4
DDET	206L	Jig and Fixture Design	4
DDET	211L	Electromechanical Drafting	3
DDET	212	Applied Engineering Mechanics	3

DDET	214L	Materials Science	4
DDET	215L	Technical Computer Applications	3
DDET	216L	Dimensional Metrology	4
Subtotal			49

* Trades & Service Occupations Department course

Required Arts & Sciences Courses

ENG	101	College Writing	3
ENG	119	Technical Communications	3
Humanities/Social Science Elective			3
MATH	121	College Algebra	3
or			
MATH	150	Advanced Algebra	4
MATH	162	Calculus I	4
or			
MATH	180	Elements of Calculus	3
MATH	123	Trigonometry	2
PHYS	151/153L	General Physics I/Lab	4
PHYS	152/154I	Physics II/Lab	4
or			
CHEM	121/121L	General Chemistry I/Lab	4
Subtotal			26-27

Total Credits for Degree 76-78

Optional Courses[#]

DDET	104L	Introduction to Technical Drafting	4
DDET	280	Introduction to Quality Assurance	3
DDET	281	Statistical Controls	3
DDET	282	Computer Applications for Quality Assurance	3
DDET	283	Coordinate Measurement Machines	3
DDET	284	Geometric Dimensioning and Tolerancing	3
DDET	285	ASQC Certification Preparation	3
DDET	291	Special Projects in CADD	3
DDET	296	Topics	variable
DDET	297	Special Problems	variable
DDET	298	Internship	3
DDET	299	Cooperative Education	3
WELD	170	Welding Skills Improvement	3

[#]Optional courses are used to enhance the education of the student. These courses may be taken at any time when prerequisites are met.

Course Descriptions

- DDET 101 Introduction to Engineering Technology 1 credit hour**
This is a required course for all Design Drafting Engineering students and should be completed in the first term. This exploratory course exposes students to the field of engineering technology. Major topics include study skills, library skills, curriculum and career expectations and college survival skills.
- DDET 102L Manufacturing Methods 3 credit hours**
(Pre- or corequisite: ENG 101) The student is introduced to manufacturing methods unique to modern industrial technology including machining, fabrication, hot and cold metal working processes, assembly operations and quality assurance. Properties of materials as affected by various manufacturing processes are introduced. (3 theory + 1 lab hours a week)
- DDET 104L Introduction to Technical Drafting 4 credit hours**
(Prerequisite: MATH 120 or ACT math score of 26 or equivalent) This is an introduction to fundamental drafting techniques including care and use of drafting equipment, lettering, sketching, linework, scaling and geometric construction. (3 theory + 3 lab hours a week)
- DDET 106L Basic CADD 3 credit hours**
(Corequisite: DDET 104L or permission of academic advisor) Microcomputer CADD hardware and software are introduced including format and execution of basic command verbs, creation, editing and saving of drawing files, and generation of hard-copy output. (2 theory + 3 lab hours a week) Course fee: \$15
- DDET 111L Mechanical Detailing 3 credit hours**
(Prerequisite: DDET 104L) This course introduces the student to the development of detail drawings including layout, view selection, notation, dimensioning, Y-14.5 tolerancing and revisions of mechanical parts. (2 theory + 3 lab hours a week)
- DDET 114L Structured Computer Programming 3 credit hours**
(Prerequisite: MATH 120) Beginning computer programming using engineering applications is the focus of this course. (2 theory + 3 lab hours a week) Course fee: \$15
- DDET 115L Intermediate CADD 3 credit hours**
(Prerequisite: DDET 106L; corequisite: DDET 111L) The student continues use of CADD software in an applied situation. Advanced drawings include insertions, layering, auto-dimensioning and constructing library files. (2 theory + 3 lab hours a week) Course fee: \$15
- DDET 116L Basic Electronic Drafting 3 credit hours**
(Prerequisite: DDET 104L) This course presents electronic drafting fundamentals including symbolic representation of electronic components and devices, block and con-

nection diagramming, cable drawings and circuit schematics. Basic electronics theory and mathematics applications are included. (2 theory + 3 lab hours a week)

DDET 201L Descriptive Geometry 3 credit hours
(Prerequisite: MATH 121 or MATH 150) A graphical analysis of the relationship between points, lines and planes in space is presented. Advanced applications of trigonometry to dynamic mechanisms and point locations are covered. (2 theory + 3 lab hours a week)

DDET 205L Machine Design Layout 4 credit hours
(Prerequisites: DDET 105L, DDET 111L, DDET 115L; corequisite: DDET 201L or MATH 123) Students apply machine design principles including fixed and removable fastening techniques, dimensioning and tolerancing for assembly; relational functions of bearings, gears, cams, belts, pulleys and shafts; and parts list development. Force vectors and stress and strain are introduced. Layout formats, part searches and material specifications are made for each design. (3 theory + 3 lab hours a week)

DDET 206L Jig and Fixture Design 4 credit hours
(Prerequisite: DDET 205L) This design course centers around the science of three-dimensional location, clamping and holding of work for machining and assembly. Cams, levers, screwlocks, air and hydraulic devices are covered. Time evaluation and accuracy are included; time and motion considerations and datum planes are taught. (3 theory + 3 lab hours a week)

DDET 211L Electromechanical Drafting 3 credit hours
(Prerequisite: DDET 205L) This course involves the study, experimentation, design and drafting of electromechanical devices and systems. Principal components of hydraulic, pneumatic drive systems and control devices are covered in a hands-on laboratory. A major design project is required. (1 theory + 5 lab hours a week)

DDET 212 Applied Engineering Mechanics 3 credit hours
(Prerequisite: MATH 123, DDET 201L) Analyzing the forces on mechanical elements at rest and in motion is the focus of this course. The study of statics and complex forces on materials is also included. (4 theory hours + 1 lab hour a week)

DDET 214L Materials Science 4 credit hours
(Prerequisite: DDET 201L or MATH 123 and ENG 119) Students analyze and evaluate the engineering characteristics of materials used in modern manufacturing technology in typical applications. Mechanical, physical and chemical properties are included. A comprehensive research paper is required. (3 theory + 3 lab hours a week)

DDET 215L Technical Computer Applications 3 credit hours
(Prerequisite: DDET 115L) Students use the computer to solve engineering and related problems. (2 theory + 3 lab hours a week)

DDET 297 Special Problems **variable credit hours**
(Prerequisite: enrolled only in 200 level technical courses and/or permission of the program academic advisor) The student and instructor define a specific problem in the area of the student's interest and directly related to the program. The student then develops and executes a solution using analytical and drafting techniques appropriate to the problem. An oral presentation may be required.

DDET 298 Internship **3 credit hours**
(Prerequisite: permission of the academic advisor) In cooperation with local industry, the student works for one term on a cooperative basis in an appropriate training program. The position is not paid.

DDET 299 Cooperative Education **3 credit hours**
(Prerequisite: permission of the academic advisor) In cooperation with local industry, the student works for one term on a cooperative basis in an appropriate training program. The position is paid.

Electronics Engineering Technology

Associate of Applied Science Degree
Montoya Campus

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

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

T-VI laboratory facilities contain modern equipment for testing, troubleshooting, calibrating, analyzing and designing electronic circuits. Such circuits may be found in communications equipment, computers, electronic instruments and many other electronic devices.

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

It is strongly recommended that all beginning students meet with the program academic advisor to plan an individual course of study. Technical elective courses and courses numbered 200 or above may not be offered every term and are subject to cancellation before classes start due to insufficient enrollment.

Pre- or corequisites for each of the Engineering Technology courses may be waived

by the academic advisor for a student who has related experience and/or course work. Credit for an EET course may be given if an official transcript from another institution indicating an equivalent course is approved by the academic advisor and department dean. Credit for an EET course may be given by passing a challenge exam. A grade of C or better in each EET course is required for a degree.

Students in this program are required to purchase all textbooks, laboratory manuals, calculator and drafting tool kit.

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

Electronics Engineering Technology Course Offerings by Term

EET	107L	109L	113L	117L	119L	207L	208L	209L	218L	219L
FALL	X	X				X	X	X	X	X
SPRING	X	X	X	X	X				X	X
SUMMER			X	X	X	X	X	X		

Electronics Engineering Technology Program

		<i>Credit Hours</i>
EET	107L Graphics and Analytical Methods	3
EET	109L Circuit Analysis I	5
EET	113L Structured Computer Programming	3
EET	117L Digital Electronics I	3
EET	119L Circuit Analysis II	5
EET	207L Digital Electronics II	3
EET	208L Microprocessors	4
EET	209L Electronic Devices	5
EET	218L Microprocessor Interfacing	3
EET	219L Electronic Systems	5
Technical Elective		3
Subtotal		42

Required Arts & Sciences Courses

CHEM	111/112L Introduction to Chemistry/Lab	4
	or	
CHEM	121/121L General Chemistry/Lab	4
ENG	101 College Writing	3
ENG	119 Technical Communications	3
Humanities/Social Science Elective		3
MATH	121 College Algebra	3
	or	
MATH	150 Advanced Algebra	4

MATH	123	Trigonometry or Trigonometry Proficiency Test	2
MATH	162	Calculus I	4
	or		
MATH	180	Elements of Calculus I	3
PHYS	151/153L	Physics I/Lab	4
	or		
PHYS	160/163L	General Physics I/Lab	5
		Subtotal	25-28
		Total Credits for Degree	67-70

Technical Electives

EET	296	Topics	variable
EET	297	Special Problems	variable
EET	298	Internship	3
EET	299	Cooperative Education	3
PC	201	Electromechanical Systems	3

Any advanced course offered by the Technologies Department or any physical science or computer science course or mathematics course above that which is required.

Course Descriptions

EET 107L Graphics and Analytical Methods 3 credit hours
(Pre- or corequisite: MATH 150 or MATH 121) Mechanical and electronic drafting methods, including schematic preparation, printed circuit layout, chassis definition and wiring, are studied. Lab time is devoted to the development of skills and techniques required to prepare drawings. In addition, students gain experience in word processing, spreadsheet preparation, graphics, data base preparation and CAD. (2 theory + 3 lab hours a week) Course fee: \$15

EET 109L Circuit Analysis I 5 credit hours
(Pre- or corequisites: ENG 101, EET 107L, MATH 150 or MATH 121) Passive DC circuits are analyzed using Ohm's Law, Kirchhoff's Laws, source conversions, network theorems and branch/mesh/nodal analysis. Transient analysis of R-C and R-L circuits is presented along with concepts of energy, power and efficiency. Computers are used for spreadsheet preparation, graphics and word processing. (3 theory + 5 lab hours a week)

EET 113L Structured Computer Programming 3 credit hours
(Prerequisite: MATH 121 or MATH 150) This is a course in beginning computer programming using engineering applications. (2 theory + 2 lab hours a week) Course fee: \$15

EET 117L Digital Electronics I 3 credit hours
(Prerequisite: EET 109L) Combinational logic and integrated circuits are analyzed and designed using Boolean algebra, Karnaugh maps and logic diagrams. Number systems, binary codes and code conversions are studied along with flip flops, multivibrators and circuit applications. Lab work emphasizes wiring and troubleshooting skill development while confirming circuit design objectives. (3 theory + 1 lab hours a week)

EET 119L Circuit Analysis II 5 credit hours
(Prerequisite: EET 109L; pre- or corequisites: ENG 119, MATH 123, MATH 162 or MATH 180) Passive AC circuits with dependent and independent sources are studied along with network theorems, phasor analysis, AC measurements, power factor analysis/correction, sweep generation usage and Fourier series. Computers are used for spreadsheet preparation, graphics, word processing and CAD. (3 theory + 5 lab hours a week)

EET 207L Digital Electronics II 3 credit hours
(Prerequisite: EET 117L) Logic circuit decoders, encoders, multiplexers, counters and registers are studied along with ADCs, DACs, RAM, ROM and applications. (3 theory + 1 lab hours a week)

EET 208L Microprocessors 4 credit hours
(Prerequisite: EET 113L; pre- or corequisite: EET 207L) Microprocessors and microcomputers are studied in depth with emphasis on machine and assembly language programming. Interrupts and DOS entry points are introduced. (3 theory + 3 lab hours a week)

EET 209L Electronic Devices 5 credit hours
(Pre- or corequisite: EET 119L) Diodes, bipolar transistors, FETs and circuits including rectifiers, zener diode regulators, clippers, clampers and amplifiers are studied. Transistor modeling and circuit analysis/design are stressed along with computer use for circuit analysis, spreadsheet preparation, graphics and word processing. (3 theory + 5 lab hours a week)

EET 218L Microprocessor Interfacing 3 credit hours
(Prerequisites: EET 208L, EET 209L) I/O devices including printers, terminals and proto board circuits are interfaced to a microcomputer. Each student makes an oral presentation and prepares documentation describing system operation and organization along with block diagrams, schematics and structured software. (2 theory + 2 lab hours a week)

EET 219L Electronic Systems 5 credit hours
(Prerequisite: EET 209L) Electronic system schematics are studied along with frequency considerations, decibel usage, differential and operational amplifiers, power supplies, thyristors, PLLs, oscillators and feedback concepts. Each student prepares a technical manual for a computer-controlled system. Video monitor basics and introductory transmission line theory are presented. Computers are used for instrument control and data logging. (3 theory + 5 lab hours a week)

Laboratory facilities contain modern equipment for testing, troubleshooting, calibrating, analyzing and designing electronic systems. Such systems include communications equipment, computers, electronic instruments and electromechanical equipment.

Students entering Electronics Technology courses must meet the prerequisites of TECH 101 (Mathematics for Technologies) and reading at a minimum of eighth-grade level. **CP 176L or equivalent is also required before taking 200-level courses.** If a student takes MATH 099 or TECH 101, it is recommended that he or she also take the electronics course from the Developmental Studies Department, CP 176L and an English course before taking courses within the major.

A grade of C or better in each electronics course is required for a degree or certificate. **It is strongly recommended that all beginning students meet with the program academic advisor to plan an individual course of study.** Optional courses and courses numbered 200 or above may not be offered every term and are subject to cancellation before classes start due to insufficient enrollment. Entry into a course without the prerequisite may be allowed with the permission of the academic advisor.

Electronics Technology Program

Certificate and Degree Core Requirements

		<i>Credit Hours</i>
+ELEC	103A	Electronics Fundamentals 4
	and	
+ELEC	103B	Electronics Fundamentals 4
	or	
ELEC	103L	Electronics Fundamentals 8
ELEC	104	Technical Mathematics 5
ELEC	105L	Digital Circuits 4
ELEC	111L	Introduction to Photonics 4
+ELEC	114A	Semiconductor Devices 3
	and	
+ELEC	114B	Semiconductor Devices 4
	or	
ELEC	114L	Semiconductor Devices 7
+ELEC	118A	Electromechanical Devices 3
	and	
+ELEC	118B	Electromechanical Devices 3
	or	
ELEC	118L	Electromechanical Devices 6
+ELEC	203A	Introduction to Microprocessors 3
	and	
+ELEC	203B	Introduction to Microprocessors 3
	or	
ELEC	203L	Introduction to Microprocessors 6
ELEC	205L	Analog Circuits 6

ELEC	214L	Troubleshooting Techniques	3
		Subtotal	49

*The student must pass both the A and B courses with a C or better in order to be given credit for the entire course.

Special Concentration Options for Certificate or Degree

Consumer Electronics/Communication

CEC	201	RF/Modulation	3
ELEC	216	Consumer Electronics	6
ELEC	217	Computer Repair	3
ELEC	218	Computer Networking	3
		Technical Elective	3

Digital Computer Networking

CEC	201	RF/Modulation	3
DIG	211	System Fabrication	3
DIG	212	Electronic System Applications	6
DIG	215	Advanced Digital Processes	6

Laser Electro-Optics

LEOT	205L	Introduction to Laser Systems	4
LEOT	206	Optics	6
LEOT	217L	Advanced Laser Systems with Applications	6
PC	212L	Vacuum Systems	2

Process Control

PC	201	Electromechanical Systems	3
PC	202	Process Control	6
PC	211	Power RF	2
PC	212L	Vacuum Systems	2
PC	213L	Control Circuits with Applications	6
		or	
SMT	201	Semiconductor Manufacturing Techniques I	3
		and	
SMT	211	Semiconductor Manufacturing Techniques II	3

Additional Certificate Requirements

BA	111	Communications (7.5 weeks)	2
		or	
ENG	101	College Writing	3

BA	131	Human Relations (7.5 weeks)	2
	or		
PSY	105	Introduction to Psychology	3
Total Credits for Certificate			71–74

Additional Degree Requirements

ENG	119	Technical Communications	3
CHEM	111/112L	Introduction to Chemistry/Lab	4
	or		
CHEM	121/121L	General Chemistry/Lab	4
Humanities/Social Science Elective			3
MATH	162	Calculus I	4
	or		
MATH	180	Elements of Calculus I	3
PHYS	151/153L	Physics I/Lab	4
	or		
PHYS	160	General Physics	4
Total Credits for Degree			84–86

Optional Courses[#]

CP	175L	C Language Programming	3
CP	177L	Introduction to Computer Graphics	3
CP	178L	Computer Animation	3
CP	274L	Introduction to the Unix Operating System	3
DDET	105L	Basic Machine Tool	2
ELEC	276L	Soldering Techniques (7.5 weeks)	2
ELEC	278	Modern Technological Advances	3
ELEC	279	Electronic Refresher	3
ELEC	280	Introduction to Quality Control	3
ELEC	282	Pulse Power	3
ELEC	296	Topics	variable
ELEC	297	Special Problems	variable
ELEC	298	Internship	3
ELEC	299	Cooperative Education	3
FS	203	Hazardous Materials	3

[#]Optional courses are used to enhance the education of the student. These courses may be taken at any time when prerequisites are met.

Course Descriptions

CEC 201 RF/Modulation 3 credit hours
(Corequisite: ELEC 205L) This course is an introduction to radio frequency communication theory, circuits and problems. Topics include electromagnetic interference, ana-

log modulation/demodulation techniques, transmission lines, and antennas. (2 theory + 3 lab hours a week)

DIG 211 System Fabrication 3 credit hours
(*Recommended corequisite: ELEC 203L*) Students study microcomputer architecture from a systems approach. They assemble and troubleshoot their own microcontroller, modem and Ethernet interface. Offered summer and fall terms only. (2 theory + 3 lab hours a week) Course fee: \$30

DIG 212 Electronic System Applications 6 credit hours
(*Prerequisite: ELEC 205L*) This course covers analog methods, signal conditioning, noise reduction and filtering techniques. Transducer theory, application, limitations and interfacing methods are presented. Offered fall and spring terms only. (4 theory + 6 lab hours a week)

DIG 215L Advanced Digital Processes 6 credit hours
(*Prerequisite: ELEC 203L, DIG 211*) This is a systems approach to PC architecture, custom configuration and I/O. Students configure, construct, maintain and troubleshoot networks in Unix and MS-DOS environments. The students use the network for data acquisition, remote I/O and PLC programming. Offered fall and spring terms only. (4 theory + 6 lab hours a week)

ELEC 103A Electronics Fundamentals 4 credit hours
(*Recommended corequisite: ELEC 104 or strong mathematics background or permission of academic advisor*) The basic concepts of DC electronics with emphasis on Ohm's Law, Kirchhoff's Law, circuit analysis and component application with troubleshooting are covered. Through laboratory exercises students obtain skills in constructing circuits from schematic diagrams and in the use of multimeters. (3 theory + 3 lab hours a week) Course fee: \$15

ELEC 103B Electronics Fundamentals 4 credit hours
(*Prerequisite: ELEC 103A*) This course covers the basic concepts of AC electronics with emphasis on Ohm's Law, Kirchhoff's Law, circuit analysis and component application. Through laboratory exercises students obtain skills in constructing, analyzing and troubleshooting AC circuits with the use of multimeters, oscilloscopes and function generators. (3 theory + 3 lab hours a week)

ELEC 103L Electronics Fundamentals 8 credit hours
(*Recommended corequisite: ELEC 104 or strong mathematics background*) The basic concepts of DC and AC electronics with emphasis on Kirchhoff's Law, circuit analysis and component application with troubleshooting are covered. Students obtain skills in the use of oscilloscopes, function generators and multimeters in laboratory exercises and in constructing circuits from schematic diagrams. (5 theory + 9 lab hours a week) Course fee: \$15

matics, vacuum, AC and DC motors, stepper motors and servomechanisms. Students obtain skills in the assembly, operation and troubleshooting of small-scale electromechanical systems. (4 theory + 6 lab hours a week)

ELEC 203A Introduction to Microprocessors 3 credit hours
(Prerequisite: ELEC 118L, CP 176L) This course covers the organization of a micro-computer using the 8088 CPU, memory and I/O devices. Programs are written in Assembly language and in a higher level language to drive the PC's serial I/O, parallel printer port and disk drives. (2 theory + 3 lab hours a week)

ELEC 203B Introduction to Microprocessors 3 credit hours
(Prerequisite: ELEC 203A) The students build individual buffered interfaces that connect with the PC's I/O backplane for their custom I/O applications. (2 theory + 3 lab hours a week)

ELEC 203L Introduction to Microprocessors 6 credit hours
(Prerequisite: ELEC 118L, CP 176L) The course centers on the 8088 microprocessor in an MS-DOS environment. Programs are written in Assembly language and in a higher level language to drive the PC's serial, I/O, parallel printer port and disk drives. The students build individual buffered interfaces that connect with the PC's I/O backplane for their custom I/O applications. (4 theory + 6 lab hours a week)

ELEC 205L Analog Circuits 6 credit hours
(Prerequisite: ELEC 114L, ELEC 118L) Circuitry involved in an analog system is covered. Discrete transistor circuits and classes of operation are studied. Signal generation and active filters using operational amplifiers are presented. Fundamentals of modulation and demodulation are also covered. (4 theory + 6 lab hours a week)

ELEC 214L Troubleshooting Techniques 3 credit hours
(Prerequisite: ELEC 205L or equivalent) Students apply troubleshooting techniques to a complete electronic system. Emphasis is on systematic analysis to locate problems. (2 theory + 3 lab hours a week)

ELEC 216 Consumer Electronics 6 credit hours
(Prerequisite: ELEC 205L or permission of academic advisor) This course is a study of televisions, video camcorders and video recording methods and equipment with an emphasis on alignment, troubleshooting and repair. (4 theory + 6 lab hours a week)

ELEC 217 Computer Repair 3 credit hours
(Prerequisite: CP 176L and ELEC 114L or permission of academic advisor) Basic aspects of computer repair, troubleshooting techniques with and without software, modifications and replacement are covered. The course emphasizes microcomputers and related hardware. (2 theory + 3 lab hours a week) Course fee: \$15

ELEC 218 Computer Networking 3 credit hours
(Prerequisite: ELEC 203L, CP 176L) A study of encoding schemes and protocols in-

the student works for one term on a cooperative basis in an appropriate training program. The position held by the student is paid.

LEOT 205L Introduction to Laser Systems 4 credit hours
(Prerequisite: ELEC 111L) The theory and operation of solid-state and gas lasers are studied. Continuous wave and pulsed systems are discussed. Laboratory exercises provide hands-on operation of various types of lasers. Offered fall term. (4 theory + 1 lab hours a week)

LEOT 206 Optics 6 credit hours
(Prerequisite: ELEC 111L) Lenses and optical systems are studied from the standpoints of geometric and wave optics. Laboratory experiments are performed. Offered fall term. (4 theory + 6 lab hours a week)

LEOT 217L Advanced Laser Systems with Applications 6 credit hours
(Prerequisite: LEOT 205L) The applications of laser systems to industry are covered. Students write a technical paper on their area of interest. Calibration techniques, interferometry and Q-switching are examples of laboratory exercises performed. Offered spring term. (4 theory + 6 lab hours a week)

PC 201 Electromechanical Systems 3 credit hours
(Prerequisites: ELEC 114L, ELEC 118L) This course uses electromechanical systems donated by local industries to expose students to equipment schematics, maintenance procedures and troubleshooting techniques. Students practice preventive and corrective maintenance procedures. (2 theory + 3 lab hours a week)

PC 202 Process Control 6 credit hours
(Prerequisites: ELEC 203L, ELEC 205L) This course covers the fundamentals of process control, PLCs, microcontrollers and sensor technology. Also included are projects involving serial digital communication, PALs, interrupts, force sensors, photonic sensors and temperature sensors. Offered fall and spring terms. (4 theory + 6 lab hours a week) Course fee: \$20

PC 211 Power RF (7.5 weeks) 2 credit hours
(Corequisite: PC 201) RF energy and its applications in manufacturing industries are studied. Topics include plasma physics, RF applications, safety, RF generators, transmission lines and RF interference. (2 theory + 3 lab hours a week)

PC 212L Vacuum Systems (7.5 weeks) 2 credit hours
(Corequisite: PC 201) This is a study of vacuum technology and vacuum systems. Topics include gas laws and properties, operation and applications of vacuum pumps, gauges and valves and systems leak detection. (2 theory + 3 lab hours a week)

PC 213L Control Circuits with Applications 6 credit hours
(Prerequisites: ELEC 203L, ELEC 205L) Topics include robotics, high level applica-

tions programming and transducer/computer interfacing projects. The PUMA industrial robot with VAL II control language, robot safety, a three-wheel intelligent robot and the Rhino robot are used. A systems project is designed and constructed by the student. Offered spring and summer terms. (4 theory + 6 lab hours a week) Course fee: \$30

SMT 201 Semiconductor Manufacturing Technology I 3 credit hours
(Prerequisite: *ELEC 103L and ELEC 105L*; Recommended prerequisite: *CHEM 111/112L or CHEM 121/121L*) Students study several processes, materials and equipment used in semiconductor manufacturing. The areas of study are wafer preparation, contamination control, oxidation, diffusion, and thin films. (2 theory + 3 lab hours a week)

SMT 211 Semiconductor Manufacturing Technology II 3 credit hours
(Prerequisite: *SMT 201*) Students continue to explore processes, materials and equipment used in semiconductor manufacturing. The areas of study are ion implantation, photolithography and etch. (2 theory + 3 lab hours a week)

TECH 101 Mathematics for Technologies 4 credit hours
(Prerequisite: *MATH 099 or equivalent*) Basic concepts of mathematics including introductory algebra, ratio and proportion, unit conversions, logarithms, scientific notation and calculator usage are covered as a preparation for Technologies applied mathematics courses. (4 theory hours + 1 lab hour a week)

Manufacturing Skills

Certificate Program
Main Campus

The Manufacturing Skills Program prepares students for entry-level positions in the manufacturing and production industry by presenting the philosophy, knowledge and skills required. This program also allows students to upgrade their skills for better job opportunities.

This is an open-entry, open-exit program that requires approximately two terms of instruction. Laboratory hours provide flexible scheduling for employed and unemployed students.

This eight-credit program is self-paced with the assistance of a qualified instructor. The program consists of 20 modules, each with criteria for successful completion. The curriculum is divided into three parts: general skills, mechanical skills and electronic skills.

Upon completion of this program, the graduate has the skills necessary for electronic and mechanical assembly, problem solving and preventive maintenance procedures. In addition, the graduate is able to inspect work for quality and to work safely in an effort to prevent damage to self and product.

For successful completion of this program, a demonstrated 80% competency or B grade is required for each module. Students demonstrating a competency of 98% on any module receive a grade of A on the module. Letter grades are given on the proficiency certificate issued upon completion of the program. Students register for this program using the grading system of CR/NC. In order to graduate from the program, the student must complete all 20 modules and complete the application for graduation.

This program requires an average of 400 hours for completion. Any student requiring more than 400 hours is evaluated for progress at 350 hours. To complete the program within the two-term maximum, the student is required to work on the modules in and out of class. At the end of each term, the student is given a grade of PR to indicate progress and required to register for the course a second time.

Students must demonstrate a math skill equivalent to or exceeding MATH 099 offered in the Department of Developmental Studies as a prerequisite for the program. If a student takes MATH 099, it is recommended that he or she also take the Developmental Studies electronics course.

Students pay a one-time \$25 course fee.

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

MSP 101L Manufacturing Skills Program 8 credit hours
(Prerequisite: MATH 099 or equivalent) This is a self-paced laboratory course covering each topic listed below. (2 theory + 18 lab hours a week) Course fee; \$25

Manufacturing Skills Modules

General Skills

- Industrial Safety
- Hazardous Materials
- Quality Assurance
- Computer Literacy
- Problem Solving

Mechanical Skills

- Hand and Power Tools
- Mechanical Components
- Torque
- Tap and Die
- Measurement Devices
- Blueprint Reading
- Fluid Systems Components
- Mechanical Project

Electronic Skills

- Electronic Components and Basic Electronic Theory
- Basic Electricity
- ESD Hardware Handling
- Soldering Fabrication and Inspection
- Cable and Harness Assembly
- Wire Wrap
- Electronic Project

Manufacturing Technology*

Associate of Applied Science Degree/
Certificate Program
Main Campus

The Manufacturing Technology program, offering both certificate and associate degree options, provides students with a broad base of skills in analog and digital electronics along with a communication and science background. The program offers concentrations in Semiconductor Manufacturing, Ceramics Manufacturing, Plastics Manufacturing, General Manufacturing and Facilities Maintenance, one of which a student must complete along with core courses for an associate degree.

Training is provided in the fundamental concepts of electronics and mechanical components. Circuits which have application in the semiconductor, digital equipment manufacturing, and measurement and control industries are covered.

Laboratory facilities containing modern equipment for testing, troubleshooting, calibrating, analyzing and designing electronic systems are used in the Semiconductor concentration. Such systems include computers, electronic instruments and electromechanical equipment.

Students entering Manufacturing Technology courses must meet the prerequisites for the program in which the course is offered. If a student takes MATH 099 or TECH 101, it is recommended that he or she also take the electronics course from the Developmental Studies Department, CP 176L and an English course before taking courses within the major.

A grade of C or better in each course is required for a degree or certificate. **It is strongly recommended that all beginning students meet with the program academic advisor to plan an individual course of study.** Optional courses and courses numbered 200 or above may not be offered every term and are subject to cancellation before classes start due to insufficient enrollment. Entry into a course without the prerequisite may be allowed with the permission of the academic advisor.

Manufacturing Technology Program

Certificate and Degree Prerequisites

			<i>Credit Hours</i>
CP	176L	Introduction to Microcomputers	3
ELEC	104	Electronics Math	5
		or	
MATH	120	Intermediate Algebra	4
		Reading 10th Grade Level	

* Pending approval of Commission on Higher Education; students should consult academic advisor.

Certificate in Semiconductor Manufacturing

Required Courses

CHEM	121/121L	General Chemistry I	4
DDET	281	Statistical Controls	3
ELEC	103L	Electronics Fundamentals	8
ELEC	105L	Digital Circuits	4
ELEC	118L	Electromechanical Devices	6
ENG	101	College Writing	3
MATH	121	College Algebra	3
SMT	201	Semiconductor Manufacturing Technology I	3
Communication Elective*			3
Total			37

Degree Core Requirements

CHEM	121/121L	General Chemistry I	4
CHEM	122/122L	General Chemistry II	4
DDET	281	Statistical Controls	3
ELEC	103L	Electronics Fundamentals	8
ELEC	105L	Digital Circuits	4
ELEC	114L	Semiconductor Devices	6
ELEC	118L	Electromechanical Devices	6
ENG	101	College Writing	3
ENG	119	Technical Communications	3
MATH	121	College Algebra	3
PC	201	Electromechanical Systems	3
PC	212L	Vacuum Systems	2
PHYS	151/153L	Physics I with Lab	4
Technical Elective+			3
Communication Electives*			6
Humanities or Social Science Elective			3
Subtotal			65

Semiconductor Manufacturing Concentration

PC	211	Power RF	2
SMT	201	Semiconductor Manufacturing Technology I	3
SMT	211	Semiconductor Manufacturing Technology II	3
Subtotal			8

Plastics Manufacturing Concentration

MTMS	201	Introduction to Materials Science	3
MTMS	203	Introduction to Polymeric Materials	3
MTMS	211	Introduction to Composite Materials	3
Subtotal			9

Ceramic Manufacturing Concentration

MTMS	201	Introduction to Materials Science	3
MTMS	202	Introduction to Ceramic Materials	3
MTMS	212	Introduction to Electronic Materials	3
		Subtotal	9

General Manufacturing Concentration

PC	202	Process Control	6
MATT	173	Machine Tool Technology Skills Improvement	3
		Subtotal	9

Facilities Maintenance Concentration

ACHR	118/118L	Electromechanical Principles	4
ACHR	119/119L	Intermediate Service Procedures	4
ACHR	207/207L	Advanced Service Procedures	4
ACHR	208/208L	Advanced Applications	4
ELTR	212/213L	PLC Theory and Installation	6
ELTR	202	Commercial Blueprint Reading II	3
PLMB	102/102L	Plumbing Systems	3
		Subtotal	28

Total Required for Associate Degree 73–74

*Communication Electives

COMM	221	Interpersonal Communication Studies	3
COMM	223	Introduction to Nonverbal Communication Studies	3
COMM	225	Small-Group Communication Studies	3
COMM	232	Business and Professional Communication Studies	3
COMM	240	Organizational Communication Studies	3
COMM	290	Gender Communication Studies	3
COMM	291	Intercultural Communication Studies	3

+Technologies Electives

CP	175L	C Language Programming	3
DDET	280	Introduction to Quality Assurance	3
ELEC	111L	Introduction to Photonics	4
ELEC	203L	Introduction to Microprocessors	6
ELEC	205L	Analog Circuits	6
ELEC	214L	Troubleshooting Techniques	3

ELEC	276L	Soldering Techniques (7.5 weeks)	2
ELEC	296	Topics	variable
ELEC	297	Special Problems	variable
ELEC	298	Internship	3
ELEC	299	Cooperative Education	3
PC	202	Process Control	6
Materials Courses			3
Vendor-specific Courses			variable

Course Descriptions

For course descriptions for ELEC courses see Electronic Technology.

For course descriptions for DDET courses see Design Drafting Engineering Technology.

For course descriptions for CP courses see Business Computer Programming Technology.

For course descriptions for PC courses see Electronics Technology.

For the remaining courses see the Trades & Service Occupations and Arts & Sciences course descriptions.

MTMS 201 Introduction to Materials Science 3 credit hours
(Prerequisite: CHEM 121/121L) The structure and properties of solid materials are introduced. The mechanical, chemical and thermal properties of the materials are emphasized along with their microstructure and the methods of processing. Metallic materials are studied in some detail with a brief introduction to ceramic, polymeric and composite materials.

MTMS 202 Introduction to Ceramic Materials 3 credit hours
(Prerequisite: MTMS 201) The basic concepts of ceramic science are covered, including ceramic classification and structures; processing from raw materials to finished products; analysis and testing of physical, mechanical and chemical properties; and the commercial applications of ceramics such as porcelain, glass and refractories.

MTMS 203 Introduction to Polymeric Materials 3 credit hours
(Prerequisite: MTMS 201) The basic concepts of polymer science are covered, including polymer classification and structures; polymerization reactions; processing of polymers and fabrication of polymeric products; analysis and testing of physical, mechanical and chemical properties; and applications of commercial polymers such as plastics, elastomers, fibers and adhesives.

MTMS 211 Introduction to Composite Materials 3 credit hours
(Prerequisite: MTMS 201) The basic concepts of composite materials are covered, including material classification and structures; reinforcing and matrix materials; mechanisms of strengthening; fabrication of composite materials including laminated materials; analysis and testing of physical, mechanical and chemical properties; and applications of commercial composites such as fiberglass, concrete, wood, carbon fiber composites, kevlar, etc.

MTMS 212 Introduction to Electronic Materials 3 credit hours
(Prerequisite: MTMS 201) The electrical, magnetic and optical properties of conductor, semiconductor and dielectric (insulating) materials are covered, including atomic phenomena which govern electronic properties; structure and processing of discrete passive devices such as resistors, capacitors, inductors and transformers; as well as the theory of semiconductors with emphasis on structure and processing of active devices. A brief introduction to superconducting materials is included.

TRADES & SERVICE OCCUPATIONS

The Trades & Service Occupations Department prepares individuals for a variety of technical and service jobs. The department offers certificates and degrees that prepare individuals for entry-level positions, for job advancement and for skill upgrading. Training includes classroom and hands-on training in technical, industrial and service occupations. Most classes meet on the Main Campus in classrooms and indoor and outdoor lab spaces.

Students are encouraged to participate in Vocational Industrial Clubs of America (VICA), the student organization. VICA activities and programs are an integral part of the curriculum.

Cooperative education allows students who have acquired most of the skills and attitudes needed to succeed in an entry-level job to work for pay. A written agreement with specific objectives is signed by the student, T-VI and the employer. The cooperative education option may not qualify students for financial aid.

Students must provide their own personal protective equipment (hard hat and safety glasses or goggles) and lab clothes which are appropriate and comply with Trades & Service Occupations Department and/or Occupational Safety and Health Act (OSHA) standards. Hard hats must meet ANSI Standard Z89.1-1969. Safety glasses or goggles must meet ANSI Standard Z87.1-1979. Students are trained to OSHA safety standards for their respective area. Any students who habitually endanger themselves or others may be suspended from T-VI.

Most Trades & Service Occupations programs require that students be in good physical condition and be free of allergies or health conditions that could endanger themselves or others. A valid driver's license and drug screening are required by most employers.

The department's certificate programs do not require students to take the T-VI placement test. Students enrolled in Trades certificate programs who wish to enroll in courses

offered by other departments must take the T-VI placement test and meet pre- and corequisites.

All occupational courses must be passed with a minimum grade of C to qualify for graduation.

Apprenticeship Programs

Note: Students enrolled in these programs may not qualify for financial aid or Veterans' Administration benefits.

Commercial Carpentry Apprenticeship

Main Campus

The Commercial Carpentry Apprenticeship for persons currently employed in the industry is offered in conjunction with the Rio Grande Chapter of Associated Builders and Contractors Inc. (ABC).

The program provides related classroom instruction.

There is a T-VI registration fee each term. Students must purchase textbooks and instructional materials through the local ABC chapter.

CCAP 198 Commercial Carpentry Apprenticeship 40 credit hours
(Prerequisite: current full-time employment in the carpentry industry or department approval) This course consists of 600 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.

Culinary Apprenticeship

Main Campus

The Culinary Apprenticeship is offered for persons currently employed full-time in the food service industry.

The three-year program stresses safety, sanitation and work ethics. Classroom instruction results in certified cook skill levels. Beginning students are admitted each term as space permits.

There is a T-VI registration fee each term. Students must purchase a textbook and instructional materials through the American Culinary Federation Rio Grande Valley Chapter.

CUAP 198 Culinary Apprenticeship 36 credit hours
(Prerequisite: current full-time employment in the food service industry or department approval) This course includes 400 hours of theory taught at T-VI. Theory covers culinary history, food decorating, food management and front-of-the-house techniques. A comprehensive written and practical final exam is administered in conjunction with the American Culinary Federation.

Electrical Trades Apprenticeship

Main Campus

The Electrical Trades Apprenticeship, for persons currently employed full-time in the electrical industry, is offered in conjunction with the Independent Electrical Contractors (IEC).

The program provides related classroom instruction.

There is a T-VI registration fee each term. Students must purchase books and instructional materials through the IEC office.

ETAP 198 Electrical Trades Apprenticeship 40 credit hours
(Prerequisite: current full-time employment in the electrical trades industry or department approval) This course consists of 600 hours of related classroom instruction covering safety, electrical theory, blueprint reading and layout, National Electrical Code interpretation, tool usage and motor controls.

Fire Sprinkler Apprenticeship

Main Campus

The Fire Sprinkler Apprenticeship is offered for persons currently employed in the fire sprinkler field. The program provides related classroom instruction. Beginning students are admitted each term as space permits.

There is a T-VI registration fee each term. Students must purchase books and instructional materials through the New Mexico chapter of the American Fire Sprinkler Association.

FSAP 198 Fire Sprinkler Apprenticeship 40 credit hours
(Prerequisite: current full-time employment in the fire sprinkler or related industry or department approval) This course consists of 600 hours of classroom instruction, including sprinkler drawings, NFPA codes and standards, hydraulic calculations, wet/dry/pre-action/deluge systems applications, hazard classification inspections and design.

Plumbing Apprenticeship

Main Campus

The Plumbing Apprenticeship, for persons currently employed full-time in the mechanical trades (plumbing) industry, is offered in conjunction with the Rio Grande Chapter of Associated Builders and Contractors Inc. (ABC).

The four-year program combines on-the-job experience with classroom instruction and provides the opportunity for qualified participants to become journeymen.

There is a T-VI registration fee each term. Students must purchase textbooks and instructional materials through the local ABC chapter.

PLAP 198 Plumbing Apprenticeship 40 credit hours
(Prerequisite: current full-time employment in the plumbing industry) This course consists of 600 hours of classroom instruction covering safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation.

Sheet Metal Apprenticeship

Main Campus

The Sheet Metal Apprenticeship, for persons currently employed full-time in the sheet metal industry, is offered in conjunction with the Rio Grande Chapter of Associated Builders and Contractors Inc. (ABC).

The program provides related classroom instruction.

There is a \$20 registration fee each term. Students must purchase textbooks and instructional materials through the local ABC chapter.

SMAP 198 Sheet Metal Apprenticeship 40 credit hours
(Prerequisite: current full-time employment in the sheet metal industry or department approval) This course consists of 600 hours of related classroom instruction. Instruction covers safety, shop and trade math, sheet metal processes for shop machinery, triangulation lay-out, radial line layout, parallel line layout, blueprint reading and Sheet Metal and Air Conditioning National Assn. (SMACNA) manuals.

Elective Courses

At least 15 students must sign up and instructional space and budget must be available before an elective course can be offered. As a result, elective courses may be canceled because of budget or low enrollment. Most are offered only at the Main Campus. Descriptions for most elective courses are included in their respective programs.

			<i>Credit Hours</i>
ACHR	171L	Basic Refrigeration Maintenance	3
ACHR	172L	Basic Air Conditioning, Heating and Refrigeration	3
ACHR	173L	Commercial Refrigeration	3
AUTC	170	Transportation Trades Machining	3
AUTC	172	Air Care Inspector	1
AUTC	173	Air Care Mechanic.....	2
#BA	256	Job Search Skills.....	2
*BT	173L	Introduction to Remodeling	3
*BT	174L	Basic Remodeling	3
*BT	175L	Intermediate Remodeling.....	3
*BT	176L	Advanced Remodeling	3
*BT	177L	Metal Framing	3
CARP	170	Carpentry Fundamentals and Cabinetmaking.....	3
CARP	171	Construction Trades Blueprint/Math.....	3
CJ	170	Physical Fitness	1
CJ	171	Physical Fitness II	1
CMPR	170	Basic Commercial Printing Skills Improvement	3
CMPR	171	Desktop Publishing on the Mac.....	3
ELTR	170	Electrical Wiring Circuitry	2
ELTR	171L	Conduit Hand Bending Fundamentals	1
ELTR	172L	Pole Climbing	1
ELTR	173	Industrial Motor Control Circuitry	2
ELTR	174L	Industrial PC Motor Control	3
ELTR	175	Fiber Optical Cable Installation	2
ELTR	176	Electrical Journeyman Preparation	3
FSMG	170L	Computers in Food Service	3
MATT	171	Precision Measurement.....	3
MATT	173	Machine Tool Technology Skills	3
MATT	174	Advanced Machine Tool Technology Skills	3
PLMB	170	Mechanical Trades Math	1
PLMB	171	Journeyman Preparation	3
PLMB	173L	Orbital Automated Welding Systems	4
PLMB	174L	Polyvinylidene Fluoride (PVDF) Welding Systems	4
SCSE	170L	Small Engine Skills Improvement I	3
SCSE	171L	Small Engine Skills Improvement II.....	3
SCSE	296	Special Topics	1-6

TRDR	170	Commercial Driver's License	2
TRDR	171	Material Handling	2
TRDR	172	Material Packaging	2
VICA	174	Introduction to Professional Development	1
VICA	175	Leadership	1
VICA	176	Career Planning	1
VICA	177	Employment Skills	1
VICA	178	Civic Responsibility	1
VICA	179	Continuous Quality Improvement	1
WELD	170	Welding Skills Improvement.....	3
WELD	171	Advanced Welding Skills Improvement	3

Business Occupations course

* Students must supply personal safety equipment and hand tools.

Course Descriptions

BT 173L Introduction to Remodeling 3 credit hours

This course introduces the student to hand and power tools and the safety measures associated with their use. OSHA regulations and job site safety are emphasized. Basic structural and framing principles and techniques are provided. (1 theory + 5 lab hours a week)

BT 174L Basic Remodeling 3 credit hours

Instruction in job site safety, OSHA regulations and construction techniques for remodeling and additions to existing building is provided. Associated building materials and installation methods are introduced. (1 theory + 5 lab hours a week)

BT 175L Intermediate Remodeling 3 credit hours

This course provides instruction in the code and permit process involved with building remodel. Personal safety and OSHA regulations are stressed. The technology to analyze existing conditions and information related to basic structural, electrical and plumbing repairs is provided. (1 theory + 5 lab hours a week)

BT 176L Advanced Remodeling 3 credit hours

Job safety in compliance with OSHA guidelines is stressed. Construction techniques associated with on-site work are demonstrated. Preliminary drawings and sketches, estimating, scheduling and inspections are emphasized. (1 theory + 5 lab hours a week)

BT 177L Metal Framing 3 credit hours

(Prerequisite: CARP 103 or department approval) Commercial and residential construction design, Uniform Building Code requirements and erection of metal buildings are studied and applied. Job-site and tool safety are stressed. (1 theory + 5 lab hours a week)

SCSE 170L Small Engine Skills Improvement I 3 credit hours

This basic theory/lab course offers instruction in the diagnosis and repair of small four-stroke air-cooled engines. The issues of safety, engine identification, special tools, ignition, cooling, lubrication, engine rebuilding and fuel systems are studied. (1 theory + 5 lab hours a week)

SCSE 171L Small Engine Skills Improvement II 3 credit hours

(Prerequisite: SCSE 170L or department approval) This intermediate theory/lab course offers instruction and practice in the diagnosis and repair of small two-stroke powered equipment. Chain saw service and chain sharpening, blower and line trimmer service are addressed. Continued safety instruction is integral to the course. (1 theory + 5 lab hours a week)

SCSE 296 Special Topics 1-6 credit hours

(Prerequisite: department approval) This is an in-depth study of problems and the advanced techniques used by mechanics.

VICA 174 Introduction to Professional Development 1 credit hour

This course is designed to assist students in developing goals and commitments. Skills include personal awareness, goal setting, time management, organization and communication.

VICA 175 Leadership 1 credit hour

This course prepares students for committee work by covering agendas, parliamentary procedures and serving on a committee. Students also participate in community service projects and improve communication skills.

VICA 176 Career Planning 1 credit hour

The skills taught include career information, report writing, conducting interviews, communication improvement and interaction with business and industry.

VICA 177 Employment Skills 1 credit hour

The skills taught assist the student in job-seeking: writing resumes, business letters and memos and creating a job portfolio. Communication and interaction with business and industry also are covered. Job retention skills are stressed.

VICA 178 Civic Responsibility 1 credit hour

This course allows students to become involved in various community services as volunteers. Local government and community leaders' roles in the operation of the city are covered. Planning and carrying out a community project are included.

VICA 179 Continuous Quality Improvement 1 credit hour

Students gain an understanding of the structure of business and industry and how total quality concepts can improve the workplace.

Air Conditioning, Heating and Refrigeration

Certificate Program Main Campus

The Air Conditioning, Heating and Refrigeration program prepares students for entry into the installation, maintenance and service field. With on the-the-job experience and field training, the graduate of this program should be able to advance quickly.

Training includes safety, installing mechanical equipment, piping and electrical controls, servicing various air conditioning, heating and refrigeration components, troubleshooting systems and performing required preventive maintenance.

Most activities take place on campus, but some take place at off-campus building sites and are an integral part of the curriculum.

Students must be free of chronic respiratory diseases and allergies to sheet metal fluxes and metals and must have normal color differentiation.

There is an EPA required certification fee for all refrigeration and air conditioning technicians. The certification is required before graduates enter the work force.

This program requires basic hand tools. Tool lists with approximate costs and purchase deadline are provided by instructors at the beginning of each term.

A suggested schedule includes:

Term 1: ACHR 104, 107, 107L, 108, 108L, 109, 109L, computer elective

Term 2: ACHR 114, 118, 118L, 119, 119L, 120, 120L, VICA 177

Term 3: ACHR 204L, 206, 206L, 207, 207L, 208, 208L

Air Conditioning, Heating and Refrigeration Program

			<i>Credit Hours</i>
ACHR	104	Basic Refrigeration Math.....	1
ACHR	107	Basic Electromechanical Principles	2
ACHR	107L	Basic Electromechanical Principles Lab	2
ACHR	108	Basic Service Procedures	2
ACHR	108L	Basic Service Procedures Lab	2
ACHR	109	Basic Applications	2
ACHR	109L	Basic Applications Lab	2
ACHR	114	Math for Systems Design	2
ACHR	118	Intermediate Electromechanical Principles	2
ACHR	118L	Intermediate Electromechanical Principles Lab	2
ACHR	119	Intermediate Service Procedures	2
ACHR	119L	Intermediate Service Procedures Lab	2
ACHR	120	Intermediate Applications	2

ACHR	120L	Intermediate Applications Lab	2
VICA	177	Employment Skills	1
ACHR	204L	Advanced Control Circuitry Lab	1
ACHR	206	Advanced Electromechanical Principles	2
ACHR	206L	Advanced Electromechanical Principles Lab	2
ACHR	207	Advanced Service Procedures	2
ACHR	207L	Advanced Service Procedures Lab	2
ACHR	208	Advanced Applications	2
ACHR	208L	Advanced Applications Lab	2
Computer Elective (any department)			3-4
Total			44-45

Course Descriptions

ACHR 104 Basic Refrigeration Math 1 credit hour

This course reviews basic arithmetic operations, fractions and decimals with applications to refrigeration. Ohm's Law calculations in series, parallel and combination circuits are covered also.

ACHR 107 Basic Electromechanical Principles 2 credit hours

This course provides students with a broad technical foundation including basic electromagnetic principles and electrical safety. Additionally, the basic compression refrigeration cycle and refrigeration system design characteristics together with a practical understanding of temperature and pressure laws as applied to refrigeration and heat transfer are discussed.

ACHR 107L Basic Electromechanical Principles Lab 2 credit hours

Students work through a series of projects including brazing, wiring circuit trainers and refrigeration simulators, analyzing domestic refrigerators, temperature and pressure experiments, window air conditioner, light commercial refrigeration diagnosis and breakdown and assembly.

ACHR 108 Basic Service Procedures 2 credit hours

Technical knowledge of the basic competencies required in refrigeration and air conditioning is provided within a multi-media setting. Students become acquainted with the requirements of EPA to be certified to handle refrigerants, including all aspects of maintenance procedures, troubleshooting, repair and service procedures.

ACHR 108L Basic Service Procedures Lab 2 credit hours

This lab provides students with training, practice and individualized instruction in the basic service procedures or competencies of the refrigeration and air conditioning field. Servicing, maintaining, repairing and troubleshooting light refrigeration and air conditioning systems are included.

- ACHR 109 Basic Applications 2 credit hours**
This course examines the many applications of compression refrigeration systems. It provides the student with a detailed technical knowledge of system design and operating characteristics in applications ranging from domestic to light commercial and room air conditioners.
- ACHR 109L Basic Applications Lab 2 credit hours**
Students work through a series of individual and team projects to gain hands-on experience with various representative systems. Evaluating the system, conducting experiments, assembling and disassembling them, tracing circuits, rewiring and restoring them to optimal function are covered.
- ACHR 114 Math for Systems Design 2 credit hours**
(Prerequisite: ACHR 104 or department approval) This course covers calculations required for residential heating and cooling system design including computer-aided heat load calculations and equipment sizing and layout. The course also provides applied math problems with refrigeration systems.
- ACHR 118 Intermediate Electromechanical Principles 2 credit hours**
(Prerequisite: ACHR 107, 108, 109 or department approval) This course provides students with a broad technical foundation including electromechanical components utilized on residential and light commercial heating and air conditioning systems. Gas, electric and heat pump theories and components are covered. Electrical test instruments are presented.
- ACHR 118L Intermediate Electromechanical Principles Lab 2 credit hours**
(Pre- or corequisite: ACHR 118 or department approval) Students work through a series of projects including piping and electrical wiring for heating and air conditioning units. Projects include packaged, split systems and combination units. Refrigerant recovery and recycling are stressed.
- ACHR 119 Intermediate Service Procedures 2 credit hours**
(Prerequisite: ACHR 107, 108, 109 or department approval) The maintenance, service, repair and troubleshooting of typical heating and air conditioning units are covered. Procedures for providing the customer with quality work in a timely manner are stressed. Installation of systems according to code is reviewed.
- ACHR 119L Intermediate Service Procedures Lab 2 credit hours**
(Pre- or corequisite: ACHR 119 or department approval) This lab provides individualized instruction in basic competencies of the residential and light commercial heating and air conditioning field. It includes the practice of maintenance, service, repair and troubleshooting of systems including a review of refrigeration procedures.
- ACHR 120 Intermediate Applications 2 credit hours**
(Prerequisite: ACHR 109 or department approval) This course covers the applications

of various heating and air conditioning systems and provides information on typical system design and operating conditions of heating and air conditioning systems including packaged, split systems, combination units and heat pumps.

ACHR 120L Intermediate Applications Lab 2 credit hours
(Pre- or corequisite: ACHR 120 or department approval) Students work on individual and team projects to gain hand-on experience with various heating and air conditioning systems by evaluating, assembling and disassembling systems and converting regulated refrigerant systems to environmentally friendly alternatives.

ACHR 204L Advanced Control Circuitry Lab 1 credit hour
(Prerequisite: ACHR 118L or department approval) Advanced electrical installation, maintenance and service of heat pumps, rooftop air conditioners and ice machines are practiced. Safe use of test instruments is stressed.

ACHR 206 Advanced Electromechanical Principles 2 credit hours
(Prerequisite: ACHR 118, 119, 120 or department approval) This course provides information on electromechanical and pneumatic components used with commercial heating and air conditioning systems. VAV, multizone and building control systems are covered. Electric, refrigeration, pneumatic and electronic controls and combination controls are stressed.

ACHR 206L Advanced Electromechanical Principles Lab 2 credit hours
(Prerequisite: ACHR 118L or department approval; corequisite: ACHR 206) Students work through a series of projects including piping and electrical wiring for ice machines, commercial refrigeration systems, soft ice cream machines and heating and refrigeration systems. Included also are computer room air conditioners and pneumatic air supply systems and components.

ACHR 207 Advanced Service Procedures 2 credit hours
(Prerequisite: ACHR 118, 119, 120 or department approval) The maintenance, service, repair and troubleshooting of commercial refrigeration units are covered. Timely and accurate diagnosis of systems, material utilization, invoicing and record keeping are stressed. Successful completion of EPA's certification exam for refrigerant usage is required for credit.

ACHR 207L Advanced Service Procedures Lab 2 credit hours
(Prerequisite: ACHR 119L or department approval; corequisite: ACHR 207) This lab provides students with examples of typical customer complaints and requires that students implement the appropriate procedures and document the outcomes. Individual and team efforts that encourage ingenuity are desirable. Recommendations for providing positive customer service are discussed.

ACHR 208 Advanced Applications 2 credit hours
(Prerequisite: ACHR 118, 119, 120 or department approval) This course covers the ap-

AUBO	105L	Basic Refinishing Systems	2
#DETC	102	Math/Basic Electricity	3
AUBO	111	Auto Body Theory II	3
AUBO	112L	Welding Plastics and Adhesives II	2
AUBO	113L	Suspension and Alignment	2
AUBO	114L	Frame and Unibody Repair	2
AUBO	115L	Mechanical Systems	2
VICA	177	Employment Skills	1
AUBO	201	Auto Body Theory III	3
AUBO	202L	Welding Plastics and Adhesives III	2
AUBO	203L	Advanced Refinishing Systems/Techniques	3
AUBO	204L	Advanced Restraint/Electrical Systems	1
AUBO	206L	Air Conditioning	1
AUBO	208L	Advanced Frame & Unibody Repair	2
		Computer Elective (any department)	3-4
		Total	41-42

#Diesel Equipment Technology course

Course Descriptions

AUBO 101 Auto Body Theory I 3 credit hours

This theory course introduces students to all phases of damage analysis and collision damage repair. Basic information is presented on hand and power tools, safety, detailing, metal finishing, refinishing and welding.

AUBO 102L Welding Plastics and Adhesives I 2 credit hours

Basic safety and instruction in oxyacetylene welding, gas metal arc welding, plastics identification, welding and adhesive repairs are presented.

AUBO 103L Metal Prep/Repair and Mechanical Systems 2 credit hours

This lab provides experience in analyzing damage, damage estimates, safety, detailing, panel removal, replacement and adjustment, mechanical system inspection and repair.

AUBO 104L Metal Finishing/Body Filling 2 credit hours

Minor body dent repair, detailing, surface preparation, damage type, tool use and safety, metal finishing and body filler repair techniques are presented.

AUBO 105L Basic Refinishing Systems 2 credit hours

Students practice paint safety, surface preparation, molding removal, surface cleaning, detailing, stripping, sanding materials and techniques, paint undercoats and applications, and spray gun operations.

AUBO 111 Auto Body Theory II 3 credit hours

(Prerequisite: DETC 102, AUBO 101, 102L, 103L, 104L, 105L or department approval)

This theory course introduces students to all phases of structural analysis and collision

damage repair. Basic information includes damage diagnosis, body measurements, welding, mechanical, glass systems and refinishing systems. Job seeking and retention skills are also stressed.

AUBO 112L Welding Plastics and Adhesives II 2 credit hours
(Prerequisite: AUBO 102L or department approval; corequisite: AUBO 111) This is an intermediate level course that builds on AUBO 102L. Additional practical skills are developed in gas metal arc welding, plastic welding and adhesives use.

AUBO 113L Suspension and Alignment 2 credit hours
(Pre- or corequisite: AUBO 111 or department approval) Students gain practical experience in diagnosis and repair of steering components and suspension systems.

AUBO 114L Frame and Unibody Repair 2 credit hours
(Pre- or corequisite: AUBO 111 or department approval) An introduction to the proper use of frame and unibody pulling equipment, body measuring systems, pulling techniques, structural panel sectioning and replacement, corrosion protection materials, glass replacement and top coat application.

AUBO 115L Mechanical Systems 2 credit hours
(Pre- or corequisite: AUBO 111 or department approval) This lab teaches students to safely remove, inspect and repair mechanical systems.

AUBO 201 Auto Body Theory III 3 credit hours
(Prerequisite: AUBO 111, 112L, 113L, 114L, 115L or department approval) This course introduces students to advanced repair techniques using industry standards in mig welding, plastics, finishing paint systems, paint application problems, color matching and application, paint finish defects, passenger restraints, electrical components and air conditioning systems.

AUBO 202L Welding Plastics and Adhesives III 2 credit hours
(Prerequisite: AUBO 112L or department approval; corequisite: AUBO 201) In this lab course more advanced gas metal arc welding techniques and plastic repair are presented.

AUBO 203L Advanced Refinishing Systems/Techniques 3 credit hours
(Pre- or corequisite: AUBO 201 or department approval) Procedures for painting spot, panel and complete repairs are practiced. Students also solve paint application problems, including causes and corrections of finish defects. Personal safety equipment, detailing, environmental regulations and customer relations are taught.

AUBO 204L Advanced Restraint/Electrical Systems 1 credit hour
(Pre- or corequisite: AUBO 201 or department approval) This lab course covers the inspection and repair of active, passive and air bag restraint systems. Students also learn to diagnose and safely adjust and repair various electrical components.

AUBO 206L Air Conditioning **1 credit hour**
(Pre- or corequisite: AUBO 201 or department approval) Instruction is provided in safety, environmental concerns, tools, equipment, servicing and repairing of automotive air conditioning systems.

AUBO 208L Advanced Frame & Unibody Repair **2 credit hours**
(Pre- or corequisite: AUBO 201 or department approval) Advanced frame, structural, measuring and mechanical system repairs are stressed.

AUBO 296 Special Topics **1-6 credit hours**
(Prerequisite: department approval) This course is an in-depth study of problems and advanced techniques in automotive body repair.

Automotive Technology

Certificate Program
Main Campus

The Automotive Technology program is designed to prepare individuals to diagnose and repair mechanical problems on automobiles and light trucks. Safety procedures and work ethics along with the correct use and selection of hand tools and test equipment are stressed. The program is designed to qualify the successful student as an entry-level general automobile technician.

This program is certified by the National Automotive Technicians Education Foundation Inc. (NATEF) as a master certified program in all eight specialty areas: automotive transmission/transaxle, brakes, electrical system, engine performance, engine repair, heating and air conditioning, manual drive train and axles, and suspension and alignment.

Students must be free of chronic respiratory diseases and allergies to fuels and solvents. A valid driver's license and a good driving record are required by most employers.

This program requires basic hand tools. Tool lists with approximate costs and purchase deadlines are provided by instructors at the beginning of each term.

A suggested schedule per term includes:

Term 1: AUTC 101, 101L, 102, 102L, 103, 103L, DETC 102, computer elective

Term 2: AUTC 111, 111L, 112, 112L, 113, 114, 114L, VICA 177

Term 3: AUTC 201, 201L, 202, 202L, 203, 203L

AUTC 103 Manual Transmissions and Axles Theory 2 credit hours

Students study the design and operation of front and rear drive manual transmissions, differentials and drive lines. Maintenance, service procedures and troubleshooting methods are emphasized.

AUTC 103L Manual Transmissions and Axles Lab 2 credit hours

Skills required to service, repair or overhaul automotive manual transmissions and clutches on front and rear drive vehicles are developed. Differential assemblies, drive lines and diagnostic procedures used in solving vibration and harshness problems are also addressed. Safety is emphasized.

AUTC 111 Engine Overhaul Theory 2 credit hours

This course presents the theory of engine systems and the use of measuring tools to determine necessary repairs and services. The operation of the internal combustion engine and the basic principles of engine overhaul are studied.

AUTC 111L Engine Overhaul Lab 2 credit hours

(Pre- or corequisite: AUTC 111 or department approval) Students acquire skills needed to perform normal engine maintenance, including fluid changes, adjustments and minor repairs. Also included are the correct use of precision measuring tools and the testing, removal, replacement and overhauling of engines.

AUTC 112 Automatic Transmissions and Transaxles Theory 2 credit hours

This course covers design and operating theory of automotive transmissions and transaxles. Servicing and troubleshooting procedures are covered.

AUTC 112L Automatic Transmissions and Transaxles Lab 2 credit hours

(Pre- or corequisite: AUTC 112 or department approval) This course provides hands-on experience in servicing, overhaul and troubleshooting of automatic transmissions and transaxles.

AUTC 113 Transportation Electronics 3 credit hours

(Prerequisite: DETC 102 or department approval) Information required to test and replace malfunctioning electronic components is provided. The theory of solid-state devices and basic principles of electronics are included. Bench top experiments are conducted using full wave rectifiers, voltage rectifiers, transistors and other electronic components.

AUTC 114 Heating and Air Conditioning Theory 1 credit hour

This theory course provides instruction in safety, environmental concerns, tools, equipment, operation of parts and servicing and repair of automotive air conditioning systems.

AUTC 114L Heating and Air Conditioning Lab 2 credit hours
(Pre- or corequisite: AUTC 114 or department approval) This course is designed to teach safety, servicing and repair of automotive heating and air conditioning systems.

AUTC 170 Transportation Trades Machining 3 credit hours
This theory/lab course includes basic machine shop repair practices as they relate to gasoline and diesel engine repairs. Instruction is provided in safety, hand tools, lathe, mill and drill press. (1 theory + 5 lab hours a week)

AUTC 172 Air Care Inspector 1 credit hour
This theory/lab course provides the training required for mechanics to become certified air care inspectors for the City of Albuquerque's Vehicle Pollution Management program. The course covers the city and federal regulations governing air pollution and emissions inspections. (.5 theory + 2.5 lab hours a week)

AUTC 173 Air Care Mechanic 2 credit hours
(Prerequisite: AUTC 172) This course covers the rules and regulations governing air pollution, emissions inspections, approved manufacturers' analyzers, waivers, extensions, extended warranties and emission control devices and equipment. (1 theory + 2.5 lab hours a week)

AUTC 201 Automotive Ignition Systems Theory 2 credit hours
(Prerequisite: AUTC 113 or department approval) The focus is on the design, operation and troubleshooting of standard, electronic and distributor-less ignition systems.

AUTC 201L Automotive Ignition Systems Lab 3 credit hours
(Pre- or corequisite: AUTC 201 or department approval) This laboratory course presents the use of diagnostic equipment and troubleshooting techniques for various types of ignition systems.

AUTC 202 Automotive Fuel Systems Theory 2 credit hours
(Pre- or corequisite: AUTC 113 or department approval) This is a theory course covering the design, operation, diagnosis and repair of fuel systems.

AUTC 202L Automotive Fuel Systems Lab 2 credit hours
(Pre- or corequisite: AUTC 202 or department approval) Students diagnose, test and repair fuel systems.

AUTC 203 Automotive Computer Systems Theory 2 credit hours
(Pre- or corequisite: AUTC 113 or department approval) Students analyze the design, operation and repair of various automotive computer systems.

AUTC 203L Automotive Computer Systems Lab 2 credit hours
(Pre- or corequisite: AUTC 203 or department approval) The focus is on troubleshooting, operation and repair of automotive computer systems.

AUTC 296 Special Topics

1-6 credit hours

(Prerequisite: department approval) This course includes an in-depth study of problems and the advanced techniques automotive technicians use in responding to them.

Baking

Certificate Program
Main Campus

This food service specialty prepares students for jobs as bakers in restaurants, bake shops and institutional kitchens. Students learn safety and hands-on skills in a lab furnished with commercial equipment.

Students must be free of chronic allergies. In addition, a physician's certificate must be presented to T-VI before the start of classes stating that the student is free from tuberculosis in a transmissible form.

This program requires basic hand tools. Tool lists with approximate costs and purchase deadlines are provided by instructors at the beginning of each term.

A suggested schedule per term includes:

- Term 1: BKNG 101, 102, 103L, 104L, 105L, 106L, VICA 177,
computer elective
- Term 2: BKNG 111, 112L, 113L, 114L, 115L, 116L

Baking Program

			<i>Credit Hours</i>
BKNG	101	Baking Theory I	2
BKNG	102	Food Service Math	3
BKNG	103L	Breads	2
BKNG	104L	Sweet Yeast Goods	2
BKNG	105L	Cake Batters	2
BKNG	106L	Pies and Pastries	2
VICA	177	Employment Skills	1
BKNG	111	Baking Theory II	3
BKNG	112L	Yeast Doughs	2
BKNG	113L	Batters	2
BKNG	114L	Pastries and Cookies	2
BKNG	115L	Icings and Fillings	2
BKNG	116L	Cake Decorating	1
Computer Elective (any department)			3-4
Total			29-30

BKNG 114L Pastries and Cookies **2 credit hours**
(Pre- or corequisite: BKNG 111 or department approval) Advanced production techniques of international pastries, pies and petit fours are presented. The seven different methods of cookie production are emphasized. International roux products are introduced with advanced safety procedures utilized.

BKNG 115L Icings and Fillings **2 credit hours**
(Pre- or corequisite: BKNG 111 or department approval) Advanced production techniques of international buttercreams, fondants, ganache and marzipan are presented; safety and sanitation requirements are stressed.

BKNG 116L Cake Decorating **1 credit hour**
(Pre- or corequisite: BKNG 111 or department approval) In this course fundamental knowledge of the production of tiered, special occasion and sculpted cakes is stressed.

BKNG 296 Special Topics **1-6 credit hours**
(Prerequisite: department approval) This course helps students enrolled in Food Service Management and Quantity Foods pursue specialized needs. The class may be taken as independent or directed study.

Carpentry

Certificate Program Main Campus

The Carpentry program provides students with safety training and entry-level job skills to enter the construction industry. Classes meet on- and off-campus and in labs designed for residential and commercial construction, cabinet-making and remodeling.

The fundamentals of framing and tools of the trade are taught, along with blueprint reading and material analysis. Students are exposed to all phases of the construction of a building including remodel, interior finish carpentry and construction and installation of cabinets.

Students must be free of chronic wood or wood product allergies and be able to lift 50 pounds. Students purchase all textbooks for this program.

This program requires basic hand tools. Tool lists with approximate costs and purchase deadlines are provided by instructors at the beginning of each term.

A suggested schedule per term includes:

Term 1: CARP 101, 102, 102L, 103, 103L, 104, 104L, VICA 177,
computer elective

Term 2: CARP 111, 112, 112L, 113, 113L, 114, 114L

off-campus on job sites where students cut and assemble the structural material to construct floor, wall, ceiling and roof systems in accordance with the Uniform Building Code (UBC). Safety is stressed.

CARP 104 Exteriors Theory 1 credit hour
(Pre- or corequisite: CARP 101, 102, 103 or department approval) This course provides instruction in the installation of exterior wall and roof finishes, windows and exterior doors in accordance with the Uniform Building Code (UBC).

CARP 104L Exteriors Lab 2 credit hours
(Pre- or corequisite: CARP 104 or department approval) This course provides experience in installing exterior wall and roof finishes, windows and exterior doors in accordance with the Uniform Building Code (UBC).

CARP 111 Carpentry Mathematics/Blueprint Reading II 3 credit hours
(Prerequisite: CARP 101, 102, 102L, 103, 103L, 104, 104L or department approval) Blueprint applications for residential homes, multiple family dwellings and commercial buildings are introduced. Instruction also is provided in the use of rules and formulas for material estimating, volume measure, ratio and proportion.

CARP 112 Interior Finish Theory 1 credit hour
(Pre- or corequisite: CARP 111 or department approval) The focus is on the UBC requirements for the installation of various types of thermal insulation and drywall. Methods involved in painting, trimming and finishing interiors are covered. Calculations for quantities of materials are determined.

CARP 112L Interior Finish Lab 2 credit hours
(Pre- or corequisite: CARP 112 or department approval) This course offers hands-on activities in insulation techniques, drywall installation, taping and texture of drywall, painting, trimwork and finishing of the interiors of residential and commercial buildings. Safety is stressed.

CARP 113 Cabinet-making and Millwork Theory 1 credit hour
(Pre- or corequisite: CARP 111 or department approval) This course provides instruction in the design, layout and construction of wood cabinets.

CARP 113L Cabinet-making and Millwork Lab 2 credit hours
(Pre- or corequisite: CARP 113 or department approval) This course offers hands-on experiences in the safe use of equipment and power tools used in the construction and finish of wooden cabinets.

CARP 114 Carpentry Remodel Theory 1 credit hour
(Pre- or corequisite: CARP 111 or department approval) This course covers the various types of construction found in residential and commercial buildings. Emphasis is placed on the Uniform Building Code requirements for remodeling an existing structure.

Commercial Printing Program

Certificate

		<i>Credit Hours</i>
CMPR	101	Commercial Printing Math I 1
CMPR	102	Offset Theory I 3
CMPR	104L	Pre-press Lab 2
CMPR	105L	Press and Bindery Lab 2
CMPR	108L	Basic Press Work 2
CMPR	109L	Intermediate Press Work 2
CMPR	111	Commercial Printing Math II 1
CMPR	112	Commercial Printing Theory II 3
CMPR	113L	Desktop Publishing 2
CMPR	114L	Estimating 2
CMPR	117L	Advanced Pre-press Lab 2
CMPR	118L	Desktop Manipulations Lab 2
VICA	177	Employment Skills 1
¹ CMPR	201L	PostScript Illustration 2
¹ CMPR	202L	Image Manipulation/Painting 2
¹ CMPR	203L	Advanced Document Assembly 2
¹ CMPR	204L	Process Stripping 2
¹ CMPR	205L	Advanced Press Work 2
¹ CMPR	206L	Process Press Work 2
		Computer Elective (any department) 3-4
Total		34-35

¹ Students select any three of these courses.

Additional Degree Requirements

² AA	101	Beginning Keyboarding 3
² AA	102	Intermediate Keyboard Applications I 3
CM	132	Construction Graphics 3
³ ENG	101	College Writing 3
³ ENG	102	Analytic and Argumentative Writing 3
³ ENG	219	Technical Writing 3
EPT	213	Occupational Safety 3
³ Communications Elective (oral communications course)		3
Computer Elective (any department)		3-4
³ Humanities/Social and Behavioral Science Elective		3
³ Math Elective		3-4
Total		67-70

² Business Occupations courses

³ Arts & Sciences courses

Course Descriptions

CMPR 101 Commercial Printing Math I 1 credit hour

Instruction is offered in math as it applies to the printing trade for measurements, pica/point rulers, proportions, type specking, sizing of camera shots, exposures, ink formulas and paper.

CMPR 102 Offset Theory I 3 credit hours

This course covers the entire process of offset printing. Design theory, layout and paste-up techniques, typesetting, darkroom procedures, offset press and bindery are major areas of discussion.

CMPR 104L Pre-press Lab 2 credit hours

This lab covers the next stage in the printing process, that of film assembly and platemaking. Students learn to shoot halftones and lineshots, strip for multiple burn plates, strip two color, the basics of contacting and platemaking. Personal safety is stressed.

CMPR 105L Press and Bindery Lab 2 credit hours

In this lab students learn the procedures for set-up, operation, clean-up and maintenance of offset lithography presses. Students get initial training in custom ink mixing and basic bindery and finishing, including the operation of the folder and the power cutter. Safety is stressed.

CMPR 108L Basic Press Work 2 credit hours

Students learn press adjustments, roller pressure adjustments, cylinder pressure (plate to blanket) and packing cylinders. Changing blankets is required. Mechanical types and weights of paper stock that affect offset running ability are also covered.

CMPR 109L Intermediate Press Work 2 credit hours

This course simulates working conditions. Time is spent to overcome weaknesses and increase skill level and speed. A final project is taken from design to bindery.

CMPR 111 Commercial Printing Math II 1 credit hour

This course provides advanced instruction in math as it applies to the printing trade for measurements, ink and chemical formulas, paper cuts and job pricing.

CMPR 112 Commercial Printing Theory II 3 credit hours

Training continues in design theory, layout and paste-up, darkroom processes, chokes and spreads, and press operation. Students are exposed to professional desktop publishing hardware and software. Also covered are the requirements for estimating.

CMPR 113L Desktop Publishing 2 credit hours

This course covers the use of page layout software, including word processing and the production of simple graphics, tables and charts. Students also are taught to use illustration software.

- CMPR 114L Estimating 2 credit hours**
The basics of estimating costs, labor and overhead for a variety of printing jobs are covered. Students learn how to charge jobs in a simulated business environment using both catalog and computer methods.
- CMPR 117L Advanced Pre-press Lab 2 credit hours**
Students are trained in hairline, multiple burn stripping using chokes and spreads. Students learn to make dupes and composites. Entry-level electronic pre-press and manual traps are also covered.
- CMPR 118L Desktop Manipulations Lab 2 credit hours**
This course introduces students to graphic design. Students practice layout/pasteup techniques using the most widely accepted tools, equipment and materials. Students also acquire basic camera and computer skills.
- CMPR 170 Basic Commercial Printing Skills 3 credit hours**
This theory/lab course is designed for individuals with industry experience who need to update their knowledge. The entire range of offset experience is covered with emphasis on improving quality. (1 theory + 5 lab hours a week)
- CMPR 171 Desktop Publishing on the Mac 3 credit hours**
(Prerequisite: instructor approval) This theory/lab course is for individuals in industry who need to upgrade their skills. The course provides desktop publishing on the Macintosh computer from the basics to recent upgrades of the most popular page layout and illustration software. (1 theory + 5 lab hours a week)
- CMPR 201L PostScript Illustration 2 credit hours**
(Prerequisites: CMPR 101, 102, 104L, 105L, 108L, 109L, 111, 112, 113L, 114L, 117L, 118L or department approval) Advanced training in designing and producing printable artwork is offered on Aldus FreeHand and Adobe Illustrator. Students learn shortcuts and trapping techniques.
- CMPR 202L Image Manipulation/Painting 2 credit hours**
(Prerequisites: CMPR 101, 102, 104L, 105L, 108L, 109L, 111, 112, 113L, 114L, 117L, 118L or department approval) Students learn to design and produce artwork and separations in Adobe PhotoShop.
- CMPR 203L Advanced Document Assembly 2 credit hours**
(Prerequisites: CMPR 101, 102, 104L, 105L, 108L, 109L, 111, 112, 113L, 114L, 117L, 118L or department approval) This course offers advanced training in designing and producing artwork on page layout software.
- CMPR 204L Process Stripping 2 credit hours**
(Prerequisites: CMPR 101, 102, 104L, 105L, 108L, 109L, 111, 112, 113L, 114L, 117L, 118L or department approval) Students receive advanced training in process film assembly and fixing desktop output problems.

CM	263	Construction Equipment and Methods	
	or	.....	3
CM	299B	Cooperative Education II	
CM	278	Mechanical and Electrical Blueprint Reading	2
EPT	213	Occupational Safety	3
VICA	177	Employment Skills	1
		Computer Elective (any department)	3-4

Required Business Occupations Courses

ACCT	101A	Accounting Principles I	3
BA	211	Business Law	3

Required Technologies Courses

ARDR	130	Drafting Fundamentals	3
ARDR	175	General Contractor Preparation	3
ARDR	261L	Construction Surveying	3

Required Arts & Sciences Courses

		Communications Elective (oral communications course)	3
ECON	201	Microeconomics	3
ENG	101	College Writing	3
		English Elective (writing course)	3
		Humanities/Social and Behavioral Science Elective	3
MATH	120	Intermediate Algebra	4
MATH	121	College Algebra	3
		Physics Elective	3

Total 73-74

Option 2: General Construction

Required Trades & Service Occupations Courses

			<i>Credit Hours</i>
CARP	101	Carpentry Math/Blueprint Reading I	3
CARP	102	Foundations Theory	1
CARP	102L	Foundations Lab	2
CARP	103	Framing Theory	1
CARP	103L	Framing Lab	2
CARP	104	Exteriors Theory	1
CARP	104L	Exteriors Lab	2
CARP	111	Carpentry Math/Blueprint Reading II	3
CARP	112	Interior Finish Theory	1
CARP	112L	Interior Finish Lab	2
CARP	113	Cabinet-making and Millwork Theory	1

CARP	113L	Cabinet-making and Millwork Lab	2
CARP	114	Carpentry Remodel Theory	1
CARP	114L	Carpentry Remodel Lab	2
CM	132	Construction Graphics	3
CM	171	Construction Materials and Techniques	3
CM	201	Commercial Construction Theory	2
CM	201L	Commercial Construction Lab	3
CM	263	Construction Equipments and Methods	3
CM	278	Mechanical and Electrical Blueprint Reading	2
EPT	213	Occupational Safety	3
VICA	177	Employment Skills	1
		Computer Elective (any department)	3-4

Required Technologies Courses

ARDR	130	Drafting Fundamentals	3
ARDR	175	General Contractor Preparation	3
ARDR	261L	Construction Surveying	3

Required Arts & Sciences Courses

		Communications Elective (oral communications course)	3
ENG	101	College Writing	3
		English Elective (writing course)	3
		Humanities/Social and Behavioral Science Elective	3
		Math Elective	3-4
		Physics Elective	3
		Total	74-76

Option 3: Electrical

Required Trades & Service Occupations Courses

			<i>Credit Hours</i>
ELTR	101	Electrical Theory I	3
ELTR	102	Electrical Math I	3
ELTR	103L	Electrical DC/AC Lab	3
ELTR	104L	AC Circuitry, Motors, Generators	3
ELTR	111	Electrical Algebra	3
ELTR	112	Residential Blueprint Reading I	3
ELTR	113	Electrical Theory II	3
ELTR	114L	Residential Wiring Lab	3
ELTR	115L	Residential Services	3
ELTR	201	Electrical Theory III	3
ELTR	202	Commercial Blueprint Reading II	3
ELTR	203	Electrical Motor Control Theory	3
ELTR	204L	Industrial Motor Control Lab	3

ELTR	205L	Industrial Power Distribution	3
ELTR	211	Industrial Electrical Circuitry and Safety	3
ELTR	212	Programmable Logic Controller Theory	3
ELTR	213L	PLC Installation and Operation.....	3
ELTR	214L	PLC Systems Operation and Troubleshooting	3
VICA	177	Employment Skills	1
		Computer Elective (any department)	3-4

Required Arts & Sciences Courses

		Communications Elective (oral communications course)	3
ENG	101	College Writing	3
		English Elective (writing course)	3
		Humanities/Social and Behavioral Science Elective	3
		Math Elective	3-4
		Physics Elective	3
		Total	76-78

Course Descriptions

CM 132 Construction Graphics 3 credit hours
(Prerequisite: ARDR 130 or department approval) Emphasis is on principles and techniques of graphics used in the construction industry. Topics include geometry, multi-view projects and visualization with applications in structural and presentation problems. (1 theory + 5 lab hours a week)

CM 171 Construction Materials and Techniques 3 credit hours
 This course covers plan reading, elementary construction techniques, materials and construction documents. Microcomputers are used for word processing, graphics, spreadsheets and data bases. Assignments include written reports and oral presentations.

CM 201 Commercial Construction Theory 2 credit hours
 This course serves as an introduction to commercial drawing sets. Buildings are analyzed for code compliance and cost per square foot. Commercial and residential buildings are contrasted, and the Uniform Building Code is covered.

CM 201L Commercial Construction Lab 3 credit hours
(Corequisite: CM 201 or department approval) Students analyze costs, specifications and codes in order to learn the responsibilities of a construction supervisor. Personal safety is stressed.

CM 256 Statics 3 credit hours
(Prerequisite: MATH 120 or department approval) Through the use of graphic and algebraic formulas, students are introduced to static forces, equilibrium, moments, stress and strain. Beams and columns in wood, steel and concrete are covered in reference to the Uniform Building Code and institutional manuals.

CM 257 Computer Estimating 3 credit hours
(Prerequisite: CM 201, 201L or department approval) This course includes a survey of contemporary software. Students complete cost estimates on buildings, using the Construction Specifications Institute formatted budgets and take-off techniques. (1 theory + 5 lab hours per week)

CM 258 Construction Management 2 credit hours
(Prerequisite: CM 257 or department approval) State-of-the-art scheduling techniques are surveyed, including computer-assisted packages. Students break down a job into its basic tasks and reassemble it in a framework that controls time, work, materials and related activities.

CM 259 Construction Applied Math 2 credit hours
Geometry and trigonometry topics that have construction layout applications are covered.

CM 263 Construction Equipment and Methods 3 credit hours
(Prerequisite: CM 258 or department approval) Large equipment used to move, lift and assemble components of commercial buildings is presented. Earth work, concrete forms and construction are covered, along with steel, wood and masonry methods, productivity, licenses and contract options.

CM 278 Mechanical and Electrical Blueprint Reading 2 credit hours
This course focuses on materials and equipment used in the electrical and mechanical systems of commercial buildings. The associated codes and costs of these systems are introduced.

CM 296 Special Topics 1-6 credit hours
(Prerequisite: department approval) This course includes an in-depth study of topics related to construction management.

CM 299A Cooperative Education I 3 credit hours
(Prerequisite: VICA 177 or department approval) The student is employed at an approved course-related work site and applies learned theory based on goals and objectives.

CM 299B Cooperative Education II 3 credit hours
(Prerequisite: VICA 177 or department approval) The student is employed at an approved course-related work site and applied learned theory based on goals and objectives.

Criminal Justice

Associate of Applied Science Degree
Main Campus

This program provides comprehensive instruction in criminal justice. Students who have already received a certificate from an approved New Mexico criminal justice academy with which T-VI has an articulation agreement are given credit for appropriate courses in the core curriculum. These students may enter the degree program after meeting T-VI admission requirements. Credit for the core curriculum will be posted at the completion of all courses in the degree program.

Some employers may require a high school diploma or GED, two years of college or bachelor's degree.

Criminal Justice Program

Required Core Courses

			<i>Credit Hours</i>
CJ	101	Criminal Law and Procedure	3
CJ	102	Juvenile Justice and Procedure	3
CJ	103	Probation and Parole	3
CJ	104	Patrol Procedures	
	or	.....	3
CJ	299A	Cooperative Education I	
CJ	106	Police and Pre-sentence Investigation Reports	3
CJ	109	Introduction to Security Services	
	or	.....	3
CJ	114	Contemporary Enforcement Techniques	
CJ	111	Traffic Investigation and Enforcement	
	or	.....	3
CJ	299B	Cooperative Education II	
CJ	112	Criminal Investigation	3
CJ	113	Organized and White Collar Crime	3
CJ	170	Physical Fitness I	1
VICA	177	Employment Skills	1
		Computer Elective (any department)	3-4

Required Arts & Sciences Courses

Communications Elective (oral communications course)			3
ENG	101	College Writing	3
English Elective (writing course)			3
MATH	120 or higher	.....	3-4

Psychology Elective	3
SOC 101 Introduction to Sociology	3
SOC 111 Criminal Justice System	3
SOC 211 Social Problems	3
SOC 212 Juvenile Delinquency	3
SOC 214 Sociology of Corrections	3
SOC 215 Criminology	3
SOC 216 Ethnic and Minority Groups	3
SOC 280 Social Science Research	3
Total	71-73

Course Descriptions

- CJ 101 Criminal Law and Procedure 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) This course is a study of the historical development, purposes and goals of common and statutory criminal law and the procedures which control actions in the criminal justice system.
- CJ 102 Juvenile Justice and Procedure 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) This course covers the juvenile court and justice system including the Children's Code and the Rules of Procedure.
- CJ 103 Probation and Parole 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) This course includes the history, philosophy and legal basis governing investigation and supervision of juvenile offenders and adult violators placed on probation and parole.
- CJ 104 Patrol Procedures 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) This course introduces the basic patrol function and the problems faced by law enforcement officers.
- CJ 106 Police and Pre-sentence Investigation Reports 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval; class is limited to 20 students) The course includes the study and use of police and pre-sentence investigation reports.
- CJ 109 Introduction to Security Services 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) Topics include the history and development of security services, relationships to the legal process, career roles and operational processes in security operations. The course also helps homeowners make living quarters more secure and covers personal defense, report writing, emergency procedures and defensive driving.

✓ **CJ 111** **Traffic Investigation and Enforcement** **3 credit hours**
(Pre- or corequisite: CJ 101, CJ 104, CJ 106 or department approval) This course includes the study of traffic law enforcement and basic wreck checking and progresses to the complete investigation of major accidents.

✓ **CJ 112** **Criminal Investigation** **3 credit hours**
(Pre- or corequisite: CJ 101, CJ 106 or department approval) Basic criminal investigation is studied from the preliminary investigation to final preparation and presentation in court.

CJ 113 **Organized and White Collar Crime** **3 credit hours**
(Pre- or corequisite: CJ 101 or department approval) This course includes the study of illegal activities of people and institutions whose purpose is profit through legitimate business, and illegal activity of people and organizations whose purpose is illegitimate gain through illegal enterprise.

CJ 114 **Contemporary Enforcement Techniques** **3 credit hours**
(Pre- or corequisite: CJ 101, CJ 104; limited to Criminal Justice majors or department approval) This course covers verbal and manual skills which officers use on a daily basis. Handcuffing, restraint, field notes and testimony are studied.

CJ 170 **Physical Fitness I** **1 credit hour**
(Prerequisite: health history questionnaire signed by a physician documenting student's ability to participate in an exercise program) This course offers a fitness assessment of muscular strength, muscular endurance, cardiorespiratory fitness, flexibility and body composition. Based on the results, the student designs and participates in an exercise program. The course is self paced. (.5 theory + 2.5 lab hours a week)

CJ 171 **Physical Fitness II** **1 credit hour**
(Prerequisite: CJ 170 and health history questionnaire signed by a physician documenting student's ability to participate in an exercise program) This advanced course offers a fitness assessment of muscular strength, muscular endurance, cardiorespiratory fitness, flexibility and body composition. Based on the results, the student designs and participates in an exercise program. The course is self paced. (.5 theory + 2.5 lab hours a week)

CJ 296 **Special Topics** **1-6 credit hours**
(Prerequisite: department approval) This course includes an in-depth study of problems and the advanced techniques that criminal justice experts use in responding to them.

CJ 299A **Cooperative Education I** **3 credit hours**
(Prerequisite: VICA 177 or department approval) The student is employed at an approved course-related work site and applies learned theory based on goals and objectives.

CJ 299B **Cooperative Education II** **3 credit hours**
(Prerequisite: VICA 177 or department approval) The student is employed at an approved course-related work site and applies learned theory based on goals and objectives.

Culinary Arts

Associate of Applied Science Degree
 Main Campus

The Culinary Arts associate of applied science degree provides students in Baking, Food Service Management and Quantity Foods an option to the certificate programs.

The program prepares individuals for entry-level jobs in bakeries, restaurants and commercial kitchens. The program also prepares individuals to become entry-level supervisors or managers. The program emphasizes safety, production sanitation, nutritional food preparation, cashiering, equipment use, human relations, supervision and business practices.

Students must be free of chronic allergies. Each student also must present a physician's certificate to T-VI before the start of classes stating that the student is free from tuberculosis in a transmissible form.

Culinary Arts Program

			<i>Credit Hours</i>
QUFD	101	Quantity Food Theory I	2
QUFD	103L	Buffet Procedures	2
QUFD	104L	Salad and Pantry	2
QUFD	105L	Dinner	2
QUFD	106L	Fry	2
QUFD	111	Quantity Food Theory II	3
QUFD	112L	Dining Room Skills	1
QUFD	113L	Cold Preparation	2
QUFD	114L	Stocks and Sauces—Sous Chef.....	2
QUFD	115L	Entree (Meat and Fish Preparation)	3
QUFD	102 or BKNG 102	Food Service Math	3
BKNG	101	Baking Theory I	2
BKNG	103L	Breads.....	2
BKNG	104L	Sweet Yeast Goods.....	2
BKNG	105L	Cake Batters	2
BKNG	106L	Pies and Pastries	2
BKNG	111	Baking Theory II	3
BKNG	112L	Yeast Doughs.....	2

BKNG	113L	Batters	2
BKNG	114L	Pastries and Cookies	2
BKNG	115L	Icings and Fillings	2
BKNG	116L	Cake Decorating	1
FSMG	101	Operations Management	3
FSMG	102	Human Resource Management	3
FSMG	103	Product Management	3
VICA	177	Employment Skills	1
		Computer Elective (any department)	3-4

Required Arts & Sciences Courses

		Communications Elective (oral communications course)	3
ENG	101	College Writing	3
		English Elective (writing course)	3
		Humanities/Social and Behavioral Science Elective	3
		Math Elective	3-4
		Total	74-76

Course descriptions are found under Baking, Food Service Management and Quantity Foods.

Diesel Equipment Technology

Certificate Program Main Campus

This program prepares students to work on a variety of diesel-powered equipment used in the trucking, heavy equipment and extraction industries.

The program meets in labs where students are introduced to safety and a variety of diesel engines, electrical and hydraulic test equipment, air conditioning equipment, drive train components, fuel injection test and calibration devices and related equipment.

The lab classes in this program consist of disassembly, evaluation, precision measurement, reassembly and testing of the following major components: engines, transmissions, drive units, electrical components, brake systems, hydraulic systems, air conditioning, transport refrigeration systems and fuel systems. The theory classes present operating principles and troubleshooting techniques.

Students must be free of chronic respiratory diseases and allergies to fuels and solvents. A valid driver's license and a good driving record are required by most employers.

This program requires basic hand tools. Tool lists with approximate costs and purchase deadlines are provided by instructors at the beginning of each term.

A suggested schedule per term includes:

Term 1: DETC 101, 102, 103L, 104L, 105L, computer elective

Term 2: AUTC 113, DETC 111, 111L, 112L, 113L, VICA 177

Term 3: DETC 201, 201L, 202, 202L, 203, 203L

Diesel Equipment Technology Program

			<i>Credit Hours</i>
DETC	101	Diesel Drive Train Theory	3
DETC	102	Math/Basic Electricity	3
DETC	103L	Manual Shift Transmissions Lab.....	2
DETC	104L	Drive Axles, Brakes and Automatic Transmissions Lab	3
DETC	105L	Hydraulic Systems	2
#AUTC	113	Transportation Electronics	3
DETC	111	Diesel Engine Theory	3
DETC	111L	Diesel Engine Overhaul	3
DETC	112L	Precision Measurement and Component Repair Lab	2
DETC	113L	Engine Tune-up and Testing Lab	2
VICA	177	Employment Skills	1
DETC	201	Diesel Electrical Theory	1
DETC	201L	Diesel Electrical Lab	3
DETC	202	Diesel Fuel Injection Theory	1
DETC	202L	Diesel Fuel Injection Lab	3
DETC	203	Transport Refrigeration/Air Conditioning Theory	1
DETC	203L	Transport Refrigeration/Air Conditioning Lab	3
		Computer Elective (any department)	3-4
Total			42-43

#Automotive Technology course

Course Descriptions

DETC 101 Diesel Drive Train Theory 3 credit hours
 Emphasis is on safety, disassembly, evaluation, reassembly, adjustment, troubleshooting and testing of drive train components. Lessons are presented on air brake troubleshooting and repair, final drive units, hydraulic system components and circuits.

DETC 102 Math/Basic Electricity 3 credit hours
 Review and application of basic math skills, such as fractions, decimals, percentages, ratios, proportions, areas, volumes, and basic electricity principles and electrical circuits are presented.

DETC 103L Manual Shift Transmissions Lab 2 credit hours
(Pre- or corequisite: DETC 101 or department approval) Shop safety, disassembly, evaluation, assembly and adjustment of manual shift transmissions used in trucks are included in this course. Also covered are single and twin countershaft transmissions, auxiliary transmissions and transfer gear cases.

DETC 104L Drive Axles, Brakes and Automatic Transmissions Lab 3 credit hours
(Pre- or corequisite: DETC 101 or department approval) Shop safety and disassembly, evaluation, assembly and adjustment of automatic transmissions, drive axles, clutches and other drive train components are presented. Air and hydraulic brake system components are disassembled, evaluated and reassembled.

DETC 105L Hydraulic Systems 2 credit hours
(Pre- or corequisite: DETC 101 or department approval) Shop safety, disassembly, evaluation and assembly of hydraulic pumps, valves, actuators and hydraulic circuits used in the heavy-equipment industry are presented. Hydrostatic transmissions and in-line circuit testers are covered.

DETC 111 Diesel Engine Theory 3 credit hours
Emphasis is placed on two- and four-stroke cycle diesel engine operating principles. Operation, troubleshooting and repair procedures are covered for blocks, crankshafts, camshafts, rods, bearings, pistons, cylinder heads, lubrication systems, cooling systems, fuel systems, air induction and exhaust systems. Job seeking and retention skills are stressed.

DETC 111L Diesel Engine Overhaul 3 credit hours
(Pre- or corequisite: DETC 111 or department approval) Engine disassembly, evaluation and reassembly techniques are covered in this course. Engines are assembled to manufacturer's recommended specifications then operated and adjusted on a test stand.

DETC 112L Precision Measurement and Component Repair Lab 2 credit hours
(Prerequisite: DETC 102 or department approval; pre- or corequisite: DETC 111) The uses of micrometers and dial indicators are presented. Measurements are done on engines then compared to manufacturer's specifications. Component repair involves disassembly, evaluation and reassembly of units such as blowers, turbochargers, oil pumps, water pumps and fuel transfer pumps.

DETC 113L Engine Tune-Up and Testing Lab 2 credit hours
(Pre- or corequisite: DETC 111) Engine adjustments and tune-ups are performed on major brands of engines. Troubleshooting skills are practiced on engines in operating condition.

DETC 201 Diesel Electrical Theory 1 credit hour
(Prerequisite: AUTC 113 or department approval) Students study shop safety and diagnosis and troubleshooting procedures of electrical systems and diesel components.

DETC 201L Diesel Electrical Lab 3 credit hours
(Pre- or corequisite: DETC 201 or department approval) Students practice shop safety and diagnostic and troubleshooting procedures of electrical components and diesel systems.

DETC 202 Diesel Fuel Injection Theory 1 credit hour
(Pre- or corequisite: DETC 201 or department approval) Students study safety, diagnosis, troubleshooting and repair of fuel injection systems and diesel components.

DETC 202L Diesel Fuel Injection Lab 3 credit hours
(Pre- or corequisite: DETC 201, 202 or department approval) Safety and diagnosis, troubleshooting and repair procedures on fuel injection systems and diesel components are practiced.

DETC 203 Transport Refrigeration/Air Conditioning Theory 1 credit hour
(Pre- or corequisite: DETC 201 or department approval) Students study shop safety and diagnostic, troubleshooting and repair procedures of transport refrigeration and air conditioning systems.

DETC 203L Transport Refrigeration/Air Conditioning Lab 3 credit hours
(Pre- or corequisite: DETC 201, 203 or department approval) Students practice shop safety while learning diagnostic, troubleshooting and repair procedures on transport refrigeration and air conditioning systems.

DETC 296 Special Topics 1-6 credit hours
(Prerequisite: department approval) This course includes an in-depth study of problems and the advanced techniques diesel technicians use in responding to them.

Electrical Trades

Certificate Program
Main Campus

The program provides the student with safety and entry-level skills for employment in the construction industry and electrical maintenance and related electrical trades.

On- and off-campus projects enable students to gain on-the-job experience in electrical installation under the supervision of instructors. In-depth study of the National Electrical Code and local wiring codes is included. Conduit bending, motor controls and the installation and use of programmable controllers in motor control are taught in the advanced terms.

Student must have normal color differentiation and be able to lift 50 pounds.

This program requires basic hand tools. Tool lists with approximate costs and purchase deadlines are provided by instructors at the beginning of each term.

A suggested schedule per term includes:

- Term 1: BA 111, 131, ELTR 101, 102, 103L, 104L, computer elective
- Term 2: ELTR 111, 112, 113, 114L, 115L, EPT 213
- Term 3: ELTR 201, 202, 203, 204L, 205L, VICA 177
- Term 4: ELTR 211, 212, 213L, 214L

Electrical Trades Program

			<i>Credit Hours</i>
*BA	131	Human Relations (7.5 weeks)	2
	or		
*PSY	105	Introduction to Psychology	3
	or	.....	3
*SOC	101	Introduction to Sociology	3
#BA	111	Communications (7.5 weeks)	2
	or		
*ENG	101	College Writing	3
ELTR	101	Electrical Theory I	3
ELTR	102	Electrical Math I	3
ELTR	103L	Electrical DC/AC Lab	3
ELTR	104L	AC Circuitry, Motors, Generators	3
ELTR	111	Electrical Algebra	3
ELTR	112	Residential Blueprint Reading I	3
ELTR	113	Electrical Theory II	3
ELTR	114L	Residential Wiring Lab	3
ELTR	115L	Residential Services	3
EPT	213	Occupational Safety	3
ELTR	201	Electrical Theory III	3
ELTR	202	Commercial Blueprint Reading II	3

ELTR	203	Electrical Motor Control Theory	3
ELTR	204L	Industrial Motor Control Lab	3
ELTR	205L	Industrial Power Distribution	3
VICA	177	Employment Skills	1
ELTR	211	Industrial Electrical Circuitry and Safety	3
ELTR	212	Programmable Logic Controller Theory	3
ELTR	213L	PLC Installation and Operation.....	3
ELTR	214L	PLC Systems Operation and Troubleshooting	3
		Computer Elective (any department)	3-4
		Total	65-68

#Business Occupations course

*Arts & Sciences course

Course Descriptions

ELTR 101 Electrical Theory I 3 credit hours
(Pre- or corequisite: ELTR 102) This course covers the basic concepts of DC and AC electricity with emphasis on Ohm's Law, Kirchoff's Law, circuit analysis and troubleshooting. Subject areas include DC and AC theory, symbol identification, schematic reading, circuit application, magnetism, basic transformers, single-phase motors and application of the National Electrical Code.

ELTR 102 Electrical Math I 3 credit hours
 The student reviews basic arithmetic functions and is introduced to electrical formulas which include Ohm's and Kirchoff's laws. Calculations of material and circuit load requirements, rules for series, parallel and combination circuits and mechanical work and power are covered.

ELTR 103L Electrical DC/AC Lab 3 credit hours
(Pre- or corequisite: ELTR 101, 102 or department approval) This course covers the basic fundamentals of electricity. Emphasis is placed on safety. Topics include electrical circuitry, meters, power sources, conductors, insulators, reactive circuits and application of the National Electrical Code.

ELTR 104L AC Circuitry, Motors, Generators 3 credit hours
(Pre- or corequisite: ELTR 101, 102 or department approval) This course provides advanced instruction in electrical alternating current concepts. Subjects include combination circuit analysis, RLC circuitry, DC/AC motors, generators, solid-state components, wiring methods for single pole and three-way switches and application of the National Electrical Code. Safety is stressed.

ELTR 111 Electrical Algebra 3 credit hours
(Prerequisite: ELTR 101, 102, 103L, 104L or department approval) This course advances the student's knowledge of electrical formulas into algebraic concepts and trigonometric functions as they apply to power production, magnetic circuitry, generators and three-phase motors in the electrical trade.

- ELTR 112 Residential Blueprint Reading I 3 credit hours**
(Pre- or corequisite: ELTR 111 or department approval) Basic instruction is provided in reading and interpreting blueprints and specifications. Emphasis is on terminology, symbols, notations, scaling, dimensioning and basic blueprint drawing techniques. Construction methods, materials and structural support of residential, commercial and industrial buildings also are covered.
- ELTR 113 Electrical Theory II 3 credit hours**
(Pre- or corequisite: ELTR 111, 112 or department approval) This course covers the application of the National Electrical Code, local codes and regulations for installation of branch circuits, services, feeders, temporary services and associated materials and equipment for residential and light commercial applications.
- ELTR 114L Residential Wiring Lab 3 credit hours**
(Pre- or corequisite: ELTR 111, 112, 113 or department approval) This course covers safety, tools, materials, single pole switches, receptacles, overcurrent protection, three- and four-way switches, pilot switches, door chimes, dryer and range receptacles and swamp coolers, as well as NEC requirements for residential and light commercial applications.
- ELTR 115L Residential Services 3 credit hours**
(Pre- or corequisite: ELTR 111, 112, 113 or department approval) This course allows students to study and build residential services, install circuit panels, cut and thread rigid conduit, hand bend and install EMT conduit in adherence to the National Electrical Code.
- ELTR 170 Electrical Wiring Circuitry 2 credit hours**
 This course provides instruction in the interpretation, design and wiring of common switch, receptacle and related circuitry in accordance with the NEC and state and local codes.
- ELTR 171L Conduit Hand Bending Fundamentals 1 credit hour**
 This theory/lab course provides instruction in the computation and placement of conduit hand benders to bend and install conduit systems in accordance with the NEC and state and local codes. (.5 theory + 2.5 lab hours a week)
- ELTR 172L Pole Climbing 1 credit hour**
 Instruction is provided in safety, use of equipment, climbing and maneuvering techniques and use of ladders on poles and spanlines. (0.5 theory and 2.5 lab hours a week)
- ELTR 173 Industrial Motor Control Circuitry 2 credit hours**
 This theory course provides instruction in the design, interpretation, drawing and installation of electromechanical relay type motor controls in accordance with the National Electrical Code.

- ELTR 174L Industrial PC Motor Control 3 credit hours**
This theory/lab course provides instruction in the operation of programmable logic controllers, interpretation of PLC logic diagrams and the installation of programming of PLC systems in accordance with the National Electrical Code. (1 theory + 5 lab hours a week)
- ELTR 175 Fiber Optical Cable Installation 2 credit hours**
This theory course introduces the installation of fiber optical cable in various systems. Emphasis is placed on proper installation and termination.
- ELTR 176 Electrical Journeyman Preparation 3 credit hours**
Instruction is provided in the use and application of the National Electrical Code Handbook. Students learn the responsibilities and duties encountered by journeymen on typical job sites.
- ELTR 201 Electrical Theory III 3 credit hours**
(Prerequisite: ELTR 111, 112, 113, 114L or 115L or department approval) This course introduces students to the commercial/industrial aspects of electrical safety, tools, materials, power distribution systems, services, hazardous locations and intrusion/fire alarm systems in accordance with the National Electrical Code.
- ELTR 202 Commercial Blueprint Reading II 3 credit hours**
(Pre- or corequisite: ELTR 112, 201 or ELEC 118L or department approval) Advanced instruction in reading blueprints and specifications is provided. The blueprints include transformers, feeders, distribution panels, sub-feeder panels, lighting circuits, motors and controllers, signal systems and power requirements.
- ELTR 203 Electrical Motor Control Theory 3 credit hours**
(Prerequisite: ELTR 112 or department approval; pre- or corequisite: ELTR 201) This course introduces students to the symbology and method of interpreting and drawing electromechanical motor control circuitry. NEMA standards are studied in detail.
- ELTR 204L Industrial Motor Control Lab 3 credit hours**
(Pre- or corequisite: ELTR 201, 202 or department approval) Topics include safety, electromechanical relay-type motor control, momentary push button switches, limit switches, proximity switches, pneumatic timers, forward/reverse starters, three-phase motors and National Electrical Code requirements.
- ELTR 205L Industrial Power Distribution 3 credit hours**
(Pre- or corequisite: ELTR 201, 202 or department approval) This lab covers safety, use of mechanical and hydraulic benders, use of power threaders, knock-out punches, hammer drills and powder actuated fasteners, drop-in anchors, cable installation, cutting, splicing and termination, wire pulling and the application of the NEC.

ELTR 211 Industrial Electrical Circuitry and Safety 3 credit hours
(Prerequisite: ELTR 201, 202, 203, 204L, 205L or department approval) This course provides instruction in safety principles and standards used in the electrical field. Techniques used for electrical troubleshooting are emphasized.

ELTR 212 Programmable Logic Controller Theory 3 credit hours
(Pre- or corequisite: ELTR 211 or ELEC 103L, 105L, 118L or department approval) Students are introduced to programmable logic motor controllers. Topics include the principles of operation of a programmable controller, the numbering systems used by controllers, logic fundamentals and basics of programming.

ELTR 213L PLC Installation and Operation 3 credit hours
(Pre- or corequisite: ELTR 211, 212 or ELEC 103L, 105L, 118L or department approval) This course enables a student to install and program programmable logic controllers in accordance with manufacturer's specifications and NEC requirements. Simulating fundamental industrial control processes with various input and output devices is also covered.

ELTR 214L PLC Systems Operation and Troubleshooting 3 credit hours
(Pre- or corequisite: ELTR 211, 212 or department approval) This course enables the student to learn intricate industrial wiring, motor controls and motor troubleshooting, programmable controller timer, counter and sequence program operations and the troubleshooting techniques involved.

ELTR 296 Special Topics 1-6 credit hours
(Prerequisite: department approval) This course provides advanced, in-depth study and research into methods and current technological equipment used in the electrical trades.

Environmental Technology

Associate of Applied Science Degree
Main Campus

The Environmental Technology program provides basic classroom instruction in the diverse field of environmental and occupational safety from a health and safety perspective. The curriculum also provides coursework designed to upgrade skills of individuals already employed in the field.

The student receives a broad, general understanding of environmental problems, as well as physical science instruction, in preparation for entry-level jobs. Instruction is provided in biology, chemistry, physics, ecology, environmental legislation, regulation compliance and abatement. The program addresses key areas of environmental protec-

tion including biological and hazardous waste, water quality protection, air quality protection, soil, domestic and industrial waste control, workplace safety, energy management and recycling.

Environmental Technology Program

			<i>Credit Hours</i>
EPT	101	Emergency First Aid Response	1
EPT	111	Environmental Technology I	4
EPT	112	Hazards and Protection Training	3
EPT	173	Water Quality Protection	3
EPT	299A	Cooperative Education I	3
or			
EPT	296	Special Topics	3
or			
Approved Elective			3
EPT	211L	Environmental Technology II/Lab	4
EPT	212	Energy and Waste Management	3
EPT	213	Occupational Safety	3
EPT	215	Environmental Instrumentation and Analysis	3
EPT	232	Air Quality Protection	1
VICA	177	Employment Skills	1
Computer Elective (any department)			3-4

Required Arts & Sciences Courses

BIO	111	Environmental Science	3
BIO	123	Biology for Health Sciences	3
BIO	124L	Biology Lab for Health Sciences	1
BIO	231L	Applied Environmental Microbiology	4
CHEM	111	Introduction to Chemistry	3
CHEM	112L	Introduction to Chemistry Lab	1
CHEM	130L	Environmental Chemistry	4
CHEM	212L	Integrated Organic Chemistry and Biochemistry	4
Communications Elective (oral communications course)			3
ENG	101	College Writing	3
English Elective (writing course)			3
Math Electives (MATH 120 and/or higher)			6-7
PHYS	102 or higher	.....	3
Humanities/ Social or Behavioral Science Elective			3
Total			77-78

Course Descriptions

EPT 101 Emergency First Aid Response 1 credit hour

This theory/lab course provides instruction in Red Cross multimedia system and cardiopulmonary resuscitation. Red Cross certification is issued. Instruction is also provided in hazardous materials, safety and toxicology. Emphasis is on emergency temporary help in order to preserve life. (0.5 theory + 3 lab hours a week)

EPT 111 Environmental Technology I 4 credit hours

(Prerequisite: MATH 100, ENG 100 or department approval; corequisite: BIO 111) This course is an introduction to environmental protection methods and their ecological basis. All major areas of environmental concern are covered including air, water, soils and food sanitation.

EPT 112 Hazards and Protection Training 3 credit hours

(Prerequisite: EPT 101, EPT 213, CHEM 111, CHEM 112L, computer elective or department approval) Training is provided in safe work practices at hazardous waste sites. Students in this lab course learn those procedures specified by OSHA in the 29 CFR 1910.120 regulation concerning safety and health plans, site characterization and analysis, waste removal and remedial operations. (9 lab hours a week)

EPT 173 Water Quality Protection 3 credit hours

(Prerequisite: EPT 111, CHEM 111, CHEM 112L, math elective, computer elective or department approval) This course provides training in the fundamentals of water quality preservation. Students study water supply system operations, distribution systems and basic hydraulics and become familiar with water quality protection and treatment techniques including backflow prevention and cross connection control. (1 theory plus 5 lab hours a week)

EPT 211L Environmental Technology II/Lab 4 credit hours

(Prerequisite: EPT 111, BIO 231L, CHEM 212L, physics elective, math elective or department approval) This theory/lab course provides instruction in technical, operational and regulatory aspects of environmental technology. Students learn to identify and handle biological, chemical and nuclear wastes. Also covered are site sampling, characterization and assessment, waste removal and site remediation methods. (2 theory + 5 lab hours a week)

EPT 212 Energy and Waste Management 3 credit hours

(Prerequisite: EPT 111, CHEM 111, CHEM 112L, physics elective, math elective, computer elective or department approval) This course provides an orientation to energy and waste management in systems. Students learn to assess energy requirements through audits. Cost effective energy conservation techniques are emphasized. Instruction is provided in waste reduction and control.

Fire Science Program

			<i>Credit Hours</i>
CJ	170	Physical Fitness	1
EPT	213	Occupational Safety	3
FS	102	Fire Service Organization	3
FS	103	Introduction to Fire Science	3
FS	111	Fire Prevention	3
FS	112	Building Construction	3
FS	201	Fire Protection Systems	3
FS	202	Managing Community Fire Protection	3
FS	203	Hazardous Material	3
FS	211	Incident Command and Control	3
VICA	177	Employment Skills	1
*#EMS	160L	Basic Emergency Medical Technician Skills	6
*FS	212	Fire Investigation	3
*FS	213	Industrial Fire Protection	3
*FS	214	Facilities Inspection	3
*FS	215	Tactics I	3
*FS	216	Tactics II	3
*FS	299A	Cooperative Education I	3
(FS 299A may be repeated for up to 9 credits.)			
Computer Elective (any department)			3-4

*Students have the option of any of these courses for a total of 15 credit hours.

#Health Occupations course

Required Arts & Sciences Courses

CHEM	111/112L	Introduction to Chemistry/Lab	4
Communications Elective (oral communications course)			3
ENG	101	College Writing	3
English Elective (writing course)			3
MATH	120	Intermediate Algebra	4
PHYS	102	Introduction to Physics	3
Psychology Elective			3
SOC	101	Introduction to Sociology	3
SOC	216	Ethnic and Minority Groups	3
Total			76-77

Course Descriptions

FS 102 Fire Service Organization 3 credit hours
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) History of fire service, operational definitions, types of organizations, fire department management techniques and governmental impact on fire service delivery, emergency management and future trends in fire protection are covered.

- FS 103 Introduction to Fire Science 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) This course includes fire service history, careers in fire protection, entry requirements, physical agility and fitness requirements, public and private fire protection organization, fire fighting equipment and facilities and the behavior and chemistry of fire.
- FS 111 Fire Prevention 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) This course presents basic principles of fire prevention, public fire and life safety education and protection provided by alarm and sprinkler systems.
- FS 112 Building Construction 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) The student is introduced to building construction with emphasis on structural elements, fire spread in buildings, construction materials, testing fire loading and safe fire department operations in different building types.
- FS 201 Fire Protection Systems 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) The design and operation of fire protection systems are covered, including water distribution, detection, alarm and watchman services, protection systems for special hazards, carbon dioxide, dry chemical, foam and water spray systems.
- FS 202 Managing Community Fire Protection 3 credit hours**
(Prerequisite: FS 102 or department approval) This course includes risk assessment, resource management, measuring and evaluating productivity, legal aspects of emergency service delivery, principles of employee supervision and the changing mission and role of fire service in the community.
- FS 203 Hazardous Materials 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) Students learn definitions, recognition and legal aspects of response to hazardous material incidents. Basic hazardous materials scene management and strategies for resolution of incidents including scene restoration are included.
- FS 211 Incident Command and Control 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) Basic principles of fire-fighting strategies, fire ground operations, general and special emergencies, incident command and communication, and multi-jurisdictional incidents as they involve fire service response are discussed in this course.
- FS 212 Fire Investigation 3 credit hours**
(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval) The student is introduced to the techniques of determining fire origin and cause.

Topics include fire scene search, legal aspects and arson problems including motives and prevention strategies. Also included are interviews and arson case preparation techniques.

FS 213 Industrial Fire Protection 3 credit hours

(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval)

This course covers OSHA fire brigade regulations, organization of fire brigades and fire brigade functions. Problems in storage and use of hazardous materials commonly found in industry are included.

FS 214 Facilities Inspection 3 credit hours

(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval)

This course covers testing of fixed fire suppression and alarm systems, methods of inspection, report writing, enforcement and legal aspects, model building and fire codes, zoning and plan review problems.

FS 215 Tactics I 3 credit hours

(Prerequisite: RDG 099 or equivalent, MATH 099 or equivalent or department approval)

This course covers basic concepts in strategy and tactics. The emphasis is on tactical operations on the fire-ground. Structural firefighting and various means of rescue are taught so students understand the role of firefighter, fire officer or chief officer.

FS 216 Tactics II 3 credit hours

(Prerequisite: FS 215 or department approval)

This course covers basic concepts in strategy and tactics as they apply to emergencies. The focus is on high-rise fires, collapse rescue, wild land fires, crash fire and rescue, hazardous materials, emergency medical services and safety. Tactical operations as related to firefighter, fire officer and chief officer are compared to incidents encountered.

FS 296 Special Topics 1-6 credit hours

(Prerequisite: department approval) This course includes an in-depth study of problems and advanced techniques.

FS 299A Cooperative Education I 3 credit hours

(Prerequisite: VICA 177 or department approval) The student is employed at an approved fire science course-related work site and applies learned fire science theory based on goals and objectives.

WordPerfect and Lotus software, in the food service industry. (1 theory + 5 lab hours a week)

FSMG 299A Cooperative Education I 4 credit hours

The student is employed at an approved course-related work site and applies management theory learned in FSMG 102, 103 and 104 based on goals and objectives.

FSMG 296 Special Topics 1-6 credit hours

This course enables Culinary Arts students to pursue expanded studies in management skills in the hospitality industry. It also may be taken as an independent or guided study or refresher course. Hours are by arrangement.

Machine Tool Technology

**Certificate Program
Main Campus**

The Machine Tool Technology program qualifies students for job entry as machine tool operators. All courses emphasize safe operations of various machine tools. Classes meet in well equipped labs where students are introduced to micrometers, gauges, drill presses, hand tools, engine lathes, milling machines, computer controlled machining centers and other equipment commonly used throughout the metal-working industry.

Students must be free of chronic respiratory diseases and allergies to oils, solvents and cutting fluids, must be able to stand on concrete floors for the length of a standard work shift and must have depth perception correctable in both eyes.

This program requires basic hand tools. Tool lists with approximate costs and purchase deadline are provided by instructors at the beginning of each term.

A suggested schedule includes:

Term 1: MATT 101, 102, 103L, 104L, 105L, 108L, computer elective

Term 2: MATT 111, 113, 117L, 120L, 121L, 122L, VICA 177

Term 3: MATT 201, 202, 208L, 214, 216L, 217L, 218L

Machine Tool Technology Program

			<i>Credit Hours</i>
MATT	101	Machine Tool Technology Math I	2
MATT	102	Machine Tool Technology Blueprint Reading I	2
MATT	103L	Basic Lathe Principles	2
MATT	104L	Basic Milling Machine Principles	2
MATT	105L	Basic Supporting Machine Tool Principles	2
MATT	108L	Basic Measurement and Inspection	2

layout and drilling, toolbit grinding and machine care and maintenance.

MATT 108L Basic Measurement and Inspection 2 credit hours

This course provides practical exercises in basic metal shop measurement and inspection techniques, including use of rules, calipers, micrometers, protractors, gauges, comparison instruments and basic optics, and inspection reports.

MATT 111 Machine Tool Technology Math II 2 credit hours

(Prerequisite: MATT 101 or department approval) A review of basic shop algebra, formulas, geometry and triangulation is presented. Concentrated instruction is provided in applied trigonometry and advanced shop math applications.

MATT 113 Machine Tool Technology Blueprint Reading II 2 credit hours

(Prerequisite: MATT 102 or department approval) Basic shop blueprint interpretation is presented. Concentrated instruction is provided in interpretation of complex engineering drawings including sectional and auxiliary views, tolerances and allowances, surface texture and working shop drawings.

MATT 117L Intermediate Lathe Principles 2 credit hours

(Prerequisite: MATT 103L or department approval) Basic engine lathe principles and operations are reviewed. Training is offered in safety, precision turning and facing, production turning, form and offset turning, taper turning, carbide tooling applications, power cutoff, boring, single point threading and basic CNC turning set up and operation.

MATT 120L Intermediate Milling Machine Principles 2 credit hours

(Prerequisite: MATT 104L or department approval) This course begins with a review of basic milling principles and operations. Training is offered in safety, climb and conventional milling methods, hole production, gear machining, form milling, slotting, pocket milling, rotary table work, indexing and basic CNC milling set-up and operation.

MATT 121L Intermediate Supporting Machine Tool Principles 2 credit hours

(Prerequisite: MATT 105L or department approval) A review of basic support equipment principles and operations is presented. Concentrated training is offered in safety, surface grinding, tool reconditioning, heat treating, production support and advanced quality assurance methods.

MATT 122L Computer Numerical Control I 2 credit hours

(Prerequisite: MATT 101 and 102 or department approval) Basic computer skills necessary to program, set up and operate CNC milling and turning centers are presented. Word address format programming, CNC manuscript and tape preparation, program troubleshooting and editing, machine referencing, tooling and workholding and fundamentals of CNC operation are covered.

MATT 218L Computer Numerical Control II **2 credit hours**
(Prerequisite: MATT 122L or department approval) Programming, manuscript and tape preparation, and editing are reviewed. Various programming languages, canned cycles, subroutines, loops and macros, menu and interactive graphic programming and an introduction to CAD/CAM system fundamentals are presented.

MATT 296 Special Topics **1-6 credit hours**
(Prerequisite: department approval) This flexible course enables students to pursue studies in specialized areas. This class may also be taken as an independent or guided study, as a refresher course or to sharpen skills prior to employer exams.

Mechanical Technology

Associate of Applied Science Degree
 Main Campus

The Mechanical Technology associate of applied science degree is available with two options: air conditioning and plumbing. Cross training in both programs is provided.

All courses must be passed with a minimum grade of C to qualify for graduation.

Mechanical Technology Program

Option I: Air Conditioning, Heating and Refrigeration

			<i>Credit Hours</i>
ACHR	104	Basic Refrigeration Math.....	1
ACHR	107	Basic Electromechanical Principles	2
ACHR	107L	Basic Electromechanical Principles Lab	2
ACHR	108	Basic Service Procedures	2
ACHR	108L	Basic Service Procedures Lab	2
ACHR	109	Basic Applications	2
ACHR	109L	Basic Applications Lab	1
ACHR	114	Math for Systems Design	2
ACHR	120L	Intermediate Applications Lab	2
ACHR	118	Intermediate Electromechanical Principles	2
ACHR	118L	Intermediate Electromechanical Principles Lab	2
ACHR	119	Intermediate Service Procedures	2
ACHR	119L	Intermediate Service Procedures Lab	2
ACHR	120	Intermediate Applications	2
VICA	177	Employment Skills	1
ACHR	204L	Advanced Control Circuitry Lab.....	1

ACHR	206	Advanced Electromechanical Principles	2
ACHR	206L	Advanced Electromechanical Principles Lab	2
ACHR	207	Advanced Service Procedures	2
ACHR	207L	Advanced Service Procedures lab	2
ACHR	208	Advanced Applications	2
ACHR	208L	Advanced Applications Lab	2

Additional Required Trades & Service Occupations Courses

EPT	213	Occupational Safety	3
PLMB	101	Basic Plumbing Theory	1
PLMB	101L	Basic Plumbing Lab	2
PLMB	102	Plumbing Systems Theory	1
PLMB	102L	Plumbing Systems Lab	2
PLMB	105	Plumbing Blueprint Reading I	1
PLMB	106L	Backflow Prevention	2
Computer Elective (any department)			3-4

Required Arts & Science Courses

Communications Elective (oral communications course)			3
ENG	101	College Writing	3
ENG	102 or ENG 119	.....	3
Humanities/Social and Behavioral Science Elective			3
Math Elective			3-4
Physics Elective			3
Total			74-76

Option 2: Plumbing

			<i>Credit Hours</i>
PLMB	101	Basic Plumbing Theory	1
PLMB	101L	Basic Plumbing Lab	2
PLMB	102	Plumbing Systems Theory	1
PLMB	102L	Plumbing Systems Lab	2
PLMB	103	Heating Control Circuitry Theory	1
PLMB	103L	Heating Control Circuitry Lab	2
PLMB	104	Plumbing Mathematics	1
PLMB	105	Plumbing Blueprint Reading I	1
PLMB	106L	Backflow Prevention	2
PLMB	111	Systems Layout/Maintenance Theory	1
PLMB	111L	Systems Layout Lab	2
PLMB	112L	Systems Maintenance Lab	2
PLMB	115	Plumbing Blueprint Reading II	2
PLMB	116L	Building Maintenance, Heating and Cooling	1
PLMB	173L	Orbital Automated Welding Systems	4

Other Required Trades & Service Occupations Courses

ACHR	104	Basic Refrigeration Math	1
ACHR	107	Basic Electromechanical Principles	2
ACHR	107L	Basic Electromechanical Principles Lab	2
ACHR	108	Basic Service Procedures	2
ACHR	108L	Basic Service Procedures Lab	2
ACHR	109	Basic Applications	2
ACHR	109	Basic Applications Lab	2
ACHR	114	Math for Systems Design	2
ACHR	118	Intermediate Electromechanical Principles	2
ACHR	118L	Intermediate EM Principles Lab	2
CM	132	Construction Graphics.....	3
EPT	213	Occupational Safety	3
VICA	177	Employment Skills	1
WELD	170	Welding Skills Improvement.....	3
Computer Elective (any department)			3-4

Required Arts & Sciences Courses

Communications Elective (oral communications course)			3
ENG	101	College Writing.....	3
ENG	102 or ENG 119	.....	3
Humanities/Social and Behavioral Science Elective			3
Math Elective			3-4
Physics Elective			3
Total			75-77

Metals Technology

Associate of Applied Science Degree
Main Campus

The Metals Technology associate of applied science degree is available with two options: Machine Tool Technology and Welding.

The program prepares individuals for entry-level positions in the metal working industry. The program also provides the opportunity to transfer to a four-year program. Personal safety is stressed.

Courses are from the Machine Tool Technology and Welding certificate programs along with Business Occupations, Technologies and Arts & Sciences.

Metals Technology Program

Option 1: Machine Tool Technology

			<i>Credit Hours</i>
MATT	101	Machine Tool Technology Math I	2
MATT	102	Machine Tool Technology Blueprint Reading I	2
MATT	103L	Basic Lathe Principles	2
MATT	104L	Basic Milling Machine Principles	2
MATT	105L	Basic Supporting Machine Tool Principles	2
MATT	108L	Basic Measurement and Inspection	2
MATT	111	Machine Tool Technology Math II	2
MATT	113	Machine Tool Technology Blueprint Reading II	2
MATT	117L	Intermediate Lathe Principles	2
MATT	120L	Intermediate Milling Machine Principles	2
MATT	121L	Intermediate Supporting Machine Tool Principles	2
MATT	122L	Computer Numerical Control I	2
VICA	177	Employment Skills	1
MATT	201	Geometric Dimensioning and Tolerancing	1
MATT	202	Metallurgy	1
MATT	208L	Advanced Lathe Principles	2
MATT	214	Machine Tool Technology CADD	2
MATT	216L	Advanced Milling Machine Principles	2
MATT	217L	Advanced Supporting Machine Tool Principles	2
MATT	218L	Computer Numerical Control II	2
WELD	170	Welding Skills Improvement	3
WELD	171	Advanced Welding Skills Improvement	3
Computer Elective (any department)			3-4
Business Occupations and/or Technologies Elective			3

Required Arts & Sciences Courses

Communications Elective (oral communications course)			3
ENG	101	College Writing	3
English Elective (writing course)			3
Humanities/Social and Behavioral Science Elective			3
Math Elective			3-4
Physics Elective			3
Total			67-69

Option 2: Welding

			<i>Credit Hours</i>
WELD	101	Welding Metallurgy Theory I	2
WELD	102	Welding Math I	1
WELD	103	Welding Blueprint Reading I	1

WELD	104L	Oxyacetylene Welding and Cutting	2
WELD	105L	Oxyacetylene Brazing/Soldering and Fabrication	2
WELD	106L	Introduction to SMAW	2
WELD	107L	Introduction to SMAW Qualifications and Fabrication	2
WELD	111	Welding Metallurgy Theory II	2
WELD	112	Welding Blueprint Reading II	1
WELD	113	Welding Math II	1
WELD	114L	Advanced SMAW	2
WELD	115L	Introduction to GMAW and Fabrication	2
WELD	116L	Introduction to GTAW and Fabrication	2
WELD	117L	Qualifications for SMAW and GMAW	2
VICA	177	Employment Skills	1
WELD	201	Welding Metallurgy Theory III	2
WELD	202	Welding Blueprint Reading III	2
WELD	205L	Pipe Layout and Welding	2
WELD	206L	Advanced GMAW and Fabrication	2
WELD	207L	Advanced GTAW and Fabrication	2
WELD	208L	Qualifications for GTAW	2
MATT	173	Machine Tool Technology Skills	3
MATT	174	Advanced Machine Tool Technology Skills	3
Computer Elective (any department)			3-4
Business Occupations and/or Technologies Elective			3

Required Arts & Sciences Courses

Communications Elective (oral communications course)			3
ENG	101	College Writing	3
English Elective (writing course)			3
Humanities/Social or Behavioral Science Elective			3
Math Elective			3-4
Physics Elective			3
Total			67-69

Plumbing

Certificate Program
Main Campus

The Plumbing program provides safety training, technical knowledge and occupational skills necessary to enter the plumbing industry. Instruction is in the fundamentals of layout, assembly and installation, as well as nomenclature of tools and materials and practice with the tools of the trade.

- PLMB 102 Plumbing Systems Theory 1 credit hour**
 This class covers the design of drainage and vent systems, sprinkler systems and water supply systems. Also covered are the correct methods to rough in a system and top out of an installation. Installation of DWV, cast iron, ABS and PVC vent systems in combustible construction is also covered.
- PLMB 102L Plumbing Systems Lab 2 credit hours**
 The student is introduced to the correct procedure for installation, repair and service of drainage and vent, sprinkler and water supply systems. Rough-ins and top outs are also covered.
- PLMB 103 Heating Control Circuitry Theory 1 credit hour**
 This course includes installation and troubleshooting of heating control circuitry. Control theory, terminology and symbols are covered. Instructional emphasis is on electrical control devices from various manufacturers. Also covered are the reading and developing of wiring diagrams and line schematics.
- PLMB 103L Heating Control Circuitry Lab 2 credit hours**
 The focus is on installation and troubleshooting of heating control circuitry. The correct use of electrical test instruments is stressed. Wiring and testing gas-fired heating test boards and actual furnaces are also covered. Safety is stressed.
- PLMB 104 Plumbing Mathematics 1 credit hour**
 This course covers basic arithmetic, whole numbers, fractions and decimals. Volumes and weight measurements are also covered.
- PLMB 105 Plumbing Blueprint Reading I 1 credit hour**
 This course introduces blueprint reading. Also covered are sketching and reading blueprint working drawings for new construction, maintenance and remodeling.
- PLMB 106L Backflow Prevention 2 credit hours**
 Students identify, test and repair backflow prevention assemblies in this theory/lab course. A minimum of 50 percent of class time is spent in the lab. Completion of the course qualifies the student to become a certified backflow prevention assembly tester. Personal safety is emphasized. (1 theory + 3 lab hours a week)
- PLMB 111 Systems Layout/Maintenance Theory 1 credit hour**
(Prerequisite: PLMB 103L, PLMB 106L or department approval) This course emphasizes design, layout and installation of water, soil and vent lines, fixtures and fittings; inspecting and testing systems; soldering; maintenance and repair of plumbing, solar systems and yard irrigation; and swimming pool, hot tub and spa installation and service.
- PLMB 111L Systems Layout Lab 2 credit hours**
(Pre- or corequisite: PLMB 106L, PLMB 111 or department approval) The emphasis is

Quantity Food Preparation

Certificate Program
Main Campus

The Quantity Food Preparation program emphasizes occupational safety/sanitation criteria and nutritional food preparation. It prepares students for entry into the rapidly growing food industry—as saute cooks after the first term or dinner cooks upon completion of the full program.

Classes are held in industrial kitchens. Students prepare large quantities of food and operate a cafeteria line including cash registers. Advanced students operate the Student Specialties program, a fine dining restaurant open to the public.

Graduates are encouraged to enroll in the Baking program, as space permits, to gain an additional job skill which may be helpful in their careers.

Students must be free of chronic allergies. Each student must also present a physician's certificate to T-VI before the start of classes stating that the student is free from tuberculosis in a transmissible form.

This program requires basic hand tools. Tool lists with approximate costs and purchase deadlines are provided by instructors at the beginning of each term.

A suggested schedule per term includes:

Term 1: QUFD 101, 102, 103L, 104L, 105L, 106L, VICA 177

Term 2: QUFD 111, 112L, 113L, 114L, 115L, computer elective

Quantity Food Preparation Program

		<i>Credit Hours</i>
QUFD	101	Quantity Food Theory I 2
QUFD	102	Food Service Math 3
QUFD	103L	Buffet Procedures 2
QUFD	104L	Salad and Pantry 2
QUFD	105L	Dinner 2
QUFD	106L	Fry 2
VICA	177	Employment Skills 1
QUFD	111	Quantity Food Theory II 3
QUFD	112L	Dining Room Skills 1
QUFD	113L	Cold Preparation 2
QUFD	114L	Stocks and Sauces—Sous Chef..... 2
QUFD	115L	Entree (Meat and Fish Preparation) 3
Computer Elective (any department)		3-4
Total		28-29

QUFD 113L Cold Preparation 2 credit hours
(Pre- or corequisite: QUFD 111 or department approval) Safe and sanitary basic salad and dressing preparations and dessert preparations are practiced. Skills such as safe use of knives are developed.

QUFD 114L Stocks and Sauces—Sous Chef 2 credit hours
(Pre- or corequisite: QUFD 111 or department approval) Students safely prepare stocks and the basic sauces and derivations of these sauces.

QUFD 115L Entree (Meat and Fish Preparation) 3 credit hours
(Pre- or corequisite: QUFD 111 or department approval) Safe basic techniques of preparing meats, fish and poultry are covered.

QUFD 296 Special Topics 1–6 credit hours
(Prerequisite: department approval) This course enables students enrolled in Culinary Arts classes to pursue related studies in specialized areas.

Transportation Technology

Associate of Applied Science Degree
 Main Campus

The Transportation Technology associate degree is available to students with three options: Automotive Body Repair, Automotive Technology and Diesel Equipment Technology.

The program prepares individuals for entry-level positions, including management and supervision, in the transportation industry.

Courses are from the Automotive Body Repair, Automotive Technology and Diesel Equipment Technology certificate programs and from other Trades & Service Occupations programs, as well as Arts & Sciences.

Option I: Automotive Body Repair

			<i>Credit Hours</i>
AUBO	101	Auto Body Theory 1	3
AUBO	102L	Welding Plastics and Adhesives I	2
AUBO	103L	Metal Prep/Repair and Mechanical Systems	2
AUBO	104L	Metal Finishing/Body Filling	2
AUBO	105L	Basic Refinishing Systems	2
DETC	102	Math/Basic Electricity	3
AUBO	111	Auto Body Theory II	3
AUBO	112L	Welding Plastic and Adhesives II	2
AUBO	113L	Suspension and Alignment	2

AUBO	114L	Frame and Unibody Repair	2
AUBO	115L	Mechanical Systems	2
VICA	177	Employment Skills	1
AUBO	201	Auto Body Theory III	3
AUBO	202L	Welding Plastics and Adhesives III	2
AUBO	203L	Advanced Refinishing Systems/Techniques	3
AUBO	204L	Advanced Restraint/Electrical Systems	1
AUBO	206L	Air Conditioning	1
AUBO	208L	Advanced Frame and Unibody Repair	2

Additional Required Trades & Service Occupations Courses

AUTC	113	Transportation Electronics	3
EPT	101	Emergency First Aid Response	1
EPT	213	Occupational Safety	3
Automotive Technology Elective			3
Computer Elective (any department)			3-4

Required Arts & Sciences Courses

Communications Elective (oral communications course)			3
ENG	101	College Writing	3
English Elective (writing course)			3
Humanities/Social and Behavioral Science Elective			3
Math Elective			3-4
Physics Elective			3
Total			69-71

Option 2: Automotive Technology

			<i>Credit Hours</i>
AUTC	101	Braking Systems Theory	1
AUTC	101L	Braking Systems Lab	2
AUTC	102	Suspension and Alignment Theory	2
AUTC	102L	Suspension and Alignment Lab	2
AUTC	103	Manual Transmissions and Axles Theory	2
AUTC	103L	Manual Transmissions and Axles Lab	2
DETC	102	Math/Basic Electricity	3
AUTC	111	Engine Overhaul Theory	2
AUTC	111L	Engine Overhaul Lab	2
AUTC	112	Automatic Transmissions and Transaxles Theory	2
AUTC	112L	Automatic Transmissions and Transaxles Lab	2
AUTC	113	Transportation Electronics	3
AUTC	114	Heating and Air Conditioning Theory	1
AUTC	114L	Heating and Air Conditioning Lab	2
VICA	177	Employment Skills	1

AUTC	201	Automotive Ignition Systems Theory	2
AUTC	201L	Automotive Ignition Systems Lab	3
AUTC	202	Automotive Fuel Systems Theory	2
AUTC	202L	Automotive Fuel Systems Lab	2
AUTC	203	Automotive Computer Systems Theory	2
AUTC	203L	Automotive Computer Systems Lab	2

Additional Required Trades & Service Occupations Courses

EPT	101	Emergency First Aid Response	1
EPT	213	Occupational Safety	3
Computer Elective (any department)			3-4
Welding Elective			3

Required Arts & Sciences Courses

Communications Elective (oral communications course)			3
ENG	101	College Writing	3
English Elective (writing course)			3
Humanities/Social and Behavioral Science Elective			3
Math Elective			3-4
Physics Elective			3
Total			70-72

Option 3: Diesel Equipment Technology

			<i>Credit Hours</i>
DETC	101	Diesel Drive Train Theory	3
DETC	102	Math/Basic Electricity	3
DETC	103L	Manual Shift Transmissions Lab	3
DETC	104L	Drive Axles, Brakes, Automatic Transmissions Lab	2
DETC	105L	Hydraulic Systems	2
VICA	177	Employment Skills	1
AUTC	113	Transportation Electronics	3
DETC	111	Diesel Engine Theory	3
DETC	111L	Diesel Engine Overhaul	3
DETC	112L	Precision Measurement and Component Repair Lab	2
DETC	113L	Engine Tune-up and Testing Lab	2
DETC	201	Diesel Electrical Theory	1
DETC	201L	Diesel Electrical Lab	3
DETC	202	Diesel Fuel Injection Theory	1
DETC	202L	Diesel Fuel Injection Lab	3
DETC	203	Transport Refrigeration/Air Conditioning Theory	1
DETC	203L	Transport Refrigeration/Air Conditioning Lab	3

Additional Required Trades & Service Occupations Courses

EPT	101	Emergency First Aid Response	1
EPT	213	Occupational Safety	3
MATT	105	Basic Supporting Machine Tool Theory	2
MATT	105L	Basic Supporting Machine Tool Principles	2
Computer Elective (any department)			3-4
Welding Elective			3

Required Arts & Sciences Courses

Communications Elective (oral communications course)			3
ENG	101	College Writing	3
English Elective (writing course)			3
Math Elective			3-4
Physics Elective			3
Humanities/Social and Behavioral Science Elective			3
Total			71-73

Truck Driving

Certificate Program Main Campus

The Truck Driving program provides students who are already licensed drivers the basic instruction required to become professional commercial truck drivers.

Students learn how to handle a tractor trailer safely and efficiently. The goal is to prepare students to earn the commercial driver's license needed to operate tractor trailers professionally.

The program is certified by the Professional Truck Driver Institute of America (PTDIA). The certification agency requires students to purchase textbooks.

Each entering student must:

- ◆ not have been convicted of or forfeited bond for more than four moving violations in the past three years;
- ◆ not have more than one at-fault, preventable accident in the past three years;
- ◆ not have been convicted of or forfeited bond for DWI or reckless driving;
- ◆ have a valid New Mexico license authorizing operation of vehicles that he/she is to drive;
- ◆ pass a physical examination as set forth in Section 391.41 of the Federal Motor Carrier Safety Regulations;
- ◆ obtain pre-qualification testing for controlled substances and alcohol use as set forth in 49 CFR 382.301 from a qualified testing facility; and
- ◆ be at least 23 years old.

WELD 106L Introduction to SMAW 2 credit hours
(Pre-or corequisite: WELD 101) This basic course in shielded metal-arc welding (SMAW) provides instruction in safety and electrical arc welding. Instruction is in beading, build-ups and welding various types of joints.

WELD 107L Introduction to SMAW 2 credit hours
Qualifications and Fabrication
(Pre- or corequisite: WELD 101) This course provides instruction in safety and proper procedure for arc welding qualifications. AWS D1.1 Code is followed on A36 material with A501 electrodes. Basic fabrication and repair problems are used for practical applications.

WELD 111 Welding Metallurgy Theory II 2 credit hours
(Prerequisite: WELD 101 or department approval) Instruction in safety, shrinkage and distortion, pre-heating and post-heating, and difficulties and defects is presented. Students are introduced to heat treatment and destructive and non-destructive testing of ferrous and non-ferrous metals.

WELD 112 Welding Blueprint Reading II 1 credit hours
(Prerequisite: WELD 103 or department approval) This course provides instruction in commercial construction and fabrication drawing interpretation and covers detail and assembly drawings related to the welding field and the transferring of measurements from blueprints to a workpiece.

WELD 113 Welding Math II 1 credit hour
(Prerequisite: WELD 102 or department approval) Instruction in area, perimeter and volumes of common structural shapes and common layout techniques supported with mathematical applications is provided.

WELD 114L Advanced SMAW 2 credit hours
(Prerequisite: WELD 106L, 107L; corequisite: WELD 111 or department approval) Advanced instruction in SMAW with a strong emphasis on safety is offered. The student practices stringers, weaves and wash passes. Various electrode types and sizes are used.

WELD 115L Introduction to GMAW and Fabrication Lab 2 credit hours
(Prerequisite: WELD 106L; corequisite: WELD 111 or department approval) This course in mig welding provides instruction in safety, spray and short-circuiting transfer. Fabrication and repairs are assigned for practical applications.

WELD 116L Introduction to GTAW and Fabrication Lab 2 credit hours
(Prerequisite: WELD 106L; corequisite: WELD 111 or department approval) Basic instruction in safety and TIG welding is provided. Instruction is given on aluminum and stainless steel. Fabrication and repairs are assigned for practical applications.

WELD 117L Qualifications for SMAW and GMAW 2 credit hours
(*Pre- or corequisite: WELD 111, WELD 114L and 115L or department approval*) Simulated qualification procedures for arc and mig welding are provided. The student simulates qualifications in all positions with A36 material.

WELD 170 Welding Skills Improvement 3 credit hours
This theory/lab course includes instruction in safety practices, general tools and equipment, sources of heat, operating procedures, metals and their properties, and applications of oxyacetylene and arc welding. (1 theory + 5 lab hours a week)

WELD 171 Advanced Welding Skills Improvement 3 credit hours
(*Prerequisite: WELD 170 or department approval*) Instruction is provided in advanced welding process. Mig and tig welding and other processes such as plasma arc, resistance, flux core, carbon and submerged arc welding are included. (1 theory + 5 lab hours a week)

WELD 201 Welding Metallurgy Theory III 2 credit hours
(*Prerequisite: WELD 111 or department approval*) This course provides instruction in safety, diagnosis of welding problems and processes used for carbon steels, stainless steels, aluminum and pipe. Concentrated instruction is offered in destructive and non-destructive testing of ferrous and non-ferrous metals including information on AWS inspection.

WELD 202 Welding Blueprint Reading III 2 credit hours
(*Prerequisite: WELD 112 or department approval*) This course provides instruction in the development of templets, pipe layout and development, structural print reading, performance of pipe qualification tests and design and layout considerations related to fabrication.

WELD 205L Pipe Layout and Welding 2 credit hours
(*Prerequisite: WELD 114L; corequisite: WELD 201 or department approval*) Working speed and proficiency are emphasized through various practical fabrication and repair assignments. Instruction is provided in basic pipe welding and layout, materials testing and industrial safety. This course also deals with welding problems for carbon steels and their repairs.

WELD 206L Advanced GMAW and Fabrication 2 credit hours
(*Prerequisite: WELD 117L; corequisite: WELD 201 or department approval*) This course provides instruction in advanced carbon steel wire feed welding. Instruction is provided in AWS lab inspection and fabrication/repair.

WELD 207L Advanced GTAW and Fabrication 2 credit hours
(*Prerequisite: WELD 116L; corequisite: WELD 201 or department approval*) Advanced aluminum and stainless steel wire feed welding are covered. Instruction is provided on AWS lab inspection and fabrication/repair.

The T-VI Community

The Governing Board

David R. Cargo, Chair
Blair L. Kaufman, Vice Chair
Patrick Chapman, Secretary
Charles E. Barnhart
Ruth L. Connery
Dan A. McKinnon III
Robert P. Matteucci

Office of the President

Alex A. Sanchez, Ed.D.

President

Patricia E. Buehler

Assistant to the President

Cleta H. Downey

Director of Development

Karen Hinton

Institutional Planning and Research Officer

Joline D. Mahr

Director of Public Information/Assistant to the President



Instructional Division

Janice E. Micali, Ph.D. Vice President for Instruction
Ruth S. Tangman Associate Vice President for Instruction

Administrative Division

Michael J. Glennon, M.B.A. Vice President for Administration
M. Sadie Tafoya Associate Vice President for Administration

Student Services and Computer Information Technology Division

Sigfredo Maestas, Ph.D. Executive Vice President for Computer Services
and Computer Information Technology

Harriette Barber Director of the Student Health Center
Jane Campbell Director of Admissions and Records/Registrar
Richard Delgado Director of Assessment Programs
Holly DeWees Site Manager, Rio Rancho/Intel Campus
Mack G. Henington Main Campus Dean
Gloria Hernandez Director of Student Job Placement Services
Howard Porter Director of Computer and Network Services
Paul A. Romero Director of Financial Aid
A. Paul Smarrella Director of Special Services
Victor B. Watson Montoya Campus Dean

Academic Deans

Philip M. Callow Dean of Technologies
Arthur B. Córdova Dean of Outreach & Transitional Programs
Susan A. Murphy Dean of Arts & Sciences
Sally J. Pearson Dean of Health Occupations
Joseph J. Rodman Dean of Trades & Service Occupations
Jacqueline Sanders Dean of Business Occupations
Mónica Torres Dean of Developmental Studies

Student Services Personnel

Alice Abeyta, Counselor
Terri Abraham, Diagnostician/Counselor
Marfa Bautista, Student Advocate, Project HAVE
Prudence Beckh, Counselor
Cindy Brennan, Counselor
Michael Campbell, Admissions Advisor
Raymond Corona, Counselor
Anita Curtis, Financial Aid Advisor
Pearlene Dawson, Student Services Advisor
Dorothy J. Duran, Associate Director of Financial Aid
Rudy Grado, Counselor
Mary Cecilia Gutierrez, Special Populations Coordinator
Cheryl D. Johnson, Director of Student Services, Montoya Campus
Joann Kirby, Counselor
Ann Kirkpatrick, Counselor

Edward J. Lopez, Counselor
Richard Martin, Admissions Advisor
Pamela Micker, Counselor
Nahid A. Movaghar, Counselor
Deborah Mzhickteno, Counselor
Arlene J. Odenwald, Financial Aid Advisor
Larry Perez, Counselor
Gregory B. Salazar, Financial Aid Advisor
Barbara Silva-Greene, Counselor
Dayle Sillerud, Examiner
Sheri Stein, Admissions Advisor
Annemarie A. Valdez, Financial Aid Advisor
Julie Watson, Counselor
Scott Whitaker, Assistant Director of Financial Aid
Bonnie Wilson, Counselor/Diagnostician

Learning Resources Personnel

Chuck Baldonado, Associate Dean of Learning Resources
Russell Gladstone, Vocational Outreach/Reference Librarian
Ruth Krug, Manager of Technical Services

Beverly J. Moreno, Director of Montoya Campus Library
John Ungemach, Manager of Instructional Media Resources
Kris Wycisk, Reference Librarian

Outreach & Transitional Programs

Marie Chávez, ESL/bilingual instructor, B.A., M.A., University of New Mexico

June E. Entringer, adult education learning center instructor, B.A., M.A.T., Alaska Methodist University

M. Sue Fox, basic skills instructor, B.A., University of New Mexico; M.B.A., University of Phoenix

Eugenia Sproul Lott, English as a second language instructor, B.A., Trinity University; M.A., Instituto Tecnológico y de Estudios Superiores de Monterrey

Joe F. Sackett, basic skills instructor, B.A., M.A., University of New Mexico

Joan N. Silverstein, literacy instructor, B.A., University of Pennsylvania; M.A., University of New Mexico

Arturo T. Talamante, coordinator of community based sites, B.A., M.A., University of New Mexico

Developmental Studies

Tim Allen, math and science instructor; B.S.E., Northeast Missouri State University

Roberta Ataman, English and reading instructor; B.A., University of Illinois; M.Ed., Loyola University of Chicago

Keith M. Atkins, math and science instructor; B.S., Ohio University

Donald Bauer, math, reading and drafting instructor; B.S., St. Cloud State University

Judith L. Brown, math and English instructor; B.A., Temple University; M.A., University of New Mexico

Paige Brown, health and math instructor; R.N., Birmingham Baptist Hospital; B.S., Samford University; M.Ed., University of Louisville

Angelika S. Carroll, English and reading instructor; B.A., College of Santa Fe; M.A., Johann Wolfgang Goethe Universität, Frankfurt, Germany

Kenneth A. Chappy, assistant to the dean; B.S., Southern Illinois University; M.B.A., University of Phoenix

James N. Chaves, math and science-electronics instructor; B.S., M.S., University of New Mexico

Max Cisneros Jr., math instructor; B.A., University of New Mexico

Linda Clay, English and math instructor; B.S., Eastern New Mexico University; M.A., University of New Mexico

Merrie Courtright, reading and English instructor; B.S., University of Nebraska at Omaha; M.S., Purdue University

Don Croxton, math instructor; B.S., University of Albuquerque

Darryl Domonkos, math and science instructor; A.B., Xavier University; M.C.P., University of Cincinnati

Martin J. Doviak, English and math instructor; A.B., Princeton University; M.A., University of California at Santa Barbara

- Shirley Ellison, special education, math, reading and English instructor; B.S., Youngstown State University, M.A., University of New Mexico
- Vicki Froehlich, math instructor; B.S., M.Ed., Texas Tech University
- Katherine Green, English and reading instructor; A.A., Snow Junior College; B.S., Utah State University; M.A., University of Nevada
- Jean Hafner, science and math instructor; B.S., University of New Mexico
- Vicki Hagen, English and reading instructor; B.A., Concordia College; M.A., University of Iowa
- Margaret Ann (Gretta) Hochstatter, math instructor; B.S., University of Albuquerque
- Donna Hurtado, special education, reading and math instructor; B.A., University of New Mexico
- William Johns, math and electronics instructor; B.S., Southern Illinois University; B.S., Alma College; M.A., New Mexico Highlands University
- Larry Johnson, special education, reading, math, computer instructor; B.A., University of California at Santa Barbara; M.A., University of New Mexico; M.A., Lesley College
- James B. Kimmons, math and reading instructor; B.A., M.A., University of New Mexico
- David Kohles, accounting, math and science instructor; B.S., University of New Mexico
- Judy G. Kristl, math and English instructor; B.S., Indiana State University
- Joseph R. Krzyzanowski, math instructor; B.B.A., M.A., University of Wisconsin
- Gerald Leister, English and math instructor; A.A., Muskegon Community College; B.A., Michigan State University; M.A., University of New Mexico
- Steve Lonz, math instructor; B.U.S., University of New Mexico; M.Math, University of Waterloo
- Ilene P. Maness, math and English instructor; B.S., M.A., University of New Mexico
- Connie Jo Martinez, English, math and business occupations instructor; B.S., M.A., University of New Mexico; M.B.A., Highlands University
- Elizabeth C. Martinez, English, math and business occupations instructor; A.A., New Mexico Junior College; B.S., M.A., University of New Mexico
- Charles Miller, math instructor; B.S., Northern Illinois University
- Maria C. Pacheco, science and math instructor; B.S., University of New Mexico
- Deborah Weaver Parker, reading and English instructor; B.S., Wheaton College, M.A., University of North Dakota
- Ralph Peters, math and science instructor; B.S., M.S., University of Wisconsin
- Linda Pope, English, math and reading instructor; B.A., Harpur College, Binghamton University; M.A., University of New Mexico
- Richard Randolph, English and reading instructor; B.A., M.A., Portland State University
- Mark Rudd, math instructor; B.A., University of New Mexico
- John M. Saavedra, math and trades instructor; B.S., University of New Mexico

Gary Sandstrom, math and science instructor; B.S.B.A., M.A., University of Phoenix

Wilfred Sawyer, math, reading and English instructor; B.S., University of Dubuque; M. Div., McCormick Theological Seminary; Ph.D., Michigan State University

Jana Smith, accounting and math instructor; B.S., Southwest Texas State University

Theresa Sullo, English and reading instructor; B.A., Boston State College; M.A., University of New Mexico

Ann Tran, math and English instructor; B.A., University of Saigon; M.A., University of Chicago

Deloris Watkins, English, math and business occupations instructor; A.A., B.A., College of Santa Fe

Phillip Weaver, math, reading and science instructor; A.A., Lassen Junior College; B.S., M.A., University of New Mexico

Mary Willingham, math and science instructor; B.A., Hardin-Simmons University; M.S., University of Arizona; M.A., University of New Mexico

John Wright, English instructor; B.A., University of California, Riverside; M.A., California State University, Fullerton

Arts & Sciences

Rama Akkaraju, mathematics instructor; B.S., Women's College Osmania University; M.S., Science College Osmania University

Richard Araiza, mathematics instructor; B.S., University of Texas/Austin

Jon Bentley, English instructor; B.A., M.A., University of New Mexico

Eli Blake, mathematics instructor; B.S., M.S., New Mexico Institute of Mining and Technology

Gene Booth, English instructor; B.A., M.Ed., George Mason University; M.A., University of New Mexico

Joseph Boroughs, psychology instructor; B.A., San Diego State University; M.A., Ph.D., University of New Mexico

Geoffrey Burks, physics instructor; B.A., M.S., Ph.D., University of Chicago

Paul N. Cahoon, English instructor; B.A., University of Albuquerque; M.A., University of Nevada/Las Vegas

Richard Calabro, biology instructor; B.S., Cornell University; M.S., University of New Mexico

Connie Callahan, psychology instructor; B.A., Missouri Southern State College; M.S., Pittsburgh State University; Ph.D., University of New Mexico

Catherine Chalmers, English instructor; B.A., Western State College of Colorado; M.A., Western State College of Colorado

Steve Cormier, history instructor; B.A., South Dakota State University; M.A., Wichita State University

Sravanthi Cornell, chemistry instructor; B.S., Nizam College; M.S., Osmania University; Ph.D., Texas Women's University

John Cornish, assistant to the dean; B.A., University of Northern Colorado; M.A., University of Denver

Lee Couch, biology instructor; B.S., M.S., University of New Mexico

Arnold Crelier, chemistry instructor; B.S., Brooklyn College; Ph.D., Indiana University

Terry Daughtrey, anthropology instructor; B.A., M.A., University of New Mexico

Rose Day, English instructor; B.A., M.A., State University of New York at Buffalo; Ph.D., University of New Mexico

Jack Douthett, mathematics instructor; B.Mus., M.Mus., University of New Mexico

Kaz Dziamka, English instructor; B.A., M.A., Jagiellonian University; Ph.D., University of New Mexico

Jeanne Elmhorst, communication studies instructor; B.A., M.A., University of Wisconsin/Steven's Point

Joseph Eridon, chemistry instructor; B.S., Western Michigan University; M.S., University of New Mexico

Virginia Fisher, mathematics instructor; B.S., Midwestern State University; M.A., University of New Mexico

Kateljne Flies, biology instructor; B.S., M.S., Texas Christian University; Ph.D., University of New Mexico

Megan Florence, mathematics instructor; B.S., M.A., University of New Mexico

Cheryl Foote, history instructor; B.A., M.A., Ph.D., University of New Mexico

Richard Fox, political science instructor; B.A., M.A., University of New Mexico

Ollar Fuller, biology instructor; B.S., M.S., Memphis State University; Ph.D., University of New Mexico

Rosalind Gottfried, sociology instructor; B.A., Rutgers College; M.A., Ph.D., Brandeis University

Janet Heath, mathematics instructor; B.S., University of Tulsa; M.S., New Mexico State University

Michael Hillard, psychology instructor; B.A., Baylor University; M.A., Illinois State University; Ph.D., Brigham Young University

Bruce Hofkin, biology instructor; B.A., University of California at San Diego; M.A., University of Oregon; Ph.D., University of New Mexico

Sherry Holmen, communication studies instructor; B.A., M.A., University of New Mexico

Carole Hunt, Spanish instructor; B.A., M.A., University of New Mexico

Julie Huntsman, biology instructor; B.S., M.S., University of New Mexico

Stephanie Kauffman, English instructor; B.A., University of Delaware; M.A., University of Houston; Ph.D., University of New Mexico

Maureen Kelly, mathematics instructor; B.U.S., M.A., University of New Mexico

William Kuipers, biology instructor; B.S., Ph.D., University of New Mexico

George Lane, philosophy instructor; B.A., Reed College; M.A., Ph.D., University of Chicago

Kevin Leith, mathematics instructor; B.S., M.S., New Mexico Institute of Mining and Technology

Jane Lyo, mathematics instructor; B.A., Korea University; M.A., University of New Mexico

Heather Hull Mara, philosophy instructor; B.A., Guilford College; M.A., St. John's College; M.L.S., University of Arizona

Carol Martinez, chemistry instructor; B.S., New Mexico Highlands University; M.S., University of California at Davis

Stephen Mathewson, English instructor; B.A., University of Oklahoma; M.A., Ph.D., University of New Mexico

- Layne McAdoo, sociology instructor; B.A., University of Oklahoma; M.A., Wichita State University; Ph.D., University of New Mexico
- Geraldine L. McBroom, assistant to the dean; B.S., M.A., Kent State University; Ph.D., Ohio State University
- Colleen McNamara, biology instructor; B.S., M.S., University of New Mexico; Ph.D., University of North Carolina
- Shelly Metz, psychology instructor; B.S., M.S., Fort Hays University; Ph.D., University of New Mexico
- Deborah Miller, chemistry instructor; B.S., Missouri Southern State College; M.S., Iowa State University
- William Miller, philosophy instructor; B.B.A., Ohio University; M.A., Kent State University
- Barbara Muller, English instructor; B.S., Abilene Christian University; M.A., University of New Mexico
- Carolyn Murray, sociology instructor; B.A., Carleton College; M.S., University of Wisconsin; M.Ed., Harvard University
- Jay J. Myers, psychology instructor; B.A., Claremont McKenna College; Ph.D., California Institute of Technology
- Hana Samek Norton, history instructor; B.A., M.A., University of Western Ontario; Ph.D., University of New Mexico
- Boye Odom, physics instructor; B.S., M.S., University of Texas at El Paso
- Linda Oldham, English instructor; B.A., M.A., University of New Mexico
- Lisa M. Orick, communication studies instructor; B.B.A., National University at Las Vegas; M.A., University of Wyoming
- Umesh Pandey, physics instructor; B.Ed., Delhi University; M.S., Agra University; M.S., New Mexico Highlands University
- Esther Pariente-Ahmed, Spanish instructor; B.A., Instituto del Profesorado San Miguel; M.A., Kansas State University; Ph.D., University of New Mexico
- Kate Parker, English instructor; B.A., University of Richmond; M.A., Western Kentucky University; Ph.D., University of New Mexico
- Harold Partin, mathematics instructor; B.S., Eastern New Mexico University; M.A., Eastern New Mexico University; Ph.D., Texas A&M University
- George Pletsch, mathematics instructor; B.S., M.A., Ph.D., University of New Mexico
- Alan Pope, English instructor; B.A., University of South Florida; M.A., Ph.D., University of New Mexico
- Mary Prentice, psychology instructor; B.A., University of New Mexico; M.S., New Mexico Highlands University
- Fred Ream, mathematics instructor; B.S., M.A., University of New Mexico
- James Rewalt, mathematics instructor; B.S., South Dakota State University; M.S., Northeast Louisiana University
- Geri Rhodes, English instructor; B.A., Bucknell University; M.A., Tufts University; Ph.D., University of New Mexico
- Virginia Roberts, sociology instructor; B.A., M.A., University of Montana
- Tomas Ruiz-Fabrega, Spanish instructor; B.A., M.A., Ph.D., University Complutense of Madrid
- Phil C. Sanchez, communication studies instructor; B.A., University of New Mexico; M.A., University of Texas at Austin

Jamie Searcy, English instructor; B.U.S., B.A., M.A., University of New Mexico

Janet Shagam, biology instructor; B.S., University of Massachusetts; M.S., University of Arizona; Ph.D., University of New Mexico

Wayne Shrubsall, English instructor; B.S., M.A., Ball State University; Ph.D., University of New Mexico

Beverly Smith, psychology instructor; B.A., University of Washington; B.A., M.S., Ph.D., University of New Mexico

Janet Smith, computer science instructor; B.A., City University of New York; M.Ed., Ph.D., University of Georgia

Peter Steinbach, mathematics instructor; B.U.S., B.A., M.A., University of New Mexico

James Swan, biology instructor; B.S., M.S., Florida State University

Lucy Vigil, Spanish instructor; B.A., M.A., Ph.D., University of New Mexico

Anne Waters, philosophy instructor; B.A., University of New Mexico; M.A., Ph.D., Purdue University; J.D., University of New Mexico

Chris Wheland, mathematics instructor; B.A., M.A., Eastern New Mexico University

Mark Williams, computer science instructor; B.A., University of New Mexico

Tadg Woods, mathematics instructor; B.S., M.A., University of New Mexico

Shawn Wright, biology instructor; B.S., Penn State University; M.S., Northeastern University

Business Occupations

Dawn Addington, CPA, accounting instructor; B.B.A., M.S.Acc., University of New Mexico

Joyce Barefoot, administrative assistant instructor; B.B.A., University of New Mexico

Cheryl Bartlett, CPA, accounting instructor; B.B.A., University of New Mexico

David Bency, CPA, accounting instructor; B.B.A., New Mexico State University

Brenda Byerly, court reporting instructor; B.S., Illinois State University

Lois Carlson, CPA, assistant to the dean; B.S.N., University of Minnesota; M.B.A., Ph.D., University of New Mexico

Priscilla Carrillo, court reporting instructor; B.S., M.A., University of New Mexico

Leigh Anne Chavez, legal assistant studies instructor; B.A., University of Nevada/Las Vegas; J.D., University of California/Los Angeles

Susie Cutler, administrative assistant/microcomputer management specialist instructor; B.B.A., Lamar University; M.A., Webster University

Chuck Edelman, business administration instructor; B.S., Sophia University; M.B.A., University of New Mexico

Sally Fish, business administration instructor; B.A., San Diego State University; M.B.A., National University

Anita Frantz, legal assistant studies instructor; B.S., J.D., University of New Mexico

Jean Gallegos, accounting instructor; B.A., Adams State College

- Precilliano Garcia, administrative assistant instructor; B.A., M.A., New Mexico Highlands University
- Marianne Gardner, administrative assistant instructor; B.A., University of Kentucky; M.S., University of Dayton
- Hossein Giahhi, business administration instructor; B.S., University of Albuquerque; M.B.A., University of New Mexico
- Elmo Gomez, administrative assistant instructor; B.S., University of New Mexico
- Fred Gordon, accounting instructor; A.A., B.A., University of Albuquerque; M.A., New Mexico Highlands University
- Marcella Green, administrative assistant/microcomputer management specialist instructor; B.S., Eastern New Mexico University; M.A., University of New Mexico
- Joann Griffin, administrative assistant instructor; B.S., University of New Mexico
- Nadine Grosjean, administrative assistant instructor; B.Ed., University of Toledo; M.A., University of New Mexico
- Sue Gunckel, CPA, accounting instructor; B.A., M.S.W., University of Denver
- Gary Hays, cashier/sales instructor; B.S., Eastern New Mexico University
- Mary Carole Helton, microcomputer management specialist instructor; B.S., University of New Mexico
- Debbie Hester-Rael, CPA, accounting instructor; B.B.A., University of Albuquerque; B.S., University of New Mexico
- Bob Hildenbrand, CPA, accounting instructor; A.A.S., Suffolk County Community College; B.P.S., State University College of New York/Utica; M.S., State University of New York/Albany
- Guy Hobbs, accounting instructor; B.S., University of Tennessee/Chattanooga
- Jim Holmes, accounting instructor; B.B.A., M.A., University of New Mexico; M.B.A., New Mexico Highlands University
- Judy Johnson, administrative assistant instructor; A.A., Mohawk Valley Community College; B.S., Western Kentucky State University; M.A., University of New Mexico
- Marilyn Konnick, administrative assistant instructor; B.S., University of Albuquerque; M.A., University of New Mexico
- Deborah LaPointe, court reporting instructor; B.S., Illinois State University; M.S., Northern Illinois University
- Myron Liberman, business administration instructor; B.B.A., City College of New York; M.A., University of New Mexico
- Barbara Logan, business administration instructor; B.S., M.A., University of New Mexico
- Fannie Lujan, administrative assistant instructor; B.S., University of New Mexico
- Anna Machemehl, administrative assistant instructor; B.S., University of New Mexico
- Marilyn Maclay, administrative assistant instructor; B.B.A., University of Texas
- Gail Maddoux, business administration instructor; B.S., Oklahoma State University; M.A., M.B.A., University of New Mexico

Gloria Madrid, administrative assistant instructor; B.A., M.A., New Mexico Highlands University

Linda Maggart, administrative assistant instructor; B.S., University of New Mexico

Joyce Matthews, accounting instructor; B.S., Miami University; M.A., University of New Mexico

Judy McCutcheon, administrative assistant instructor; B.S., M.A., University of New Mexico

Nancy NtiAsare, legal assistant studies instructor; B.S., City University/Seattle; J.D., Willamette University

William Price, accounting instructor; B.S., Metropolitan State College; M.A., University of Arizona

Shirley Quintana, court reporting instructor; B.S., University of New Mexico

Robert Reeback, legal assistant studies instructor; B.A., M.A., Ph.D., University of Rochester; J.D., University of New Mexico

David Steele, business administration instructor; B.A., Eastern New Mexico University; M.B.A., University of New Mexico

Anita Sterchi, administrative assistant instructor; B.S., M.A., University of New Mexico

Anita Vaughn, administrative assistant instructor; B.S., Indiana University

John Warns, business administration instructor; B.A., University of New Mexico

Joe Webster, CMA, accounting instructor; B.S., University of Albuquerque; M.B.A., College of Santa Fe

Maja Whittington, accounting instructor; B.A., M.B.A., University of Texas/El Paso

Kim Wong, business administration instructor; B.S., Brigham Young University; M.B.A., J.D., Boston College; M.S., Massachusetts Institute of Technology

Anna Wormald, court reporting instructor; B.A.S., M.A., University of New Mexico

Health Occupations

John Blewett, RRT, RCP, respiratory care instructor; A.S., University of Albuquerque; B.U.S., University of New Mexico

Teresa Brito-Asenap, program director, child development; M.A., University of New Mexico

Marsha Brown, RN, nursing instructor; B.S.N., State University of New York at Albany; M.S.N., University of New Mexico

Margaret Dahrting, RN, nursing instructor; B.S.N., University of New Mexico; M.S.N., University of New Mexico

Charles Fatta, RRT, RCP, respiratory care instructor; B.A., University of New Mexico; M.B.A., University of Phoenix

Pamela Fletcher, R.D./L.D., nutrition instructor; B.S., Michigan State University; M.A., University of New Mexico

Charlene Fritts, RN, major instructor, pharmacy technician and perioperative nursing; A.D.N., University of Albuquerque; B.S., B.S.N., Graceland College, College of Saint Francis; M.A., Webster University

- Richard Gentile Jr., RRT, RCP, director of respiratory care programs; A.A.S., Milwaukee Technical College; B.S., Georgia State University; M.Ed., University of Houston
- David Gordon, RRT, RCP, respiratory care instructor; A.S., University of Chicago Hospitals and Clinics
- Diane E. Jacobi, RN, nursing instructor; B.S.N., M.S.N., University of New Mexico
- Monya Kmetz, MT (ASCP), program director, medical laboratory technician; B.S., Eastern New Mexico University; M.A., University of New Mexico
- Marcia Lee, RN, nursing instructor; B.S., California State University, Chico; M.S., University of California, San Francisco
- Patricia Loffin, RN, nursing instructor; LPN, Mercedian School of Nursing; RN, Olympic College; B.S.N., Pacific Lutheran University
- Lorraine Lowen, RN, nursing instructor; A.A., A.A.S., Suffolk County Community College; B.S.N., M.S.N., State University of New York at Stony Brook
- Ruth McCall, MT (ASCP), CLS (NCA), major instructor, phlebotomy; B.S., University of Iowa
- Paulette McNeill, RN, nursing instructor; B.S.N., M.S.N., University of New Mexico
- Gloria Monek-Kovanis, RN; nursing instructor; B.S.N., Temple University; M.S.N., Gwynedd Mercy College
- Mary Moser-Gautreaux, RN, nursing instructor; B.S.N., University of New Mexico; M.S.N., University of Texas at El Paso
- Delores Pederson, RN, nursing instructor; B.S.N., University of North Dakota
- Lori Ponge, RN, nursing instructor; B.S.N., University of Massachusetts
- Marie Rea-Trujillo, RN; nursing instructor, B.A., Mount St. Mary's College, California; M.S.N., University of California, Los Angeles
- Paul Sands, RRT, RCP, clinical coordinator, respiratory care programs; A.S., University of California at Davis; B.A., University of New Mexico
- Ann E. Sims, RN, major instructor, nursing assistant; B.S.N., University of New Mexico
- Nancy Stephens, RN, nursing instructor; B.S.N., M.S., University of Maryland
- Patricia Stephens, RN, director of nursing programs; B.S.N., University of Iowa; M.S., University of California, San Francisco; M.A., Denver Seminary
- Anna Swan, RN, major instructor, health unit clerk program; B.S.N., University of New Mexico
- Carol Winkles, RN, nursing instructor; B.A.N., Gustavus Adolphus College; M.S.N., University of Wisconsin-Eau Claire

Technologies

- Jamie Barr, assistant to the dean; B.A., Barnard College; M.P.A., University of New Mexico
- Joseph Black, electronics technology instructor; B.S., University of Utah; B.S.E.E., University of New Mexico; M. P. A., Troy State University
- William Boettcher, electronic engineering technology instructor; B.S., M.S., University of Wisconsin
- Bruce Bush, electronics technology instructor; B.S., Southern Illinois University
- David Clauss, electronics technology instructor; B.A., University of New Mexico
- Steven Fraker, architectural/engineering drafting technology instructor; B.S., Eastern New Mexico University; M.A., University of New Mexico
- Hayward Franklin, business computer programming technology instructor; B.A., American University; Ph.D., University of Arizona
- Joel Gellman, electronics technology instructor; B.S., College of Advanced Science
- Judith George, architectural/engineering drafting technology instructor; B.A., Carleton College
- Beverly Gersema, business computer programming technology instructor; B.S., Chapman University
- James Green, electronics technology instructor; A.S.E.E., State Technical Institute at Memphis; B.S.I.E., University of New Mexico
- Gordon Hall, registered architect, architectural/engineering drafting technology instructor; B.F.A., M.Arch., University of New Mexico
- James Hart, electronics technology instructor; B.U.S., University of New Mexico
- Raymond Isengard, electronics technology instructor
- Brenda Judd, business computer programming technology instructor; B.B.A., Eastern New Mexico University; M.B.A., University of La Verne
- Andrew Kerr, registered architect; architectural/engineering drafting technology instructor; B.S. Arch., University of Dundee
- Paul Kirkpatrick, architectural/engineering drafting technology and computer programming technology instructor; B.U.S., University of New Mexico
- Eric Krosche, electronics technology instructor; A.S., Middlesex County College; B.S., M.S., New Mexico Institute of Mining and Technology
- Alfred E. Lauber, registered architect, registered landscape architect, architectural/engineering drafting technology instructor; B. Arch., University of Oregon; M.A., University of Wyoming
- Donald Lentz, business computer programming technology instructor; B.A., New Mexico State University; B.S.N., University of New Mexico
- William Lindquist, business computer programming technology instructor; B.I.E., M.S.I.E., Auburn University
- Aaron Loggins, electronics technology instructor; B.S., U.S. Military Academy; M.S., AFIT, Wright-Patterson A.F.B.; M.B.A., University of New Mexico; Ph.D., Texas Tech University
- Fabian Lopez, electronics technology instructor

- Thomas Lucero, registered architect, architectural/engineering drafting technology instructor; B.F.A. Arch., M.A., University of New Mexico
- Earnestine Mitchell, business computer programming technology instructor; B.A., Grambling State University of Louisiana
- JoAnn Poe, electronics technology instructor; B.A., M.A., Arizona State University
- Laurence Rose, laser electro-optic technology instructor; B.S., New Mexico Highlands University; M.S., University of New Mexico
- Richard Schutzberger, design drafting engineering technology instructor; B.S.E.E., M.S.E.E., University of New Mexico
- Daniel Shaffer, design drafting engineering technology instructor; A.S., New Mexico Junior College; B.S., Kansas State College; M.A., University of New Mexico; M.S., Colombia Pacific University
- E. Tito Suárez, business computer programming technology instructor; B.S., Pontificia Universidad Católica del Perú
- Susan Sujka, math/electronics technology instructor; B.S., New Mexico Institute of Mining and Technology
- Theodore Trujillo, electronics technology instructor; B.S., University of Albuquerque
- Wesley Wesbrooks, electronics technology instructor; B.S., Southern Illinois University
- Michael White, electronics engineering technology instructor; B.S., M.S., Texas Tech University
- Elizabeth Wilkinson, design drafting engineering technology instructor; B.A., University of New Mexico
- Mary Jane Willis, electronics technology instructor; B.S., Northwestern State University of Louisiana; M.A., University of New Mexico
- Charles A. Young, business computer programming technology instructor; B.S., University of Arizona; M.A., Webster University

Trades & Service Occupations

- Alain Archuleta, electrical trades instructor; B.S., Southern Illinois University
- Earnest Arko, electrical trades instructor; B.A., Highlands University
- Paul Baxter, automotive body repair instructor; B.S., New Mexico State University
- Paul Beck, machine tool technology instructor; B.S., University of New Mexico
- David Bergsland, commercial printing instructor; B.F.A., University of Minnesota
- Noel Binford, construction management instructor; B.S., University of New Mexico
- Richard Birkey, assistant to the dean; B.S., University of Illinois; M.A., Ed.D., University of New Mexico
- Timothy Brown, electrical trades instructor; B.S., Iowa State University
- Thomas Bryant, truck driving instructor; B.S., Southern Illinois University
- Glen Bugge, automotive technology instructor; B.S., Illinois State University
- Darcy Buland, quantity foods instructor; B.S., Mankato State University
- Kayleigh Carabajal, baking instructor; B.A., University of Albuquerque; M.A., University of New Mexico
- Darrell Creel, truck driving instructor; B.A., Western New Mexico University
- James DeMarcus, air conditioning, heating and refrigeration instructor; B.S., Southern Illinois University
- Frederick Downum, construction management instructor; B.S., Northern Arizona University
- John P. Gabaldon, electrical trades instructor; B.S., University of New Mexico
- Rudy Garcia, food service management instructor; B.U.S., University of New Mexico; M.A., Webster University
- Donald D. Groghan, criminal justice instructor; A.A., Schreiner Institute; B.A., Baylor University; M.A., University of Alabama; M.S., California Lutheran College
- Scott Henrickson, automotive technology instructor; B.U.S., University of New Mexico
- Dave Hinchcliffe, carpentry instructor; B.S., Southern Illinois University
- Joyce Jones, quantity foods instructor; B.S., Southern Illinois University
- Robert Kho, automotive technology instructor; B.A., California State University
- Barry King, environmental technology instructor; B.S., M.S., University of Houston
- Mario Lazoya, welding instructor; B.U.S., University of New Mexico
- Samuel E. Lovelette, electrical trades instructor; B.S., Ferris State College
- James Marshall, air conditioning, heating and refrigeration instructor; B.A., M.S., Ph.D., Southern Illinois University
- Ronald Marshall, commercial printing instructor; B.S., Pittsburgh State University
- Ted Modica, diesel equipment technology instructor; A.S., State University of New York; B.S., Southern Illinois University
- Thomas J. Morris III, physical fitness/exercise science instructor; B.S., M.S., University of Illinois
- Larry Mounger, transportation technology instructor; B.S., Southern Illinois University

John Murray, air conditioning, heating and refrigeration instructor; B.A., University of New Mexico

Paul Jay Musselman, air conditioning, heating and refrigeration instructor; A.S., B.S., Northern Arizona University

Walter Niederberger, criminal justice instructor; B.A., M.S., San Jose State University

Simon Nunez, Jr., plumbing instructor; B.S., Western New Mexico University

John Pierce, carpentry instructor; B.A., University of New Mexico

Harold Senke, environmental technology instructor; A.S., B.S., New Mexico State University

Michael Southerly, fire science instructor; A.G.S., Rio Salado Community College; B.A., Ottawa University

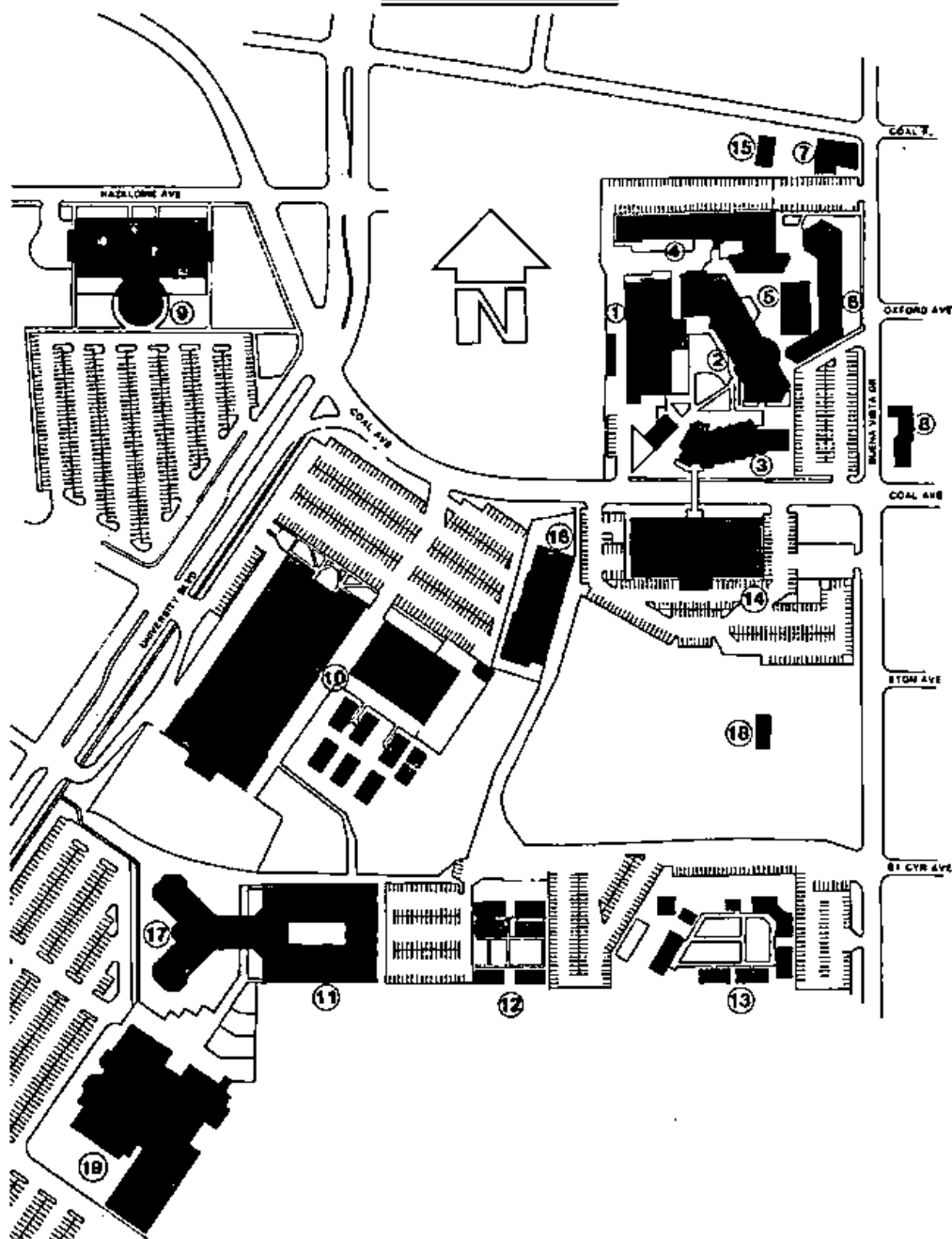
Wayne Sprong, environmental technology instructor; A.A., Allan Hancock College, B.A., State University of New York College of Technology; M.P.A., Golden Gate University

Richard Warren, machine tool technology instructor; B.S., University of New Mexico

Alton Whittier, welding instructor

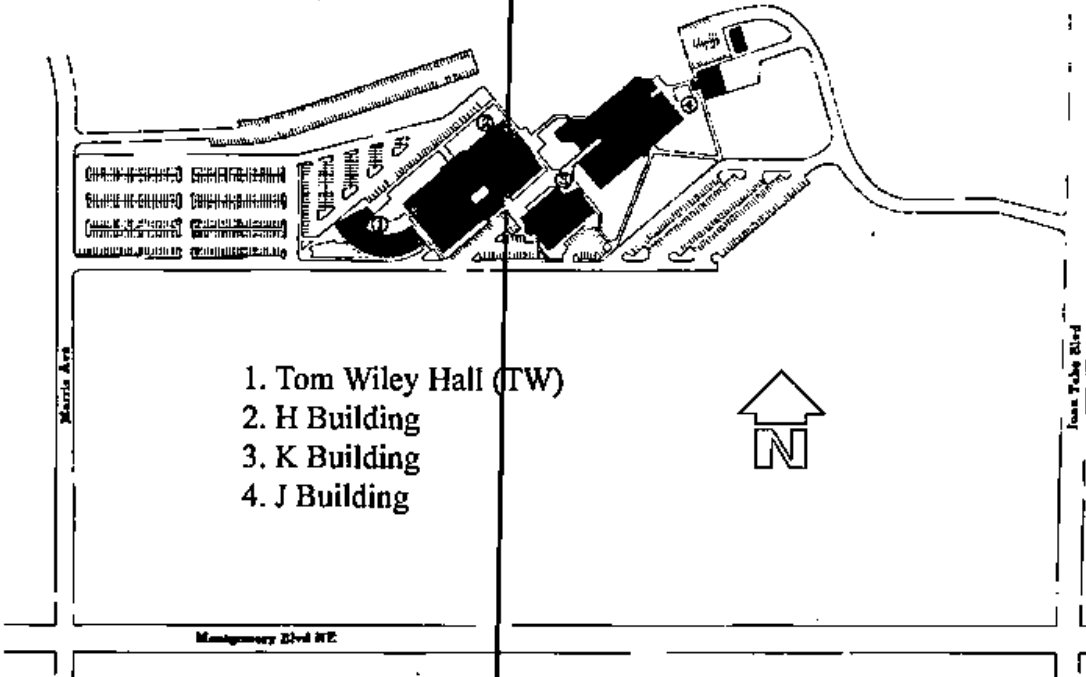
Charles R. Yonker, machine tool technology instructor; A.S., Moraine Valley Community College; B.S., Chicago State University

Main Campus

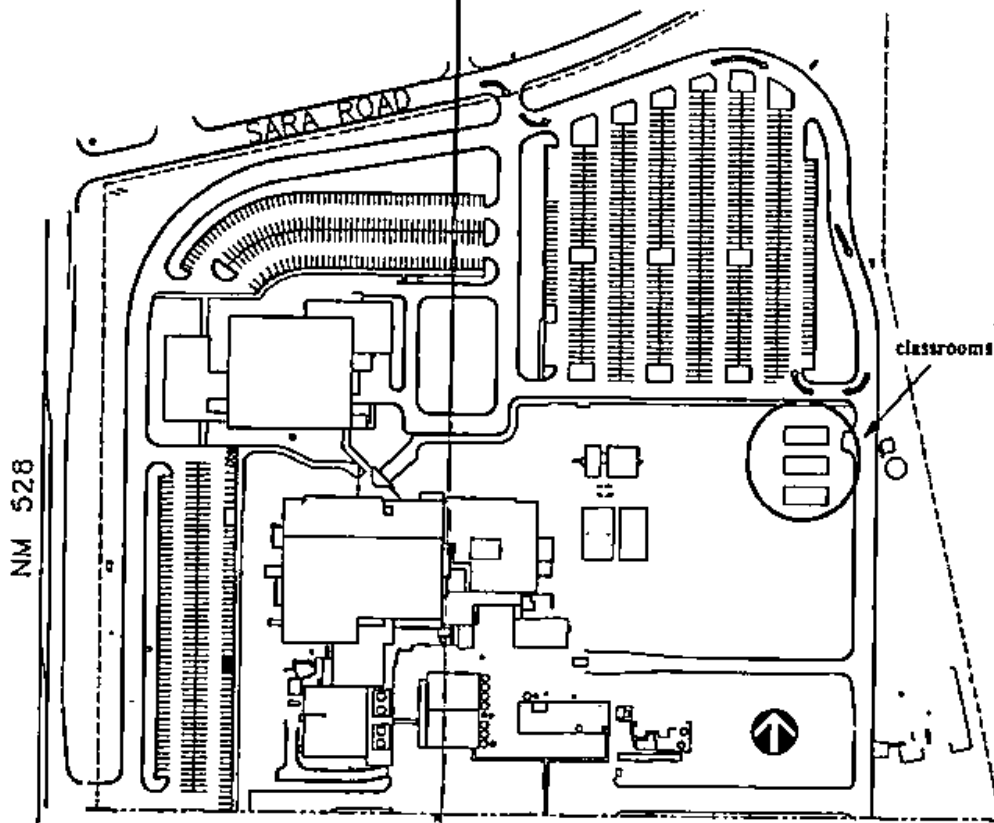


- | | |
|-----------------------------------|---|
| 1. West Building (W) | 11. Preparatory Building (P) |
| 2. Administration Building (A) | 12. South Temporary Buildings (ST) |
| 3. South Building (S) | 13. Buena Vista Buildings (BV) |
| 4. North Building (N) | 14. Jeannette Stromberg Hall (JS) |
| 5. Main Building (M) | 15. Human Resources Office |
| 6. East Building (E) | 16. Science Laboratory Building (L) |
| 7. North Temporary Building (NT) | 17. Max Salazar Hall (MS) |
| 8. Student Job Placement Services | 18. Tres Manos Child Development Center |
| 9. Smith Brasher Hall (SB) | 19. Student Services Building |
| 10. Ted Chavez Hall (TC) | |

Montoya Campus



Rio Rancho/Intel Campus



Index

A

absences 42
academic calendar 10–11
academic honesty 55
academic records 46
academic regulations 41–48
academic standards 44
academic year 41
Accounting 8, 60, 94, 97–
102, 105, 195
accreditation 8
Accuplacer 19, 51
ACT 19, 24, 52
adding courses 25
address change 48
Administrative Assistant 8, 102–106
admission 17–29. *See also* individual
programs
Adult Education 14–16, 19, 317
Learning Centers 16, 50
advanced placement
153, 160, 164, 179
advanced placement exams 21. *See*
also individual programs
advertising 115
advisory committees 6
Aerospace Studies (Air Force) 92
Air Conditioning, Heating and
Refrigeration 232–236
Air Conditioning, Heating and
Refrigeration option 281
algebra 81, 82

American College Test (ACT) 19,
24, 52
American Hotel and Motel Associa-
tion 107
Anderson Schools of Management
136
anthropology 67
applying to T-VI 19–29
apprenticeship programs 226–229
Architectural/EngineeringDrafting
Technology 183–191
art 68
articulation agreement
6, 65, 93, 136
Arts & Sciences Department 64–
92, 306, 317
ASQC certification 204
ASSET 19, 51
Associate Degree Prep Program 18
astronomy 68–69
attendance 16, 42
audiovisual 51
auditing courses 43
Automotive Body Repair 236–239
Automotive Body Repair option 291
Automotive Technology 8, 239–243
Automotive Technology option 292

B

Baking 243–245
basic skills 14, 15
biological and physical science 66

biology 69–71
bookstores 29, 54
bus passes 54
business
 law 112
 math 94, 105
 organizations 127
Business Administration 8, 107–117
Business Computer Programming
 Technology 192–199
Business Occupations Department
 93–139, 309, 317
Business Occupations
 Learning Centers 94–96

C

calculators 61, 94, 105
calculus 82, 83
cancelling enrollment 25
Carpentry 245–248
Ceramic Manufacturing Concentration
 option 223
certificate/degree status 18
Certified Management Accounting 97
Certified Professional Secretary 102
Certified Public Accountant 97
challenge examinations 20, 94. *See*
 also individual programs
chemistry 60, 71–72
child care 35, 54
Child Development 146–149
choice of catalog 46
circuit analysis 207
classification of students 41
College Level Examination Program
 (CLEP) 22
commercial carpentry apprenticeship
 226
Commercial Printing 248–252
communication 105, 106, 111
communication studies 73–74
communications 60–61, 66
computer assisted drafting (CAD) 183
computer languages
 ADA 198

ANSI COBOL 195, 195–196
Assembler 197
BASIC 196, 198
C 196, 197, 198
C++ 198
RPG 197, 198
Unix 198
computer literacy 74
computer literacy graduation require-
 ment 18, 45, 66, 141. *See also*
 individual programs
computer science 66, 74
computer software
 Access 134
 CADD 280
 dBase 94, 133
 desktop publishing 133, 134, 250
 DOS 94, 133
 Excel 134
 Lotus 94, 133, 196
 MS-DOS 196
 PowerPoint 134
 Windows 95, 133, 196
 word processing 105, 133, 196
 WordPerfect 95
computer-assisted design/drafting
 (CADD) 202, 204
computer-assisted drafting (CAD)
 280
computer-assisted instruction 15
computers
 accounting 112
 computer-aided design 278
 crime 55
 database management 197
 data entry 121–122
 graphics 196
 in law practice 129
 information processing 120
 Internet 134
 keyboarding. *See* keyboarding
 Macintosh 94
 microcomputers
 94, 106, 112, 131–
 135, 134, 196, 197

- networks 135, 198, 216
- programming 61, 74, 135, 192–199, 195–199, 202, 207
- repair 216
- software 74
- concurrent enrollment 18
- Construction Management option 252
- Construction Technology 252–256
- consumer electronics 216
- Consumer Electronics/Communication option 211
- continuing education credit 20
- Continuing Education Studies 6
- continuous enrollment 46
- Continuous Quality Improvement 116–117, 231
- Continuous Quality Improvement option 109
- Contract Training 6
- cooperative education. *See* individual programs
- corequisite 23, 43
- counseling 19, 49
- course fees 29
- course load 23
- course numbering 41
- course placement test 51
- course repetition 25
- Court Reporting 117–121
- creative writing 76
- credit by examination 20–22. *See also* individual programs
- credit hour 41
- credit/no credit 43. *See also* individual programs
- Criminal Justice 257–260
- culinary apprenticeship 226
- Culinary Arts 260–261
- cultural studies 75

D

- data entry 121–122
- data processing 195
- Delta Epsilon Chi 115

- dependent care allowance 32
- Design Drafting Engineering Technology 8, 200–205
- desktop publishing. *See* computer software: desktop publishing
- Developmental Studies Department 56–63, 304, 317
- Diesel Equipment Technology 261–264
- Diesel Equipment Technology option 293
- Digital Computer Networking option 211
- disabilities, services for people with 5, 6, 50, 51
- disruptive behavior policy 55
- Division of Vocational Rehabilitation 36
- drafting 61, 183–191, 200–205, 207
- dropping courses 25

E

- economics 75
- Electrical option 254
- Electrical Trades 265–269
- electrical trades apprenticeship 227
- electromechanical devices 215
- electromechanical drafting 203
- electronics 61
- Electronics Engineering Technology 8, 205–209
- electronics fundamentals 213
- Electronics Technology 209–218
- Emergency Medical Technician 141–142
- Engineering option 185
- English 57, 75–77, 94
- English as a second language (ESL) 14, 15, 58
- entrepreneurship 122
- environmental science 69
- Environmental Technology 269–272
- equal opportunity policy 5
- estimated expenses 32
- ethics 84

F

Facilities Maintenance option 220
 fees 28
 fiber optics 214
 filing 94
 financial aid 3, 33–40. *See also*
 individual programs
 fine arts and foreign languages 66
 Fire Science 272–275
 fire sprinkler apprenticeship 227
 Food Service Management 276–277
 Free Application for Federal Student
 Aid (FAFSA) 33
 French 77–78
 full load 23
 funding of T-VI 6

G

GED 4, 52
 General Construction option 253
 general education 9
 general education core curriculum 65
 General Honors courses 64, 78–79
 Geographic Information Systems 199
 geography 78
 goals of T-VI 7
 Governing Board 6, 301
 grade appeal 44
 grades 16, 25, 42–48
 graduation 11, 45
 graffiti 55
 grammar 63, 77

H

Hablamos Español 14
 health care 53
 health insurance 53
 Health Occupations Department
 45, 140–181, 311, 317
 Health Unit Clerk 149–150
 high school students 18
 history 79
 history of T-VI 5

honor roll 44
 honors, graduation with 46
 Housing option 185
 human relations 112
 humanities 66, 80

I

identification cards 41
 incomplete grade 43
 Instructional Media Resources 51
 International Business option 109
 International Business Specialist 122–
 124
 internship. *See* individual programs

J

job placement 12, 53, 231
 job search skills 113
 Job Training Partnership Act 36
 journalism 80

K

keyboarding 60, 94, 104–
 105, 106, 119

L

Laser Electro-Optics option 211
 lasers 217
 Legal Assistant Studies 125–130
 legal terminology 121
 liberal arts degree 65–66
 libraries 50
 Licensed Practical Nurse Refresher
 142–143
 linguistics 67
 literacy 15
 literature 76, 77

M

Machine Tool Technology 277–281
 Machine Tool Technology option 284
 machine tools 202
 machine transcription 94, 106

major 25
Manufacturing Skills 218–219
Manufacturing Technology 220–224
marketing 112, 124
materials science 203, 223–224
math 51, 59, 66, 81–
82, 195, 199, 214, 218, 247, 287
math anxiety 62
Math Applications Learning Lab 57
Mechanical Technology 281–283
mediation 130
Medical Laboratory Technician 150–
155
medical terminology 94, 120
medical transcription 94
merchandising 109, 112
Metals Technology 283–285
Microcomputer Management Special-
ist 131–135
microprocessors 208, 215
Military Studies 66, 92
mission statement 7
Montoya Campus 317, 319
music 83

N

name change 48
New Mexico Council of Independent
Community Colleges 65
New Mexico National Guard 27
New Mexico Real Estate Commission
107
non-credit educational opportunities 6
non-degree status 18
non-traditional credit 20
Nursing 8, 161–167
Nursing Assistant 155–157
Nursing Home/Home Health Atten-
dant 143
Nursing Student Loan 35
nutrition 83–84

O

occupational support courses 60–61
off-campus sites 15

office technology 102–106
optics 217
Outreach & Transitional Programs
Department 14–16, 304, 317

P

Parent Loans for Undergraduate
Students 35
parking 54
Pell Grant 34
Perioperative Nurse Specialist 144
Permission to Enroll forms 19
Pharmacy Technician 167–169
Phi Theta Kappa 53
philosophy 84
Phlebotomy 169–170
photonics 214
physical fitness 259
physics 85–86
placement test 19, 51, 93, 225
Plastics Manufacturing Concentration
option 222
Plumbing 285–288
plumbing apprenticeship 228
Plumbing option 282
political science 86
Practical Nursing 8, 157–161
Pre-Management 136–137
preparatory courses 23, 56–63
prerequisites 23, 43. *See also*
individual programs
Presbyterian Hospital School of
Practical Nursing 157, 160
probability and statistics 82
probation 44
process control 218
Process Control option 211
program and/or course requirements
19
proofreading 95
psychology 87–88
purchasing 113

Q

quality assurance 204
quality control 216
Quantity Food Preparation 289-291

R

radio frequency communication 212
reading 57, 59
real estate 109, 114, 128, 137-138
records 46
refunds 31
Registered Nurse Refresher 145
registration 15, 23-29
religion 88
remodeling 230
repeating courses 25, 44
residency 26-29
Respiratory Care programs 8, 171-181
Respiratory Therapy 8, 176-181
Respiratory Therapy Technology 8, 171-176
Rio Rancho/Intel Campus 317, 319

S

sales 115
Sales and Cashiering 138-139
SAT 19, 24, 52
satisfactory academic progress 37
schedule of classes 3, 23
scholarships 36
school year 6, 10, 41
science 60
self-paced learning 6, 50, 57, 93, 94-97
semiconductor devices 214
semiconductor manufacturing 218
Semiconductor Manufacturing Concentration option 222
senior citizen tuition discount 28
sheet metal apprenticeship 228
shorthand 95
 machine shorthand 119, 120
shuttle bus 54

skill improvement/mini courses 61-62
Small Business Development Center 6, 93
small business management 109
smoking policy 55
social and behavioral science 66
Society of Manufacturing Engineers 200
sociology 88-89
soldering 216
Spanish 51, 90-91
Special Services 3, 50, 317
spelling 62, 95
Stafford Loan 34
Stay in School 37
"stepbacks" 25
student activities 53
Student Handbook 3
Student Incentive Grant 34
Student Job Placement Services 53, 317
student newspaper 53
student records 16
student services 49-55
study skills 62
substance abuse policy 55
Supplemental Educational Opportunity Grant 34
supplies 29
suspension 45

T

T-VI Foundation 6, 36
technical writing 76
Technologies Department 182-224, 313, 317
testing 51
textbooks 29, 54
theater 91
tools 29. *See also* individual programs
topics courses. *See* individual programs
tourism and hospitality 109, 113

Trades & Service Occupations

- Department 19, 225–300, 315, 317
- transcripts 47
- transfer of credit 20
- Transportation Technology 291–294
- Tres Manos Child Development Center 35, 317
- trigonometry 81
- Truck Driving 8, 294–296
- tuition 28–29
 - senior citizen discount 28
- Tutorial/Learning Centers 8, 50, 317
- tutors 16
- typing. *See* keyboarding

U

- uniform fee 31
- University of New Mexico
 - 56, 92, 103, 136, 146, 152, 176, 181

V

- vacuum systems 218
- veterans 36
- Veterans Administration 36
- Vocational Industrial Clubs of America (VICA) 225

W

- Welding 296–300
- Welding option 284
- withdrawing from T-VI 25
- word processing. *See* computer software.
- work study 35
- workshops 6
- writing 57, 75
- Writing and Reading Assistance Center 57