CATALOG 1989–90

Albuquerque Technical-Vocational Institute

Volume XXIV **June 1989**

Main Campus
525 Buena Vista SE, Albuquerque, NM 87106
Telephone: (505) 848-1400

Joseph M. Montoya Campus
4700 Morris NE, Albuquerque, NM 87111
Telephone: (505) 298-5461

Equal Opportunity Policy

The Albuquerque Technical-Vocational Institute, in compliance with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973, does not discriminate on the basis of race, color, national origin, religion, handicap, age or sex in any of its policies, practices or procedures. The provision includes, but is not limited to, admissions, testing, employment, financial aid and educational services.

Any person who wants to file a complaint based on these laws should contact the T-VI equal opportunity officer, Joline Mahr, M Building, Main Campus, 525 Buena Vista SE, 848-1407.

Telephone Directory

Main Campus

Switchboard/Locator	848-1400
Admissions	848-1540
Adult Basic Education	848-1486
Adult Learning Center	848-1771
Bookstore	848-1649
Cashier (Admissions)	848-1516
Continuing Education Division	848-1480
Financial Aid	848-1530
GED—General Educational Development	247-9579 Ext. 28
Information	848-1540
Instructional Division	848-1607
Administration	848-1607
Arts and Sciences	848-1680
Business Occupations	247-9579
Developmental Studies	848-1750
Health Occupations	848-1560
Technologies	848-1610
Trades	848-1700
Library	848-1770
Placement	848-1460
Special Services for the Handicapped	243-1741 TTY 247-9304
Student Records	848-1510
Student Services Administration	848-1601
Support Services Administration	848-1406
Business Office	848-1430
Personnel	848-1409
Public Information	848-1407
Testing Services	848-1550

Joseph M. Montoya Campus 298-5461

Photos by Gene Kimzey

Calendar

1989

SEPTEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Classes begin, Sept. 5

OCTOBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Midterm, Oct. 26
Staff development, Oct. 27

NOVEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Thanksgiving:
Instructional Division, Nov. 23–24
Continuing Education Division,
Nov. 22 (no classes after 5 p.m.)
Nov. 23–25

DECEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Term break, Dec. 22–Jan. 8
(Arts and Sciences classes and some degree program classes end Dec. 23)

1990

JANUARY

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Classes begin, Jan. 9

FEBRUARY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

Presidents' Day, Feb. 19

MARCH

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Midterm, Mar. 2

APRIL

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Term break, Apr. 25–May 6
(Arts and Sciences classes and some degree program classes end Apr. 28)

MAY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Classes begin, May 7
Memorial Day, May 28

JUNE

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Midterm, June 29

JULY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Independence Day, July 4

AUGUST

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Term break, Aug. 18–Sept. 3
(Arts and Sciences classes and some degree

☐ = non-school day

Table of Contents

About the Institute

The Albuquerque Technical-Vocational Institute (T-VI) is a public postsecondary school that provides occupational education and coursework leading to associate degrees. The Institute opened in 1965 and is the third largest postsecondary school in New Mexico. About 18,000 students attend T-VI.

Funding for T-VI programs and most construction and equipment comes from a local property tax and an annual appropriation by the New Mexico Legislature. Federal funding, usually for special programs, is also received.

T-VI's first classes were held in an elementary school, which had been closed, and surplus army housing. Since then, more than $51 million worth of construction has taken place.

The Main Campus, near Albuquerque's downtown business district, occupies 60 acres of land on both sides of Coal Avenue SE from University Boulevard to Yale Boulevard. The 42-acre Joseph M. Montoya Campus is located at 4700 Morris NE. Situated along the Bear Canyon Arroyo just north of Montgomery Boulevard, the campus stretches from Morris Avenue to Juan Tabo Boulevard. The campus may be entered from either street.

The school year is divided into three terms of 15 weeks each. Most programs admit beginning students each term—in September, January and May.

Many programs are available at both the Main and Montoya campuses. Continuing Education Division classes are held at both campuses and other locations throughout the T-VI district. Programs, facilities and services are accessible to handicapped individuals.

ACCREDITATION: T-VI is accredited to grant certificates, diplomas, Associate in Applied Science and Associate in Science degrees by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools.

In addition, two Health Occupations programs are accredited by special agencies. The Practical Nurse program is accredited by the National League for Nursing and the Respiratory Therapy Technician program by the American Medical Association's Committee on Allied Health Education and Accreditation.

PUBLIC DOCUMENTS: The following public documents are available at the admissions areas of both campuses: mission and goals statement, faculty credentials, accreditation materials.

The T-VI Catalog is the student's official guide to the programs, courses and policies of the Institute. It is the student's responsibility to become familiar with the general policies of the Institute and to comply with those policies.

Information in this catalog is subject to change without notice at any time by proper administrative directive.

Instructional Programs

Instructional Division

The T-VI Instructional Division offers the following:

- **CERTIFICATE PROGRAMS:** Full-time programs in 35 business, health, technology and trades occupations.

- **ASSOCIATE DEGREES:** Available in 14 business, health, technology and trades majors, and in the liberal arts.

- **LIBERAL ARTS COURSES:** Communications, mathematics, social and natural science, humanities and general elective classes offered for college credit.

- **PREPARATORY PROGRAM:** For persons who must improve skills to meet admission requirements for T-VI's occupational or associate degree programs or college entry.

- **SPECIAL SERVICES:** For handicapped students.

- **OTHER PROGRAMS:** For persons wanting to pursue a course of study at their own pace. These services include Adult Learning Centers, Business Occupations Learning Centers, a Business Assistance Center, and apprenticeship programs in various trades occupations.

Not all certificate and degree programs are offered at both campuses or every term.

Persons not working toward a certificate or degree may enroll part time in specific courses if space is available.

If fewer than 12 persons have applied to begin a program, the program may be cancelled that term.

After a program begins, no required class will be cancelled regardless of enrollment. However, support classes may be cancelled if there are not enough applicants to justify the class being offered.

For complete information on programs and policies, see *Instructional Division* beginning on page 12 of this catalog.

COLLEGE TRANSFER: T-VI programs and courses may transfer to other two- and four-year institutions. Information about credit transfer is available from T-VI counselors.

Continuing Education Division

The Continuing Education Division, with offerings primarily of interest to part-time students, includes:

- **SKILL IMPROVEMENT CLASSES:** About 175 offerings in business, trade and industrial, health and technical subjects.

- **ADULT BASIC EDUCATION:** Instruction for improvement of written and spoken English; amnesty, reading and math classes; and preparation for the General Educational Development (high school equivalency) and U.S. citizenship examinations.

- **VOCATIONAL ENRICHMENT CLASSES:** For high school students at their schools after regular school hours. Contact high school counselors for more information. (Adults may enroll in these classes on a space-available basis.)

A Continuing Education class may be cancelled if enrollment is insufficient. Fees for such classes are refunded. Classes may be terminated if fewer than 10 persons are attending regularly.

Continuing Education classes are offered at T-VI's Main and Montoya campuses and other locations throughout the Albuquerque area. For complete information on classes and registration procedures, see *Continuing Education Division* beginning on page 101 of this catalog.

SUBSTITUTE CLASSES: Continuing Education Division classes that carry the same course numbers as courses offered by the Instructional Division are approved for use in certificate and degree programs. These classes begin the listings under each Skill Improvement heading in the Continuing Education Division section, and are followed by the SK (Skill Improvement) classes.

Not all classes can be substituted in an Instructional Division program on a one-to-one basis. In some cases, it takes two or more Continuing Education classes to equal one Instructional Division class.

For information, see the instructional department counselors or Continuing Education Division personnel.

Estimated Expenses

An important matter to consider when planning to attend T-VI full time is what it will cost. These estimated expenses for food, housing, transportation, school and personal expenses are for a full-time student. The Financial Aid Office uses these figures to estimate financial aid needs.

STUDENT EXPENSES

Student's Status	*1 Term*		*2 Terms*		*3 Terms*	
DEPENDENT STUDENT LIVING AT HOME (assumed for Albuquerque residents)						
	Certificate	*Degree*	*Certificate*	*Degree*	*Certificate*	*Degree*
Tuition and Fees*	25	145	40	290	55	435
Room and Board	914	914	1,829	1,829	2,743	2,743
Books and Supplies	51	101	101	203	152	304
Personal Expenses	599	599	1,198	1,198	1,797	1,797
Transportation	312	312	624	624	936	936
*TOTAL**	$1,901	$2,071	$3,792	$4,144	$5,683	$6,215
DEPENDENT STUDENT LIVING OFF CAMPUS						
	Certificate	*Degree*	*Certificate*	*Degree*	*Certificate*	*Degree*
Tuition and Fees*	25	145	40	290	55	435
Room and Board	2,079	2,079	4,159	4,159	6,238	6,238
Books and Supplies	51	101	101	203	152	304
Personal Expenses	600	600	1,201	1,201	1,801	1,801
Transportation	325	325	650	650	975	975
*TOTAL**	$3,080	$3,250	$6,151	$6,503	$9,221	$9,753
INDEPENDENT STUDENT LIVING OFF CAMPUS						
	Certificate	*Degree*	*Certificate*	*Degree*	*Certificate*	*Degree*
Tuition and Fees*	25	145	40	290	55	435
Room and Board	2,079	2,079	4,159	4,159	6,238	6,238
Books and Supplies	51	101	101	203	152	304
Personal Expenses	792	792	1,584	1,584	2,376	2,376
Transportation	340	340	680	680	1,021	1,021
*TOTAL**	$3,287	$3,457	$6,564	$6,916	$9,842	$10,374

Note: These figures are only estimates and are subject to change without notice.

**Generally, nonresident students should add $696 per term. See pages 14–16 for more specific information regarding tuition and fees.*

Graduate Job Placement, 1988

	TOTAL GRADUATES	Could not locate	Not seeking employment	Continuing school	AVAILABLE FOR WORK	Employed in training-related job	Employed but job not related to training	Unemployed but seeking	Percent employed (training-related job: graduates available for work)	Working in New Mexico	Working out-of-state	Average hourly rate in training-related jobs	Average annual salary in training-related jobs based on 40-hour work week
BUSINESS OCCUPATIONS													
Accounting	16	2	5	3	9	9	—	—	100%	9	—	6.00	$12,493
Accounting, AAS	25	2	3	2	20	16	—	4	80%	15	—	6.79	$14,140
Bookkeeping	11	6	1	1	4	2	1	1	50%	3	—	5.00	$10,400
Business Administration	41	4	12	11	25	17	2	6	68%	18	1	6.03	$12,560
Legal Assistant Studies, AAS	6	—	1	—	5	5	—	—	100%	5	—	8.29	$17,260
Legal Office Worker[1]	20	3	6	2	11	8	—	3	73%	8	—	4.86	$10,110
Secretarial Studies	63	5	12	11	46	35	4	7	76%	37	1	5.42	$11,280
Secretarial Studies, AAS	5	1	—	—	4	3	—	—	75%	3	—	5.19	$10,813
HEALTH OCCUPATIONS													
Health Unit Clerk	37	6	5	2	26	15	5	6	58%	19	—	5.45	$11,338
Licensed Practical Nurse Refresher[2]	22	5	5	3	12	9	1	2	75%	10	—	8.64	$17,977
Nursing, AS	77	3	2	—	72	71	—	1	99%	70	1	11.44	$23,789
Nursing Assistant	53	16	13	7	24	19	3	2	79%	21	—	5.21	$10,832
Phlebotomist	15	2	3	1	10	7	2	1	70%	9	—	5.13	$10,665
Practical Nurse	3	—	—	—	3	3	—	—	100%	3	—	—	—
Registered Nurse Refresher[2]	52	6	7	—	39	38	—	1	97%	37	1	12.78	$26,583
Respiratory Therapy Technician	11	1	1	3	9	9	—	—	100%	9	—	6.83	$14,215
TECHNOLOGIES													
Architectural Drafting Technology	41	2	8	2	31	19	5	7	61%	22	1	5.83	$12,117
Civil and Surveying Technology	23	2	1	—	20	13	5	2	65%	16	1	5.67	$11,790
Data Processing Technology	42	2	5	3	35	26	—	8	74%	23	4	6.96	$14,508
Electromechanical Drafting[3]	11	1	3	1	8	4	3	1	50%	7	—	6.88	$14,321
Electronics Technology	54	3	9	4	42	27	3	12	64%	26	3	7.60	$15,813
Electronics Technology, AAS	10	—	—	—	10	6	—	4	60%	6	—	9.14	$19,015
Instrumentation and Control Technology	70	3	7	5	60	44	1	15	73%	39	6	8.79	$18,289
Instrumentation and Control Technology, AAS	25	4	2	3	19	15	1	3	79%	14	2	8.96	$18,646
Laser Electro-Optic Technology	29	1	—	1	28	22	—	6	79%	8	14	9.50	$19,754
Laser Electro-Optic Technology, AAS	7	—	3	2	4	3	—	1	75%	2	1	8.41	$17,500
TRADES													
A/C, Heating and Refrigeration	33	1	2	1	30	28	1	1	93%	28	1	5.32	$11,057
Automotive Body Repair	3	—	1	—	2	2	—	—	100%	2	—	3.68	$ 7,644
Automotive Technology	22	1	4	—	17	16	—	1	94%	16	—	6.50	$13,526
Baking	20	1	8	2	11	11	—	—	100%	11	—	5.88	$12,225
Carpentry	38	4	14	4	20	15	2	3	75%	16	1	5.30	$11,024
Commercial Printing	30	5	8	4	17	12	2	3	71%	12	1	4.72	$ 9,817
Diesel Mechanics	23	2	5	1	16	13	—	3	81%	12	1	6.11	$12,723
Electrical Trades	21	—	1	1	20	20	—	—	100%	20	—	4.57	$ 9,515
Law Enforcement[4]	9	1	8	8	—	—	—	—	—	—	—	—	—
Law Enforcement, AAS	5	—	1	1	4	4	—	—	100%	4	—	10.23	$21,268
Machine Tool Technology	42	—	4	2	38	35	1	2	92%	36	—	6.02	$12,512
Plumbing	24	6	8	3	10	7	2	1	70%	8	1	3.86	$ 8,029
Quantity Food Preparation	32	1	11	6	20	19	1	—	95%	20	—	4.40	$ 9,159
Truck Driving	18	1	2	—	15	14	—	1	93%	13	—	9.44	$19,640
Welding	15	—	4	2	11	11	—	—	100%	10	1	4.81	$10,003
TOTALS	1097				803	648			81%				

[1]No longer offered as a separate program but as a specialty option in Secretarial Studies at either certificate or AAS degree level.
[2]All graduates of program have prior work experience in their field; salaries should not be considered entry level.
[3]No longer offered as separate program.
[4]Graduates all continued their education to earn an AAS degree before seeking employment.

NOTE: Information about T-VI's retention rates is available from the Student Services Office upon request.

School Year

T-VI meets year-round with the year divided into three 15-week terms—fall, winter and summer. Breaks between terms range from 10 days to two weeks.

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, persons who interrupt their programs may not be able to resume their studies at the time they want, because the classes they need may not be available every term.*

ABBREVIATED SCHEDULES AND SNOW DAYS: The Institute announces a special schedule or school closing only under extreme weather conditions. If an abbreviated schedule is designated, classes begin at 10:30 a.m. at both campuses. Classes meeting prior to 10:30 a.m. are canceled. If a "snow day" is designated, the Institute is closed.

T-VI observes the determination of the Albuquerque Public Schools in designating abbreviated schedules and snow days. *When either situation occurs, information is announced by local radio stations.*

Services for Students

The Student Services Department assists applicants, students and graduates. Services include admission, testing, educational advisement, personal and career counseling, student records and transcripts.

COUNSELING AND ADVISEMENT: Professional counselors at both campuses provide educational advisement to applicants and students. Counselors can assist students with problems that may be preventing them from doing their best in school. Counseling services normally are available in the occupational departments weekdays from 7:30 a.m. to 4:30 p.m., and in the admissions areas weekdays from 8 a.m. to 5 p.m. During peak registration periods (August–September, December–January, and April–May), advisement is available in the admissions areas at both campuses from 8 a.m. to 6:30 p.m. Monday through Thursday, and 8 a.m. to 5 p.m. on Friday.

HEALTH ADVISEMENT: The Health Advisement Center, located in Room A-127 on Main Campus, is open weekdays from 8 a.m. to 5 p.m. Services, all offered free of charge, include first aid for minor injuries and illnesses; blood pressure, vision and hearing tests; and information about such health problems as venereal disease and substance abuse. There are cots for people who become ill while on campus. If it is necessary to transport an ill or injured student to a medical facility, the student is responsible for all transportation costs.

JOB PLACEMENT: Graduates are responsible for finding their own jobs after completing a T-VI program. However, the Institute's Industrial Relations Office and instructional staff provide job-seeking assistance to full-time students and graduates.

The Industrial Relations Office is at 616 Buena Vista SE on Main Campus. There is a liaison office at the Montoya Campus.

Graduates and Instructional Division students who are enrolled for at least 12 credits may call the Industrial Relations HOT LINE (843-9696) for a recorded message of daily job openings, obtain referral cards for full- and part-time jobs listed by employers who want to hire from T-VI, and use a variety of printed materials and other resources available in the office.

Instructional Division students in their final term may register for graduate placement services which include résumé preparation and scheduling of campus interviews. Students must be candidates for graduation with passing grades at midterm to be scheduled for interviews or have résumés sent to employers.

Testing Services

T-VI's Testing Center, in the C Building on Main Campus, offers a variety of tests—most free of charge. Among the examinations administered are the American College Test (ACT), admission tests for certificate majors, the General Educational Development (GED) exam for high school equivalency, typing speed tests, math tests and career aptitude tests. The ACT, certificate program admission tests and GED also are administered at the Montoya Campus. For more information, contact the Testing Center, 848-1550.

CAREER APTITUDE TESTS: Several tests are available for applicants by appointment. Aptitude, personality and interest tests are given to assist applicants with career choices. A current registration fee must be on file before the exams will be given.

GED EXAM: Anyone at least 18 years old and not enrolled in high school may take the exam for a high school equivalency diploma. A test fee must be paid in advance.

A 17-year-old may take the exam 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. Special testing is available for disabled students.

Interested persons are pretested 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 classes, offered day and evening at both campuses and other locations in the Albuquerque area. For information on the classes, see page 106.

ACT: These exams, scheduled monthly, are for people wishing to enter an associate degree program, and for Practical Nurse and Respiratory Therapy Technician applicants. The ACT fee plus a $15 registration fee must be paid in advance. Information about the ACT and free study guides are available in the Testing Center.

CERTIFICATE PROGRAM ADMISSION TESTS: Basic math and vocabulary tests are administered to applicants to help them determine, with the help of a counselor, which certificate programs may best match abilities and interests.

MATH PLACEMENT TESTS: The algebra placement test must be taken by all students who want placement in Math 150 or above but have not taken the prerequisite course. Students planning to enroll in Math 162/Calculus I must take both the algebra and trigonometry placement tests.

Library Services

Library Services includes the libraries, Adult Learning Centers and Audiovisual Services. All the facilities are open to the public.

Main Campus Library Services is located in C Building. The Library and Adult Learning Center are on the fourth floor; Audiovisual Services is on the third floor. The Montoya Campus Library and Adult Learning Center are in J Building.

When school is in session, the facilities 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.

A Professional Resource Center for T-VI's instructional staff is located in the Main Campus Library.

Services include help in locating materials, instruction in how to use a library, study facilities, interlibrary loans, magazine back issues, and coin-operated copying machines.

LIBRARIES

Library materials include books, pamphlets, maps, newspapers, magazines, encyclopedias and dictionaries. Special collections of learning materials are maintained in all T-VI occupational subjects.

ADULT LEARNING CENTERS

Adult Learning Center services are offered free to T-VI students and other adults who want to develop basic education skills, occupationally related knowledge, microcomputer literacy or self-improvement.

Audiovisual materials are used and trained staff members are on duty to help each person set up and pursue an individual, self-paced learning program. Tutors are available during regular library hours when school is in session.

Basic education materials in the centers at both campuses include General Educational Development (GED) preparation, English as a second language, conversational English, beginning Spanish, spelling, reading, grammar and mathematics.

Among occupational materials available are those related to accounting, sales, computers, electronics, auto mechanics and secretarial sciences.

AUDIOVISUAL SERVICES

Audiovisual Services maintains T-VI's 16mm film and videotape collections and all AV 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.

At the Main Campus, special audiovisual materials are available for recreational viewing in Audiovisual Services.

Food Services

The Main Campus has two food facilities—one located in the Administration Building (Room A-35) and the other in the Business Occupations Building (Room B-125).

The A-35 facility includes a *bakery*, open Tuesday through Friday on school days from 8:15 a.m. to 12:30 p.m.; a *culinary arts line* serving luncheon entrées on school days from 11:15 a.m. to 12:30 p.m.; and a *snack bar* serving short-order meals and snacks on school days from 7:45 a.m. to 3:30 p.m., and from 5:15 p.m. to 8:30 p.m. Monday through Thursday when Continuing Education Division classes are in session.

The Business Occupations Building facility includes a *snack bar* serving short-order meals and snacks on school days from 6:45 a.m. to 2 p.m.; and a culinary arts dining facility, *Student Specialties*, serving gourmet meals Tuesday through Thursday at 5:30 p.m. by reservation only.

The Montoya Campus has a snack bar that serves breakfast weekdays from 7:30 a.m. to 1:30 p.m. when school is in session.

Vending machines are available in several locations at both campuses.

Student Store

The T-VI Bookstore, located in the Administration Building on Main Campus, sells all of the textbooks required for Arts and Sciences classes, Skill Improvement classes and some associate degree programs. The store also sells a full range of school supplies and miscellaneous items such as dictionaries, backpacks, sportswear and novelties.

The bookstore is open Monday through Thursday, 8 a.m. to 8 p.m., and Friday, 8 a.m. to 4:30 p.m.

Housing

T-VI has no dormitories. Students must make their own arrangements for housing. A list of property owners who have contacted T-VI with available rentals is kept at the C Building reception desk at Main Campus.

Parking and Transportation

PARKING: Student parking lots are provided free at both T-VI campuses. The lots are unsecured, and T-VI is not liable for theft, vandalism or other losses which might occur while vehicles are parked on campus. Vehicles should be locked and valuables hidden.

Designated handicapped parking spaces are available in T-VI parking lots. There are special parking areas for motorcycles and bicycles.

Students may use T-VI parking lots by obtaining a parking permit decal. Decals are issued for lots nearest the student's classes. Decals are available in the lobby of the Administration Building or from department counselors at Main Campus, and the Student Services Center at Montoya Campus. The decal should be put on the rear bumper of vehicles (rear fender of motorcycles).

Violations of parking regulations result in citations by T-VI security. Students receiving three or more citations are referred to the Student Government's Judicial Affairs Committee. The committee can recommend action ranging from a warning to suspension from the Institute.

BUS PASSES: Economical passes for postsecondary students are available for Suntran city buses. A pass good for unlimited rides during one calendar month may be purchased for $19 at the Financial Aid Office in the C Building on Main Campus or Student Services Center in the H Building at Montoya Campus.

To encourage students to use the city buses, T-VI pays a 50 percent rebate on passes purchased at the Institute.

Bus passes and rebates also may be issued to eligible Continuing Education Division students on a demonstrated need basis. Information may be obtained from the Adult Basic Education administrator at the Main Campus (Room A-30).

The speed limit in all parking lots is eight miles per hour.

Campus Conduct

PLAGIARISM AND CHEATING: A student guilty of plagiarism and/or cheating will receive a grade of F or U in the course involved and the grade will be so recorded on the transcript. 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 (30-7-2 NMSA 1978) and students participating in law enforcement instruction requiring the use of firearms who are under the supervision of a certified law enforcement instructor.

LAW VIOLATIONS: Law violations by anyone on campus will be handled by appropriate law enforcement agencies.

FOOD AND BEVERAGES: Drinking and eating are prohibited in all classrooms and labs.

SMOKING: In accordance with City Council Ordinance 0-51 and Governing Board Resolution 1989-4, smoking is prohibited in all T-VI buildings.

STUDENT DRESS: Students are asked to attend class dressed appropriately for the job for which they are training. Students or visitors must wear shirts and shoes to enter a T-VI building.

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

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

SUBSTANCE ABUSE: T-VI will support the laws of the city, state and federal government regarding the use, sale or possession of alcohol, narcotics and dangerous drugs.

A student shall not use any controlled substance on T-VI property as defined by applicable federal, state and/or city statutes, except when prescribed by a licensed member of the medical profession for the treatment of the student.

Students under the care of a physician and using prescribed drugs on campus under a physician's direction, shall have a proper statement from the physician authorizing the use of the drug and describing the side effects, if any, resulting from the use of the drug. If, in the opinion of the instructor or administrator, a student's actions and/or behavior are considered unsafe as a result of using the drug, the student may be sent home.

If a student is found using, selling or otherwise possessing a controlled substance on campus that is not properly authorized by a licensed medical professional, the student may be dismissed.

Students shall not drink alcoholic beverages while at school, nor shall they report for school under the influence of intoxicants to any degree, nor shall they have any odor of intoxicants on their breath. Students shall not bring or store any alcoholic beverages on Institute property. Violation of this policy may result in suspension or dismissal of the student.

A substance abuse prevention program is sponsored by the Institute. Information and initial counseling assistance concerning substance abuse as well as referrals to appropriate agencies are available from admissions and department counselors, and the Health Advisement Center, Room A-27, at Main Campus.

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

SUBSTANCE ABUSE/DISRUPTIVE BEHAVIOR APPEAL: A student suspended or dismissed for disruptive behavior or found in violation of the Institute's substance abuse policy regarding dangerous drugs, narcotics or alcohol which interfere with the educational process may appeal the case to the department dean.

The student must appeal in writing within three school days of the suspension or dismissal. The dean

shall appoint a review board of two faculty members and one student to review the violations with the student involved. The hearing must be held within five working days after the student's request has been received by the department dean. The student will be given the opportunity to present his/her version of the incident. The board will determine if the suspension or dismissal is upheld or if the student is to be reinstated. The board will determine the length of any suspension. The board will inform the department dean of its findings and recommendations, and the dean will inform the student. The decision of the board is final.

If reinstated, the student will be placed on probation. In the case of substance abuse, the reinstated student will also be required to see a T-VI counselor for assistance in seeking professional help. The T-VI counselor will report periodically to the department dean about the progress of the individual.

Personal Property

LOCKERS: Lockers are available at both campuses. Any student may use an empty locker by simply providing a lock for it. However, the lock and locker contents must be removed by the last day of each term, when a student is no longer enrolled, or when necessary for security or repair reasons.

Locks remaining on lockers during a term break or more than five days after a student has left school are cut off and the locker contents removed. Students then have 30 days to claim their possessions in Room M-105 on Main Campus or H-103 on Montoya Campus.

LOST AND FOUND: The Main Campus lost and found is at the A Building lobby reception desk. On the Montoya Campus, it is in the Student Services Center.

INSURANCE: T-VI is not responsible for property loss, damage or personal injuries. Students are urged to obtain their own property and medical insurance coverage.

Phone Calls and Visitors

Students are not called from class to receive tele phone calls or visitors.

Pay phones are available at both campuses for student and visitor use.

Fire Alarms

T-VI does not hold fire drills. Each classroom and lab has a fire evacuation plan posted. At the beginning of the term, students should study the plan for each room in which they have classes.

The alarm on the Main Campus is a continuous, loud bell. The Montoya Campus alarm is a horn.

If an alarm activates, the affected building should be evacuated immediately and everyone should stay well away from the building until an "all clear" has been sounded.

Student Government and Activities

Student Government for T-VI's Instructional Division is made up of representatives elected at the beginning of each term from Main and Montoya Campus programs. Their job is to carry the ideas of fellow students to the Student Government meetings and report back after each meeting.

Student Government works to make T-VI a better place for both students and staff. It is the official channel for expressing student ideas and concerns about campus conditions, instructional programs, school policies and procedures, and student activities.

Leadership is provided by a student body president and vice president elected for two consecutive terms by Instructional Division students.

A staff advisor attends all Student Government meetings and serves as the liaison between the government and T-VI staff.

All students are welcome to attend any Student Government meeting. However, only elected representatives may make motions and vote.

STUDENT ACTIVITIES: A limited student activities program is available. An effort is made to establish any type of extracurricular club or activity in which at least 15 students are interested. Such a club or activity can be formed if a faculty or staff member agrees to serve as sponsor and needed facilities can be located at reasonable costs. Persons interested in forming a club should contact the student activities coordinator in Room B-105 on Main Campus or the Montoya Campus resident administrator.

INSTRUCTIONAL DIVISION

Admission Policies

To enroll in the Instructional Division, a person must be at least 18 years old or a high school graduate. Others can be admitted only if excused from attending a secondary school according to New Mexico's compulsory attendance law or through the special admission option (see next column).

Interested persons should apply as soon as they have decided to attend T-VI. Some programs have entrance requirements based on test scores.

Students are admitted into one of three categories:

- **CERTIFICATE:** For students declaring a major in an occupational area. Certificate programs vary in length from one to four terms. Students must take a placement test.

- **DEGREE:** For students entering an associate degree program. Applicants must meet the following requirements:

1. Provide proof of high school graduation or General Educational Development (GED) diploma.
2. Provide official American College Test (ACT) scores. Satisfactory ACT scores are: English, 17; math, 12; natural sciences, 18; social sciences, 14. All degree programs require satisfactory ACT scores in English and math. Some programs have additional ACT requirements (refer to degree programs). Students who do not present satisfactory scores will be required to take the appropriate preparatory courses before qualifying for a degree program.

Applicants may use one of the following as an equivalent to the ACT:

—Scholastic Aptitude Test (SAT) scores corresponding to satisfactory ACT scores.

—Completion of English 100, Math 100, Natural Science 100 and Social Science 100.

—Presentation of associate or bachelor's degree. (Official transcripts with statement of degree from a regionally accredited institution required; proof of high school diploma or GED not required.)

—An official transcript from a regionally accredited college showing at least 15 transferable Arts and Sciences credits which include English composition and math. (Only lower division courses with grades of C or better will be considered.)

- **NONDEGREE:** For students who want to take occupational or Arts and Sciences courses without declaring a major. Two Arts and Sciences courses may be taken without previous testing. Students wanting to take more than two courses must complete the normal admission process. Students may choose also from a list of occupational courses that do not require testing.

PREPARATORY PROGRAM: Applicants needing or wanting preparatory work to help them meet admission requirements for T-VI certificate or degree programs or college entry are admitted to the Preparatory Program in the Developmental Studies Department.

SPECIAL ADMISSION OPTION—CONCURRENT ENROLLMENT: A highly qualified high school senior may enroll in Arts and Sciences courses at T-VI while also enrolled in high school. Students seeking concurrent enrollment must meet the following requirements:

- Be a currently enrolled high school senior with graduation scheduled within one calendar year.
- Provide an official high school transcript with a cumulative grade point average of 3.0 or better on a 4.0 scale, and rank in the top 25 percent of the class.
- Submit the T-VI permission and recommendation form signed by the high school principal or designee and the student's parents or guardians.
- Meet the general admission requirements.
- Have an interview with an admissions counselor.

A concurrent student may enroll for a maximum course load of eight Arts and Sciences credit hours (two courses) per term.

HEALTH REQUIREMENTS: 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 in that program. In such cases, the admission counselor will help the applicant select another program.

Registration

Applications may be mailed or brought in person to either the Main Campus (C Building) or Montoya Campus (H Building). Admissions offices are open Monday through Thursday, 8 a.m. to 6:30 p.m., and Friday, 8 a.m. to 5 p.m. The Main Campus office also is open Saturday from 8 a.m. to 5 p.m.

Late registration, on a space-available basis, is held only through the 10th day of classes in 15-week terms, the fifth day of classes in short terms. Any student who misses the first three days of scheduled occupational classes may be withdrawn automatically as a "no show." Readmission is on a space-available basis.

PREREQUISITE COURSES: Before a student may enroll for credit or audit in a course which has prerequisites, the prerequisite courses must be completed satisfactorily. A student may be disenrolled if the prerequisites have not been met.

ADDING/DROPPING COURSES: Courses may be *added* or sections *changed* only through the 10th day of classes in 15-week terms, the fifth day of classes in short terms. Courses *may not be dropped* during the last two weeks of a term.

To drop a course, a "drop form" must be completed. Details are available from counselors.

Courses dropped after the 10th day of classes in 15-week terms and fifth day of classes in short terms will be marked with a W on student transcripts. Students who do not make a written request to drop a course and are not in attendance at the time of final exams will receive an F or a U for the course.

AUDIT: Changes from audit to credit must be made by the 10th day of a 15-week term or the fifth day of a short term. Changes from credit to audit must be made by midterm of a 15-week term or the fourth week of a short term.

WITHDRAWAL: To withdraw, a "withdrawal" form must be completed. Details are available from counselors. A student cannot withdraw from school during the final two weeks of a term.

INTERRUPTED TRAINING: Students who drop out for one or more terms and wish to return to school should contact the Admissions Office early in the term prior to the one in which they wish to resume studies to be sure class space will be available.

CANCELLATION OF ENROLLMENT: If a student is not able to attend T-VI when planned but has registered for classes, the student must cancel registration at the Records Office before the beginning of the term. If done before the beginning of the term, a full refund of all fees paid except for the nonrefundable registration fee will be issued. Withdrawal after the first day of the term requires that the student complete the withdrawal process listed above.

Tuition and Fees

REGISTRATION FEE: There is a $15 registration fee for each term, payable before the student is enrolled.

RESIDENT STATUS: A person who has lived in New Mexico for the 12 consecutive months preceding the first day of classes may be considered for resident status. Individuals between the ages of 18 and 23 seeking to establish residency may be required to provide proof of financial independence. Exceptions for resident status exist. Persons with questions about resident status should contact the Admissions Office at either campus.

TUITION:

	RESIDENT	NONRESIDENT
Arts and Sciences Courses		
1 to 11 credit hours and more than 18 credit hours	$21 per credit hour	$58 per credit hour
12 to 18 credit hours	$252	$696
Occupational Courses		
1 to 11 credit hours and more than 18 credit hours	none	$58 per credit hour
12 to 18 credit hours	none	$696

Tuition must be paid in full before a student receives a class schedule. Authorized agencies that have agreed to pay a student's training expenses are billed by the Institute.

Tuition rates and structure are subject to change without notice.

BOOKS: Students enrolled in Arts and Sciences courses and some associate degree programs must purchase their textbooks. Books are loaned free to students enrolled in certificate program courses but must be paid for if lost or damaged. Students must pay a $10 textbook deposit when they are admitted. The deposit is refunded if the student returns all textbooks in good condition. Cost of lost or damaged books is deducted from the deposit, and the student is required to redeposit the $10 before registering for another term.

EQUIPMENT AND SUPPLY FEES: Many T-VI programs require students to buy personal equipment, such as uniforms in Health Occupations and tool kits in Trades and Technologies. The equipment is issued early in the program and becomes the student's personal property.

Several programs charge a supply fee to cover the cost of expendable items provided by T-VI. Lab fees are charged for some Arts and Sciences classes.

Personal equipment, supply and lab fees must be paid in full before the student receives a class schedule. In some programs, fees are paid at the beginning of the program only. In other programs, fees are required each term.

Students may not register for a new term until all previous accounts are paid in full.

REFUNDS: The *registration fee* is a processing charge and is refundable only if T-VI cancels all classes in which a student has registered.

Tuition is refundable if T-VI cancels a class or if the student withdraws before the 10th day of classes. Tuition refunds are prorated as follows: withdrawal prior to the start of the term—100 percent; withdrawal during the first five days of classes—90 percent; withdrawal during the second five days of classes—80 percent.

Supply and lab fees are not refundable after the term begins.

Equipment fees are not refundable after equipment is issued.

All divisions of T-VI accept the following in payment of fees or book purchases: cash, money orders, cashier's checks, personal checks (in the amount of fees and book purchases only), and VISA and MasterCard credit cards.

Class Schedule

The class schedule a student receives at registration shows the time and location of each class. Most Instructional Division classes meet as follows:

Morning	Afternoon
7:30 to 8:20	12:30 to 1:20
8:30 to 9:20	1:30 to 2:20
9:30 to 10:20	2:30 to 3:20
10:30 to 11:20	3:30 to 4:20
11:30 to 12:20	4:30 to 5:20
	5:30 to 6:20

Calendar

Instructional Division

FALL TERM, 1989

Classes Begin	Sept. 5
Final Registration Day	Sept. 18
Midterm Grades	Oct. 26
Staff Development (no classes)	Oct. 27
Thanksgiving (no classes)	Nov. 23–24
Withdrawal Deadline	Dec. 7
Last Day of Classes	Dec. 21
(Arts and Sciences classes and some degree program classes end Dec. 23)	
Term Break	Dec. 22–Jan. 8

WINTER TERM, 1990

Classes Begin	Jan. 9
Final Registration Day	Jan. 22
Presidents' Day (no classes)	Feb. 19
Midterm Grades	Mar. 2
Withdrawal Deadline	Apr. 10
Last Day of Classes	Apr. 24
(Arts and Sciences classes and some degree program classes end Apr. 28)	
Break	Apr. 25–May 6

SUMMER TERM, 1990

Classes Begin	May 7
Final Registration Day	May 18
Memorial Day (no classes)	May 28
Midterm Grades	June 29
Independence Day (no classes)	July 4
Withdrawal Deadline	Aug. 3
Last Day of Classes	Aug. 17
(Arts and Sciences classes and some degree program classes end Aug. 18)	
Break	Aug. 18–Sept. 3

Course Fees

ARTS AND SCIENCES COURSES

BIO	115L	$15	(lab fee)
BIO	121L	$15	(lab fee)
BIO	122L	$15	(lab fee)
BIO	124L	$15	(lab fee)
BIO	139L	$15	(lab fee)
BIO	224L	$15	(lab fee)
BIO	239L	$15	(lab fee)
BIO	247L	$15	(lab fee)
BIO	248L	$15	(lab fee)
BIO	299L	$15	(lab fee)
CHEM	112L	$15	(lab fee)
CHEM	121L	$15	(lab fee)
CHEM	122L	$15	(lab fee)
PHYS	153L	$15	(lab fee)
PHYS	154L	$15	(lab fee)
PHYS	163L	$15	(lab fee)

BUSINESS OCCUPATIONS COURSES

ACCT	101L	$15	(supply fee)
ACCT	102L	$15	(supply fee)
ACCT	201L	$15	(supply fee)
ACCT	202L	$15	(supply fee)
BA	222L	$15	(supply fee)
BA	284L	$15	(supply fee)
CASH	101L	$15	(supply fee)
ENTR	101L	$15	(supply fee)
LAS	101	$15	(supply fee)
LAS	102	$15	(supply fee)
LAS	203	$15	(supply fee)
LAS	221	$15	(supply fee)
LAS	230	$15	(supply fee)
SS	101L	$15	(supply fee)
SS	102L	$15	(supply fee)
SS	201L	$15	(supply fee)
SS	202L	$15	(supply fee)
SS	203L	$15	(supply fee)
SS	204L	$15	(supply fee)
SS	205L	$15	(supply fee)
SS	298L	$15	(supply fee)

HEALTH OCCUPATIONS COURSES

HUC	121C	$30	(equipment fee)
LPNR	155L	$15	(supply fee)
MLT	110L	$55	(equipment and lab fees)
MLT	112L	$15	(lab fee)
MLT	201L	$15	(lab fee)
MLT	202L	$15	(lab fee)
MLT	203L	$15	(lab fee)
NA	110L	$30	(equipment fee)
NURS	121C	$80	(equipment fee)
NURS	221C	$10	(equipment fee)
PHLB	101L	$45	(equipment fee)
PRNS	255L	$25	(supply fee)
RNR	255L	$15	(supply fee)
RTT	121C	$75	(equipment fee)

TECHNOLOGIES COURSES

ARDR	101L	$55	(equipment fee)
ARDR	201L	$40	(equipment fee)
C&S	101L	$45	(equipment fee)
C&S	111	$40	(equipment fee)
DP	101L	$10	(supply fee)
DP	111L	$10	(supply fee)
DP	201L	$10	(supply fee)
DP	205L	$10	(supply fee)
DP	208L	$10	(supply fee)
DP	215L	$10	(supply fee)
ELEC	116	$10	(supply fee)

TRADES COURSES

ACHR	101L	$90	(equipment fee)
ACHR	111L	$70	(equipment fee)
ACHR	201L	$70	(equipment fee)
AUBO	101L	$100	(equipment fee)
AUBO	111L	$75	(equipment fee)
AUBO	201L	$50	(equipment fee)
AUTC	101L	$100	(equipment fee)
AUTC	111L	$90	(equipment fee)
AUTC	201L	$90	(equipment fee)
BKNG	101L	$100	(equipment fee)
BKNG	111L	$30	(equipment fee)
CARP	101L	$100	(equipment fee)
CARP	111L	$70	(equipment fee)
CMPR	101L	$30	(equipment fee)
DIME	101L	$100	(equipment fee)
DIME	111L	$130	(equipment fee)
DIME	201L	$130	(equipment fee)
ELTR	101L	$100	(equipment fee)
ELTR	111L	$85	(equipment fee)
ELTR	201L	$50	(equipment fee)
ELTR	211L	$50	(equipment fee)
MATT	101L	$100	(equipment fee)
MATT	111L	$80	(equipment fee)
MATT	201L	$70	(equipment fee)
PLMB	101L	$100	(equipment fee)
PLMB	111L	$70	(equipment fee)
QUFD	101L	$100	(equipment fee)
QUFD	111L	$80	(equipment fee)
TRDR	104L	$100	(supply fee)
WELD	101L	$100	(equipment fee)

Standards of Progress

GRADING: Two grading scales are used to compute cumulative[1] grade point average (GPA):

Developmental Studies			Arts and Sciences Courses and Occupational Courses		
		GPA			GPA
S	Satisfactory	—	A	91–100	4.0
P	Progress	—	B	81– 90	3.0
U	Unsatisfactory	—	C	71– 80	2.0
			D[2]	61– 70	1.0
			F[2]	Failing	0.0
			I	Incomplete	—
			W	Withdrew	—
			AU[3]	Audit	—
			TR[4]	Credit	

[1]*Cumulative GPA is based on all courses except Developmental Studies.*
[2]*A grade of D or F is unsatisfactory and is not considered passing for a course that is a prerequisite for any other course.*
[3]*An audited course does not earn credit and is not computed in the GPA. The cost is the same as for hours taken for credit.*
[4]*Grade given for credit by challenge exam or transfer.*

HONOR ROLL: A "Vice President's Honor Roll" is compiled each term listing full-time students earning GPAs of 3.6 to 4.0.

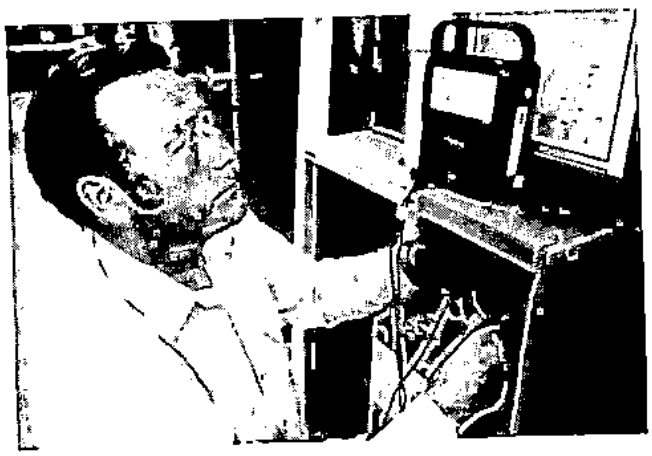
GRADE REPORTS: Progress reports (grades) are given at midterm in 15-week courses. These grades are not a part of the student's permanent record.

Final grades are issued at the end of each term and are reflected on the student's transcript and calculated in both a term GPA and a cumulative GPA. Grades received in Developmental Studies courses, however, are not included in GPA computations.

A student who receives an I (Incomplete), U (Unsatisfactory), D or F as a final grade may not enroll in any class for which the former is a prerequisite. An I is converted to a grade upon completion of the missing work. It must be removed by the 10th day of the following term or it will be permanently recorded as an F or U.

REPETITION OF A COURSE: A student may choose to repeat a course for a better grade. Both grades will appear on the transcript and become a part of the cumulative GPA.

GRADE APPEAL: Students may appeal only final failing grades. Appeal forms are available from department offices. The following steps must be followed:



- **Step 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 first week of classes in the following term. If the matter is not satisfactorily resolved at this level, the student may appeal to the department dean.
- **Step 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 to hear the appeal within one week. *The written decision of the board (two faculty members and one student) is final.*

SCHOLASTIC PROBATION AND SUSPENSION: To remain in good academic standing, a student must have a cumulative GPA of 2.0. All work attempted in the Instructional Division except Developmental Studies courses is used in computing GPA. Students with a GPA below 2.0 are placed on *warning*, *probation* or *suspension* as indicated below.

- **Warning:** A student whose cumulative GPA is between 1.50 and 1.99 in a given term will receive a warning.
- **Probation:** A student whose cumulative GPA falls below 1.50 in a given term will be placed on probation effective with the following term.
- **Suspension:** After two consecutive terms of probation, a student will be suspended from the Instructional Division. The duration of the initial suspension is one term; for subsequent suspensions, one full year. A student may be eligible to enroll in Developmental Studies during the suspension period. A student who has been suspended must have department dean approval for readmission to the same program or major.

ACADEMIC SUSPENSION: A student who fails for three successive terms to make satisfactory progress toward a certificate or degree will be suspended from T-VI for one year. Academic suspension may not be appealed.

Attendance Policies

Students enrolled for credit for audit are expected to attend all class sessions. Instructors will take attendance. Students with excessive absences (15% of total class hours) may be dropped by the instructor.

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.

See the Health Occupations student handbook for specific rules in those programs.

READMISSION: A student dropped for attendance reasons may apply to reenter T-VI the following term.

Graduation Policies

GENERAL REQUIREMENTS: To graduate from T-VI, a student must have a 2.0 cumulative GPA. Degree and certificate students must satisfactorily complete all core requirements for their majors and have fulfilled all requirements for regular status with no restrictions by midterm. A student's last term of coursework must be completed at T-VI.

DEGREE REQUIREMENTS: In addition to the general requirements listed above, students enrolled in degree programs must also earn a minimum of 60 credit hours (most programs require more), and a minimum of 15 credit hours in residency after a degree becomes available.

DEGREES AND CERTIFICATES: Students enrolled in degree programs will receive an Associate in Arts (AA), Associate in Science (AS) or Associate in Applied Science (AAS) degree upon completion of all requirements. Students in degree programs who complete all certificate requirements may apply for a certificate without changing their status. Certificates are awarded *en route* to the degree, if applicable.

APPLICATION FOR GRADUATION: Students in associate degree programs or certificate programs of three or more terms must complete an "application for graduation" form in the term preceding the graduation term. Forms are used to determine eligibility, and must be submitted no later than the 12th week of the preceding term. Students in certificate programs of one or two terms do not have to complete the form.

Failure to apply for graduation may delay graduation. Students who have completed all course requirements but have failed to apply for graduation must pay the $15 registration fee, apply for graduation and, if approved, receive their certificate or degree at the end of the term in which they apply.

Application forms are available in the department counselors' offices and must be returned there. If a student is determined ineligible for graduation, a copy of the form with reasons for ineligibility will be returned to the student.

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 which was in effect when they entered the program or any subsequent catalog, provided the selected catalog is not more than five years old when the degree or certificate requirements are completed and provided the student has been in continuous enrollment. Those whose enrollment is discontinuous graduate under the catalog that is current upon their return.

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.

Student Records

Permanent records are kept for each Instructional Division student. The transcript shows all courses taken, hours and credits for the courses, final grades and supervised work experiences.

At registration, most students authorize T-VI to provide confidential copies of transcripts to employers and other educational institutions. Students not wanting this service may so indicate on the transcript at any time by making a request in writing to the Main Campus Records Office or the Student Services Center at the Montoya Campus.

Students may examine any documents in their cumulative records. Free copies of transcripts are provided to students and former students on request at the Records Office. All other uses of student records are in accordance with the Federal Family Educational Rights and Privacy Act of 1974 and its amendments. Copies of the law are available for examination upon request in the Records Office at Main Campus and the Student Services Center at Montoya Campus.

Financial Aid

Expenses are a major concern in selecting a school. Financial aid is not intended to cover *all* of the student's educational costs, but rather to provide assistance to needy students who, without such help, would be unable to attend T-VI.

The school offers financial assistance to supplement the resources of the student and the student's family. This assistance can be in the form of grants, loans, student employment and other programs based on financial need. Students may receive financial assistance from one of these programs, or a "package" of various programs.

Applications for financial aid are available in the T-VI Financial Aid offices, located in the C Building at Main Campus or the Student Services Center at Montoya Campus. Both offices are open weekdays from 8 a.m. to 5 p.m.

Most sources require federal form processing which may take up to 10 weeks. Students who need financial aid should apply early, using forms available from either Financial Aid Office at T-VI.

Transfer students who are applying for financial aid must provide financial aid transcripts from every postsecondary school previously attended, even if no financial aid was awarded or received.

The following are programs for which application is made directly to the funding agency. Checks are mailed to students by the agencies.

VETERANS ADMINISTRATION (VA): Most full-time T-VI programs are approved for VA education and training benefits. In addition to service veterans, persons entitled to benefits include children and widows of deceased veterans and dependents of veterans with 100% disability classifications.

Students who wish to transfer credit from other institutions must provide official academic transcripts from every postsecondary school previously attended.

Students planning to apply for VA benefits must have their schedules approved and certified by the VA representative on campus. Certified students who failed to complete a term in which they received VA funds are obligated to repay the full amount.

Information about eligibility for VA education benefits is available at any Veterans Administration office. The Albuquerque office is at 500 Gold SW (766-3361).

NEW MEXICO DIVISION OF VOCATIONAL REHABILITATION (DVR): Persons with disabilities may be eligible for education and training assistance from DVR. The Albuquerque offices include: (NE and SE) 300 San Mateo NE, Suite 320, 841-4560; (SW) 2720 Isleta Blvd. SW, 842-3243; and (NW) 2221 Rio Grande Blvd. NW, 842-3184.

WORK UNLIMITED: Education and training assistance for unemployed, underemployed or economically disadvantaged persons is provided by this agency. Work Unlimited in Albuquerque is located at 1701 Fourth St. SW (768-6060).

BUREAU OF INDIAN AFFAIRS (BIA): Native American students enrolled full time may be eligible for education benefits through the BIA. Applicants should consult with their home tribal agencies for BIA funding before applying to T-VI.

JOB TRAINING PARTNERSHIP ACT (JTPA): Training assistance is provided for unemployed, underemployed or economically disadvantaged persons by the JTPA program. Students should contact the New Mexico Employment Security Department or the Albuquerque Job Corps Center for eligibility information. Native American students may contact the National Indian Youth Council (NIYC) Employment and Training Project or their tribal offices for eligibility information.

The New Mexico Employment Security Department in Albuquerque is at 501 Mountain Rd. NE (841-9362). The Albuquerque Job Corps Center is at 1500 Indian School Rd. NW (842-6500). The Albuquerque NIYC office is at 318 Elm SE (247-2251).

STAY IN SCHOOL: This program is designed to help needy students pay for their education by placing them in government jobs. Eligible students must be at least 16 years old, prove economic hardship, and enroll in an eligible program that consists of at least 15 clock hours of instruction per week. The student may work part time up to 20 hours per week. The pay varies depending on the job assignment, but cannot be lower than the federal minimum wage. Physically handicapped and mentally retarded students are eligible regardless of their financial condition.

Information and applications can be obtained at any office of the New Mexico Employment Security Department. The Albuquerque office is at 501 Mountain Rd. NE (768-3700).

Application for the following programs should be made at T-VI using the Financial Aid Form. Generally, checks are disbursed by the Business Office, Room M-101, weekdays between 8 a.m. and 4:30 p.m. Disbursement schedules are listed with program information.

PELL GRANT: U.S. citizens and eligible noncitizens who plan to attend T-VI may apply to receive this federal grant, which is based on need as determined by the need analysis on the Financial Aid Form. If a student is attending less than full time but at least half time, the grant will be adjusted downward. To be eligible for a Pell Grant, a student *cannot* have a bachelor's degree.

Currently, awards range from $200 to $2300 per year for eligible T-VI students who are enrolled full time in an eligible program. Programs that are eligible for Pell are generally at least two terms in length. Students may check with the Financial Aid Office for more information regarding program eligibility.

Students receive one-third of the Pell award in the fall term, one-third in the winter term, one-sixth during the first half of the summer term (May and June); and one-sixth during the last half of the summer term (July and August). Checks are disbursed on the last class day of the first month of each term. Supplemental disbursement dates are scheduled on the last class day of each month for students whose Pell file was not completed in time for the regular disbursement date.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG): A limited amount of SEOG federal funding is available to aid students with exceptional financial need as determined by the need analysis on the Financial Aid Form. Students with exceptional financial need are those with the lowest expected family contribution.

A student must be enrolled at least half time to be eligible to receive an SEOG. SEOG awards cannot be less than $100 or more than $4000 per year. Generally, SEOG checks are disbursed in the middle of each term.

NEW MEXICO STUDENT INCENTIVE GRANT (NMSIG or SSIG): This program provides aid to full-time students who are legal residents of New Mexico and have need as determined by the need analysis on the Financial Aid Form. The amount of an SSIG award ranges from $200 to $800 per year. Generally, NMSIG checks are disbursed in the middle of each term.

COLLEGE WORK-STUDY (CW-S): This program aids needy, eligible students by providing employment at the Institute. The student employee may work up to 20 hours per week. CW-S students are paid every two weeks at the federal minimum wage rate.

NEW MEXICO WORK-STUDY (NMW-S): This program is designed to help students pay for their education by providing jobs at the Institute. An eligible student may not have to show need to participate in the program. Eligible students must be New Mexico residents, have a minimum 2.0 GPA, and be enrolled full time. Students are paid every two weeks at the federal minimum wage rate.

T-VI WORK-STUDY: This program aids eligible students by providing part-time employment at the Institute. To receive this funding, a student must be enrolled at least half time in the Instructional Division and have at least a 2.0 GPA.

A student may not need to fill out a Financial Aid Form to receive T-VI Work-Study funding. Students may work up to 20 hours per week and are paid every two weeks at the federal minimum wage rate.

Students should apply for the following loan programs by using the Financial Aid Form plus a specific application for each program. A list of participating lenders is available in the Financial Aid Office.

Loan checks are generally disbursed each term through the Financial Aid Office in coordination with the Business Office. The disbursement date for loan checks depends on when the student applied for the loan, and when the check was disbursed to the school by the lender.

STAFFORD LOAN (FORMERLY GSL): U.S. citizens and eligible noncitizens may apply for the Stafford Loan if enrolled at least half time in an eligible program consisting of at least 300 clock hours (12 credit hours) of instruction. Students *must* have applied for a Pell Grant before filling out a Stafford Loan application. Maximum loans are for $2625 per year.

Students may select a lender from a list available in the Financial Aid Office. Stafford Loan applications are obtained from the lender.

Eligibility for Stafford Loan funds is based on federal guidelines and need as determined by the need analysis on the Financial Aid Form. The student must remain in good standing to receive Stafford Loan funds.

Upon leaving school or dropping below half-time enrollment, the student must begin to repay the loan within six months. The current interest rate is 8% and minimum payments are $50 per month.

SUPPLEMENTAL LOANS FOR STUDENTS (SLS): If a student has applied for a Pell Grant *and* a Stafford Loan and still requires additional funding, the student may apply for an SLS loan. This loan is for self-supporting students only, and should be used only after all other resources have been tapped.

A student does not have to demonstrate need to receive SLS funds. The SLS loan may be used to replace the expected family contribution calculated from the need analysis on the Financial Aid Form. The interest rate is variable but will not exceed 12%. The maximum amount that a student may borrow is $4000 per year. The student must begin to repay the loan 60 days after the initial disbursement date. The minimum payment is $50 per month.

PARENT LOANS FOR STUDENTS (PLUS): PLUS loans are designed to aid the parents of dependent students who need additional funding after all other resources have been tapped. Parents do not have to demonstrate need to receive PLUS funds.

The PLUS loan may be used to replace the expected family contribution calculated from the need analysis on the Financial Aid Form. The interest rate is variable but will not exceed 12%. The maximum amount a parent may borrow is $4000 per year. The parent must begin to repay the loan 60 days after the original disbursement date. The minimum payment is $50 per month.

NEW MEXICO NURSING STUDENT LOAN (NMNSL): The NMNSL is a program for New Mexico residents enrolled in a nursing educational program preparing for an associate degree in nursing. Students must show need as determined by the need analysis on the Financial Aid Form. Maximum loans are $2500 per year. Loans can be repaid with service in an underserved area within the state.

STANDARDS FOR SATISFACTORY PROGRESS FOR FINANCIAL AID PURPOSES: Financial aid will be terminated whenever a student is no longer making satisfactory progress at T-VI. *A student is considered no longer making satisfactory progress when any of the following conditions occur:*

- The student's T-VI transcript for the past five years has final grades averaging less than C (2.0 grade point average). Grade point values for financial aid eligibility are: A=4, B=3, S=3, C=2, P=2, D=1, F=0, U=0, I=0. W, AU and TR are not counted. 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.
- The student is making a second change of program at T-VI. No financial aid will be approved to enroll in a third program.
- The student withdraws from all classes before the completion of a term.
- The student has not completed an eligible certificate program within a reasonable number of terms (no more than the equivalent of full-time enrollment for one extra term in a one- or two-term program, the equivalent of full-time enrollment for two extra terms in a three-term program, or the equivalent of

full-time enrollment for three extra terms in a four- or more-term program). In addition, students must complete a minimum cumulative number of credits as they progress through a program.

- The student has not completed an associate degree within three years (nine terms). In addition, students must complete a minimum cumulative number of credit hours as they progress through a program.

The following charts show the minimum cumulative number of credit hours students must complete as they progress through a program based on their enrollment status and term in the program.

CERTIFICATE PROGRAMS							
Term in Program	1st	2nd	3rd	4th	5th	6th	7th
Full-Time Enrollment	9	18	28	37	47	56	66
¾-Time Enrollment	7	14	22	29	37	44	52
Half-Time Enrollment	4	9	14	19	24	29	33

DEGREE PROGRAMS									
*Term in Program	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
Full-Time Enrollment	8	16	24	32	40	48	56	64	71
¾-Time Enrollment	6	12	18	24	30	36	42	48	54
Half-Time Enrollment	4	8	12	16	20	24	28	32	36

**Students with more than nine terms at T-VI should contact the Financial Aid Office for information on academic progress.*

Note: The above figures are minimum credit hours that students must complete to remain eligible for financial aid. The figures do not necessarily reflect what students should be completing to finish a program on time.

REINSTATEMENT: If a student believes termination of financial aid was based on inaccurate information, or if special circumstances warrant reconsideration, the student may make an appeal *in writing* to the Financial Aid Director.

A student terminated from financial aid can reestablish eligibility by successfully removing the condition which caused the termination or by proving that special circumstances warrant an exception from the above standards.

DEFERMENT POLICY: Students awarded grants, loans or scholarships in sufficient amounts to cover tuition, equipment fees and/or textbooks may defer payment of tuition until their financial aid check is available. In cases where financial aid is not sufficient to cover all charges, the balance due is the responsibility of the aid recipient. Upon receipt of financial aid, all accounts due T-VI will be deducted from the financial aid check and the difference will be given to the student.

It is the student's responsibility to pay for tuition, equipment fees, textbooks and/or any other T-VI charges if the financial aid does not arrive or is canceled for any reason. If a student's balance is not cleared on or before the 10th day prior to the end of the term, a hold will be placed on the student's registration and academic records.

To apply for a financial aid deferment, a student should contact the Financial Aid Office at Main Campus.

REPAYMENT OF CASH DISBURSEMENTS: A student who withdraws from school must repay financial aid received as a cash disbursement to cover living expenses if the cash disbursement is greater than the student's living expenses up to the withdrawal date. The excess amount is the overpayment. Living expenses will be calculated in increments of one month.

The following formula is used to determine the portion of the overpayment to be returned to the applicable Title IV program(s).* College Work-Study, Stafford Loans, SLS and PLUS loans are excluded from the calculations.

Repayment Formula

$$\text{Amount of Overpayment} \times \frac{\text{Total Title IV Funds}}{\text{Total Financial Aid}} = \text{Amount to be Returned to Title IV Programs}$$

REFUNDS: If a student receives Title IV program funds and subsequently withdraws from school, and as a result of the school's refund policy is due a refund, a portion of the refund must be returned to the applicable Title IV program(s).*

The following formula is used to determine the portion of the refund to be returned. College Work-Study is excluded from the calculations.

Refund Formula

$$\text{Amount of Overpayment} \times \frac{\text{Total Title IV Funds}}{\text{Total Financial Aid}} = \text{Amount to be Returned to Title IV Programs}$$

DISTRIBUTION POLICY: If it is determined that a student has incurred an overpayment, an equal amount will be distributed to each of the applicable Title IV program(s).* In the case of a Stafford, SLS or PLUS loan, the portion allocated will be returned to the student's lender. The portion allocated to a program will not exceed the amount that the student received from the program.

**Title IV programs include Pell Grant, SEOG, College Work-Study, Stafford (GSL) Loan, SLS and PLUS loans.*

ARTS AND SCIENCES DEPARTMENT

Arts and Sciences, one of six instructional departments at T-VI, provides liberal arts courses to support degree programs, and offers an associate in arts degree. All courses are transferable as freshmen and sophomore electives or requirements at other degree-granting institutions.

All Arts and Sciences courses have a tuition charge. Science courses also have lab fees (see page 16). Some courses carry prerequisites or corequisites.

COURSE DESCRIPTIONS

BIOLOGICAL AND PHYSICAL SCIENCE

BIO 111—Environmental Science (3 cr)
This course surveys environmental problems and the role of man in the environment. Topics include the functions of the biosphere and its ecosystems, and solutions to problems.

BIO 115L—Biophysical Science (4 cr)
This is an introduction to the natural sciences of biology, chemistry and physics, and emphasizes their application to the human organism. Laboratory complements lecture by focusing on laboratory procedures and techniques. Three hours of lecture and one three-hour lab are taken concurrently.

BIO 121L—Principles of Biology I (4 cr)
This course emphasizes the development of concepts. Topics include impact biology, biological chemistry, Mendelian inheritance, molecular genetics and embryology. Three hours of lecture and one three-hour lab are taken concurrently.

BIO 122L—Principles of Biology II (4 cr)
(*Prerequisite: BIO 121L*) Emphasizing the development of concepts, topics include population genetics, evolution, ecology, behavior, plant and animal physiology, and the diversity of organisms. Three hours of lecture and one three-hour lab are taken concurrently.

BIO 123—Biology for Health Sciences (3 cr)
(*Corequisite: BIO 124L*) Principles of cell biology, cell chemistry, genetics and organismic biology are studied with an emphasis on human systems.

BIO 124L—Biology Lab for Health Sciences (1 cr)
(*Corequisite: BIO 123*) Laboratory exercises, demonstrations and dissections related to cell biology, organ systems and genetics are conducted.

BIO 136—Human Anatomy and Physiology for Non-Majors (3 cr)
(*Corequisite: BIO 139L*) The relationship of structure to function at the cellular and gross anatomical levels are among the fundamental concepts covered in this course.

BIO 139L—Human Anatomy and Physiology Lab for Non-Majors (1 cr)
(*Corequisite: BIO 136*) Exercises in anatomy and physiology, including demonstrations and dissections, are covered in this course.

BIO 224L—Southwestern Natural History (4 cr)
Three hours of lecture and three hours of lab or field trips (one or more overnight) present the natural history and identification of southwestern flora and fauna.

BIO 237—Human Anatomy and Physiology I (3 cr)
(*Prerequisites: For fall term 1989—BIO 115L or BIO 123/124L; starting winter term 1990—BIO 115L or a combination of BIO 123/124L or BIO 121L and CHEM 111/112L or CHEM 121L; corequisite: BIO 247L*) 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 cr)
(*Prerequisites: BIO 237/247L; corequisite: BIO 248L*) This course continues BIO 237 and covers the structure and function of the cardiovascular, respiratory, digestive,urinary, reproductive and endocrine systems. (*See BIO 299/299L prerequisites before choosing this course. You may need to register for BIO 299/299L.*)

BIO 239—Microbiology for Health Sciences (3 cr)
(*Prerequisites: For fall term 1989—BIO 115L or BIO 123/124L; starting winter term 1990—BIO 115L or a combination of BIO 123/124L or BIO 121L and CHEM 111/112L or CHEM 121L; corequisite: BIO 239L*) The concepts of microbiology, host-parasite relationships, infection and immunity are introduced.

BIO 239L—Microbiology Lab for Health Sciences (1 cr)
(Prerequisites: For fall term 1989: BIO 115L or BIO 123/124L; starting winter term 1990—BIO 115L or a combination of BIO 123/124L or BIO 121L and CHEM 111/112L or CHEM 121L; corequisite: BIO 239) In three-hour-per-week laboratory sessions, students study laboratory techniques with microorganisms and observe the growth of microorganisms, control and sanitation.

BIO 247L—Human Anatomy and Physiology Lab I (1 cr)
(Prerequisites: For fall term 1989—BIO 115L or BIO 123/124L; starting winter term 1990—BIO 115L or a combination of BIO 123/124L or BIO 121L and CHEM 111/112L or CHEM 121L; corequisite: BIO 237) This course provides anatomical and physiological laboratory exercises coordinated with the topics covered in BIO 237. Specimen dissection and cadaver study are included.

BIO 248L—Human Anatomy and Physiology Lab II (1 cr)
(Prerequisites: BIO 237/247L; corequisite: BIO 238) This course provides anatomical and physiological laboratory exercises coordinated with the topics covered in BIO 238. Specimen dissection and cadaver study are included. *(See prerequisites for BIO 299/299L before choosing this course. You may need to register for BIO 299/299L.)*

BIO 296—Topics in Biology (1–3 cr)
Various topics in biology are presented.

BIO 299—Human Anatomy and Physiology II (3 cr)
(Prerequisite: BIO 237/247L taken at T-VI before fall term 1989; corequisite: BIO 299L) This course emphasizes physiological processes. *It must be taken by students who have had BIO 237/247L at T-VI before fall term 1989.*

BIO 299L—Human Anatomy and Physiology II Lab (1 cr)
(Prerequisite: BIO 237/247L taken at T-VI before fall term 1989; corequisite: BIO 299) This course provides laboratory experience focusing on measurement of physiological parameters and dissection of mammal specimens. *It must be taken by students who have had BIO 237/247L at T-VI before fall term 1989.*

CHEM 111—Introduction to Chemistry (3 cr)
(Corequisite: CHEM 112L) This course is designed for nonscience majors in the health sciences. Instruction is provided in the basic concepts of chemistry.

CHEM 112L—Introduction to Chemistry/Lab (1 cr)
(Corequisite: CHEM 111) Laboratory instruction, demonstration and experimentation are the focus of this course.

CHEM 121L—General Chemistry (4 cr)
(Prerequisite: MATH 120 with a minimum grade of B or MATH 121 or MATH 150 with a minimum grade of C) Students are introduced to the chemical and physical behavior of matter through lecture and laboratory instruction.

CHEM 122L—General Chemistry II (4 cr)
(Prerequisite: CHEM 121L) A continuation of CHEM 121L, students meet for three hours of lecture and one three-hour lab per week.

PHYS 102—Introduction to Physics (3 cr)
This general-interest course for nonscience or science majors introduces the basic concepts and phenomena of physics. In conjunction with practical demonstrations and applications, the course is descriptive. Students need only a minimum of elementary mathematics.

PHYS 151—Physics I (3 cr)
(Prerequisite: MATH 121 or MATH 150 or MATH 180) Through lectures and demonstrations, this course is a study of mechanics, sound and heat. This is a noncalculus-based course which satisfies premedical, predental, preoptometry, and certain technologies requirements.

PHYS 152—Physics II (3 cr)
(Prerequisite: PHYS 151) Using lecture and demonstration, this course presents the areas of electricity, magnetism and optics.

PHYS 153L—Physics I Lab (1 cr)
(Pre- or corequisite: PHYS 151) Experimental technique and demonstration of the principles and phenomena of physics are the focus of experiments in mechanics, heat and sound.

PHYS 154L—Physics II Lab (1 cr)
(Pre- or corequisite: PHYS 152) This laboratory course features experiments in electricity, magnetism and optics.

PHYS 160—General Physics I (4 cr)
(Pre- or corequisite: MATH 162) A study of mechanics and sound waves is offered in this course. Topics and demonstrations include Newton's law of motion, force, moments, friction, work, energy, power, momentum and longitudinal wave properties.

PHYS 161—General Physics II (4 cr)
(Prerequisite: PHYS 160; pre- or corequisite: MATH 163) Lectures in heat, electricity and magnetism are supplemented by demonstrations.

PHYS 163L—General Physics Lab (1 cr)
(Pre- or corequisite: PHYS 160 or PHYS 161) Topics introduced in the lecture corequisite are explored in the laboratory.

PHYS 167—Problems in Physics I and General Physics I (1 cr)
(*Corequisite: PHYS 151 or PHYS 160*) Recitation and problem solving are handled in matters relating to PHYS 151 and PHYS 160. *This course is offered on an audit basis only.*

PHYS 168—Problems in Physics II and General Physics II (1 cr)
(*Corequisite: PHYS 152 or PHYS 161*) Recitation and problem-solving are handled in matters relating to PHYS 152 or PHYS 161. *This course is offered on an audit basis only.*

COMMUNICATIONS

COMM 130—Public Speaking (3 cr)
Emphasis is on the dual role of speech as both a speaking and listening skill. Individual speeches and group discussion are included. Practice is provided through audience analysis, verbal/nonverbal expression, critical listening and oral presentations.

COMM 221—Interpersonal Communication (3 cr)
This course provides an analysis of a variety of interpersonal communication concepts with special emphasis on the application of communication skills that improve interpersonal relationships in different situations.

COMM 232—Business and Professional Speaking (3 cr)
(*Prerequisite: COMM 130 or permission of instructor*) Speeches common to business and professional arenas are analyzed, prepared and presented.

COMM 240—Organizational Communication (3 cr)
Current theories of organizational behavior are examined with emphasis on communication patterns and practices. Attention is given to superior-subordinate communication, formal and informal communication networks, authority and power.

COMM 270—Communication for Teachers (3 cr)
Interpersonal, small group and public communication concepts and practices are introduced. Subjects are especially pertinent to classroom teachers at elementary, middle and secondary levels.

COMM 293—Topics in Communication Studies (1–3 cr)
Topic offerings vary from term to term.

ENG 101—Writing with Readings in Exposition (3 cr)
This course stresses expository writing and reading. It concentrates on organizing and supporting ideas in essay writing. Students must pass a first-day diagnostic essay to remain enrolled.

ENG 102—Analytic Writing (3 cr)
(*Prerequisite: ENG 101 with a minimum grade of C or a minimum ACT score of 25*) Students undergo intensive practice writing essays that analyze expository and literary readings.

ENG 119—Technical Communications (3 cr)
(*Prerequisite: ENG 101 with a minimum grade of C or a minimum ACT score of 25*) This is an introductory study of written and verbal communications. Topics covered include descriptive and process analysis, informal reports and proposals, short logs/reports for lab and field work, basic production of graphics, letter writing and oral presentation.

ENG 221—Creative Writing: Fiction (3 cr)
(*Prerequisite: ENG 101 or permission of instructor*) Student work is supplemented by texts and discussion on writing as a creative process.

ENG 222—Creative Writing: Poetry (3 cr)
(*Prerequisite: ENG 101 or permission of instructor*) Student poetry is supplemented by texts and discussion on writing as a creative process.

ENG 240—Traditional Grammar (3 cr)
Using traditional grammar, this course is a study of the basic analysis of English sentences. Students are introduced to terminology and methods for identifying parts of speech, functional units of sentences and basic sentence patterns.

COMPUTER SCIENCE

CSCI 101—Computer Literacy (3 cr)
This introductory course provides lecture and laboratory instruction in the use of computers. Lecture topics emphasize understanding how computers work. Lab time covers the basics of software application.

CSCI 155L—Introduction to Computer Programming (4 cr)
(*Prerequisite: MATH 150 with a minimum grade of C*) This course is an introduction to the skill of computing. Understanding the relationship between computing and problem solving, using programs written in Pascal, is the main objective.

FINE ARTS AND LANGUAGES

ART 101—Introduction to Art (3 cr)
Students are introduced to the fundamental concepts of visual arts as well as the language of form and the mediums 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 cr)
Emphasizing major forms of expression—pottery, textiles, jewelry, architecture, painting and photography—the interrelationships of the three southwestern cultures are explored in slide lectures and field trips.

ART 201—History of Art I (3 cr)
This course presents the art of prehistoric, Near Eastern, Egyptian, Greek, Roman, early Christian, Byzantine, Romanesque and Gothic eras and styles. Lectures are supplemented by slides.

ART 260—Architectural History: Ancient through Modern (3 cr)
As a survey of the history of architecture, this course's topics include the pyramid, Gothic cathedral, Renaissance palace, and Post-Modernist house.

MUSC 139—Music Appreciation I (3 cr)
Concentrating on compositions from chamber music and symphonic literature, students expand their abilities to listen actively. This course is nontechnical and may require attending musical performances.

SPAN 101—Elementary Spanish I (3 cr)
Designed for students with no previous exposure to Spanish, this course develops all four language skills. Emphasis is on listening, comprehension and speaking.

SPAN 102—Elementary Spanish II (3 cr)
(*Prerequisite: SPAN 101 or permission of instructor*) Students continue development of listening and speaking skills. More emphasis is placed on reading and writing.

SPAN 201—Intermediate Spanish I (3 cr)
(*Prerequisite: SPAN 102 or permission of instructor*) Students review grammar and expand conversational skills while further developing writing and reading.

SPAN 202—Intermediate Spanish II (3 cr)
(*Prerequisite: SPAN 201 or permission of instructor*) A continuation of SPAN 201, this course provides more conversational activities and more emphasis on reading and writing skills.

HUMANITIES

ENG 150—Study of Literature (3 cr)
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.

ENG 210—Film as Literature (3 cr)
Screenings and critical study of major films supplement this course's analyses of film as literature. Students also survey major trends in the history of film.

ENG 211—Topics in Literature (1–3 cr)
Specific types or areas of literature are surveyed. Topic variations include the American novel, the short story, quest romances and Native American literature.

ENG 270—Modern Literature (3 cr)
American and European literature of the 20th century is introduced. Works by such authors as Eliot, Faulkner, Fitzgerald, Yeats, Joyce, Ibsen, Camus and Chekhov are emphasized.

ENG 296—American Literature (3 cr)
Students survey literature from colonial to present times. Short stories, poetry, drama and nonfiction are emphasized.

HIST 101—Western Civilization I (3 cr)
Events, personalities, issues, rises and falls are the focus of this course which covers ancient times through 1648.

HIST 102—Western Civilization II (3 cr)
From 1648 to the present, people and events are explored in their various contexts, such as colonialism, the age of revolutions, expansionism and the Great Wars.

HIST 161—History of the United States I (3 cr)
This is a survey of the economic, political, intellectual and social development of the United States from 1607 to 1877.

HIST 162—History of the United States II (3 cr)
A continuation of HIST 161, this course covers the period from 1877 to the present.

HIST 230—U.S.S.R. Today: People, Politics, Culture (3 cr)
Important issues of contemporary Russian life, including their historical sources and political and cultural significance, are the focus of this course.

HIST 260—History of New Mexico (3 cr)
The history of New Mexico is covered from Cabeza de Vaca to the present. The borderlands and Spanish, Indian and Anglo contributions are studied.

HIST 296—Topics in History (1–3 cr)
Various topics in the field of history are covered.

HUM 107—Living World Religions (3 cr)
Major living world religions are introduced. Students study Buddhism, Christianity, Hinduism, Islam and Judaism.

HUM 111—Humanities I (3 cr)
The student is given a comparative introduction to the development of human civilizations from their beginnings through the Middle Ages.

HUM 112—Humanities II (3 cr)
Students are given a comparative introduction to the development of human civilization from the Renaissance through contemporary times.

HUM 247—Topics in Humanities (1–3 cr)
A variety of topics of an interdisciplinary nature are explored.

PHIL 110—Introduction to Philosophical Thought (3 cr)
This course surveys philosophical issues addressed by great thinkers of the Western tradition. Problems concerning values, knowledge, reality, and social, political and religious philosophy are introduced. Some time is given to a comparison of Western philosophical systems with those of the Orient.

PHIL 156—Logic and Critical Thinking (3 cr)
This course provides the tools of reason which are helpful in everyday decision-making. It also introduces skills for argument analyses and effective communication of ideas. Informal fallacies and formal deductive systems are included.

PHIL 241—Topics in Philosophy (1–3 cr)
Topics vary. Students explore a major philosophic issue or give special attention to a great philosopher's works.

PHIL 245B—Business Ethics (3 cr)
Ethical problems associated with the field of business are examined. Moral issues such as insider trading, conflict of interests, employer/employee relations and "whistle-blowing" are viewed from widely different moral perspectives.

PHIL 245E—Engineering Ethics (3 cr)
Ethical problems associated with the field of engineering are examined. Moral issues such as experimentation in engineering, safety, confidentiality, professional rights and obligations, and career choice are viewed from widely different moral perspectives.

PHIL 245M—Biomedical Ethics (3 cr)
This course examines ethical problems associated with the fields of medicine and bio-research. Moral issues such as euthanasia, genetic experimentation, informed consent and abortion are viewed from widely different moral perspectives.

MATHEMATICS

MATH 120—Intermediate Algebra (3 cr)
Topics covered include linear equations and inequalities, polynomials, factoring, exponents and radicals, fractional expressions and equations, and quadratic equations.

MATH 121—College Algebra (3 cr)
(*Prerequisite: MATH 120 with minimum grade of C or math placement exam or a minimum ACT score of 25*) This course includes the study of equations, inequalities and systems of equations. Functions and their graphs are introduced including polynomial, rational, exponential and logarithmic.

MATH 123—Trigonometry (2 cr)
(*Prerequisite: MATH 120 with a minimum grade of C or math placement exam or a minimum ACT score of 25*) Trigonometric functions, radian and degree measure, graphs, basic trigonometric identities and inverse trigonometric functions are covered.

MATH 145—Introduction to Probability and Statistics (3 cr)
(*Prerequisite: MATH 120 with a minimum grade of C or math placement exam or a minimum ACT score of 25*) 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.

MATH 150—Advanced Algebra (3 cr)
(*Prerequisite: MATH 120 or MATH 121 with a minimum grade of C or math placement exam or a minimum ACT score of 25*) This course emphasizes polynomial, rational, exponential and logarithmic functions, as well as the graphs of these functions. The course includes an introduction of sequences and series.

MATH 162—Calculus I (4 cr)
(*Prerequisite: MATH 121 with a minimum grade of B or MATH 150 with a minimum grade of C or math placement exam; pre- or corequisite: MATH 123 or math placement exam*) This course includes a study of derivatives; average rate of change of a function; formal differentiation relative to rational functions, inverse and trigonometric functions; increment of a function and the concept of continuity; applications of the derivative, such as curve sketching, maxima and minima; integration, relation between derivative and integral, finding the area between two curves, and calculating volumes.

MATH 163—Calculus II (4 cr)
(*Prerequisite: MATH 162 with a minimum grade of C*) This course covers differentiation and integration techniques with applications involving transcendental functions; numerical integration techniques, solving simple differential equations, improper integrals and application of the mean value theorem.

MATH 180—Elements of Calculus I (3 cr)
(*Prerequisite: MATH 121 with a minimum grade of C or MATH 150 with a minimum grade of C*) Students briefly review functions; graphs; limits; derivatives as a rate of change; applications to graphing, maxima, minima and motion; integral as antiderivative and as a sum, applications, exponential and logarithmic functions.

MATH 181—Elements of Calculus II (3 cr)
(*Prerequisite: MATH 180 with a minimum grade of C and some knowledge of trigonometry or MATH 123. MATH 123 can be taken concurrently with MATH 181*) A continuation of MATH 180, this course covers the definite integral, multivariate calculus, simple differential equations, and a basic review of trigonometry and its relation to calculus.

MATH 264—Calculus III (4 cr)
(*Prerequisite: MATH 163 with a minimum grade of C*) This continuation of MATH 163 covers vector representation of curves and surfaces, partial derivatives, gradient, tangent planes, directional derivative, multiple integrals, cylindrical and spherical coordinates, and applications.

SOCIAL AND BEHAVIORAL SCIENCE

ANTH 120—Archaeology: Discovering Our Past (3 cr)
This introductory course presents students with an overview of archaeological theory and methods including data from selected archaeological sites in various geographical areas representing different time periods.

ANTH 130—Cultures of the World (3 cr)
This course introduces students to basic concepts of cultural anthropology. Lectures include a survey of the variety of existing human cultures in their native environments and the relationships of the cultural components. One societal example is studied in detail.

ANTH 150—Evolutionary Anthropology (3 cr)
An introduction to the world of biological anthropology and the concepts of organic evolution, this course emphasizes the fossil history of primates and prehistoric man with a consideration of their paleoecological context. Modern primate behavior is considered in terms of its relevance to human evolution.

ANTH 255—Southwestern Anthropology (3 cr)
The archaeology of the southwest is presented from the earliest inhabitants through the early 1600s.

ANTH 296—Topics in Anthropology (1–3 cr)
Topics vary. Students explore an issue in anthropology or the works of an influential anthropologist.

ECON 101—Introduction to Economics (3 cr)
Students are introduced to basic economic concepts and developments. Topics include the origins of capitalism, transplantation and adaptation in the New World, and new institutions in America in the 1800s and 1900s.

ECON 200—Macroeconomics (3 cr)
Issues in macro-theory and money and banking, emphasizing contemporary economic problems, are covered.

ECON 201—Microeconomics (3 cr)
Students are introduced to micro-theory, international trade theory, and economic growth and development.

GEOG 102—Human Geography (3 cr)
Emphasizing the human elements of world geography, this course provides a systematic analysis of world population, demographic factors, ethnic groups, predominant economies and political units, and their interrelation and interaction with the physical earth.

PSCI 110—The Political World (3 cr)
This introduction to politics emphasizes how people can understand their own political systems and those of others.

PSCI 200—U.S. Politics (3 cr)
This is a survey of American politics including the theory of democracy and political institutions, the electorate, and American governmental branches and their bureaucracies.

PSCI 210—State and Local Politics (3 cr)
Analysis of the workings of politics at the state and local levels is the emphasis of this course. New Mexico is one of many states used as examples.

PSCI 220—Comparative Government and Politics (3 cr)
By considering European, developing and communist regimes and systems, students gain insights into the political history, socioeconomic structure, and contemporary political institutions and behaviors of governments and "the body politic."

PSCI 240—International Politics (3 cr)
Students analyze various significant factors in international politics. Topics include nationalism, ideology, deterrance, balance of power, international law, international conflict and collaboration.

PSCI 260—Political Ideas (3 cr)
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.

PSY 101—General Psychology I (3 cr)
An introduction to basic processes underlying behavior, this course focuses on principles of learning, memory and motivation, language, states of awareness and biological bases of behavior.

PSY 102—General Psychology II (3 cr)
An introduction to patterns of human behavior, this course focuses on human growth and development, intelligence, personality, social psychology, abnormal behavior and therapy.

PSY 220—Developmental Psychology (3 cr)
(*Prerequisite: PSY 101 or PSY 102*) 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 cr)
(*Prerequisite: PSY 101 or PSY 102*) Emphasizing processes of normal human adjustment and coping in personal and interpersonal areas, this course presents topics in the applications of psychology to stress and mood management, self-esteem, social adjustment, communication and relationships.

PSY 260—Psychology of Learning and Memory (3 cr)
(*Prerequisite: PSY 101 or PSY 102*) 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 formation.

PSY 271—Social Psychology (3 cr)
(*Prerequisite: PSY 101 or PSY 102*) This course presents topics on social interaction—communication, perception of oneself and others, attitudes, leadership.

PSY 296—Topics in Psychology (1–3 cr)
Topics vary, concentrating on the work of an influential psychologist, a school of psychology, or an area in psychology.

SOC 101—Introduction to Sociology (3 cr)
This course covers the basic concepts, topics and theories of contemporary sociology.

SOC 111—Criminal Justice System (3 cr)
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 cr)
(*Prerequisite: SOC 101*) This course provides an analysis of a range of social problems in contemporary U.S. society, such as racism and prejudice, crime and delinquency, mental disorders, family changes, poverty, and substance abuse from a sociological perspective.

SOC 212—Juvenile Delinquency (3 cr)
(*Prerequisite: SOC 101*) Topics covered in this course include the characteristics of the delinquent youth under the age of criminal adulthood, theories of causation and related empirical research.

SOC 213—Deviant Behavior (3 cr)
(*Prerequisite: SOC 101*) Students focus on the theory and research of deviant behavior and types of individual and subcultural deviance.

SOC 214—Sociology of Corrections (3 cr)
(*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 cr)
(*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 cr)
(*Prerequisite: SOC 101*) This course is the study of ethnic and racial groups, conflict and adjustment, cultural differences, theories of prejudice and current trends and problems in our global society.

SOC 221—Sociology of Rich and Poor Nations (3 cr)
(*Prerequisite: SOC 101*) Topics covered include patterns of development and change in nation/states, relationships between Third World and industrial nations, and the impact of class conflict, war, revolution, reform and colonialism on national development.

SOC 225—Marriage and the Family (3 cr)
(*Prerequisite: SOC 101*) Emphasizing influences between large-scale social changes and changes in family composition and interaction, this course analyzes contemporary family and household forms.

SOC 230—Society and Personality (3 cr)
(*Prerequisite: SOC 201*) This course introduces topics in social psychology such as personality theories, concepts of self, human relationships, small group dynamics and organizational theories.

SOC 280—Social Science Research (3 cr)
(*Prerequisite: SOC 101*) The methodology of experimental science is applied to the social sciences in this course. Topics include the study of methodologies of data collection and analysis. Library resources, including legal citations, are used.

SOC 296—Topics in Sociology (1–3 cr)
Topics vary. Students explore an issue in sociology or the works of an influential sociologist.

GENERAL ELECTIVES

NUTR 125—Nutrition (3 cr)
This is a study of the basic principles of nutrition including the impact of nutrition on body functions, total health and life style.

PLACEMENT BY EXAMINATION

Students may use the ACT to place into some Arts and Sciences courses without taking prerequisites. Students do not receive credit for course prerequisites fulfilled by an ACT score. See course descriptions for details.

CREDIT BY EXAMINATION

Students may earn a maximum of 30 credit hours toward Arts and Sciences requirements through the following:

1) Advanced Placement (AP)
2) College Level Examination Program (CLEP) (subjects exams only)
3) T-VI Challenge Exams
4) Correspondence Courses

AP and CLEP exams and scores are as follows:

1) Advanced Placement

T-VI Course	AP	Minimum Score	Cr
ART 101	Art History	4	3
BIO 121L/122L	Biology	3	8
CHEM 121L/122L	Chemistry	3	8
CSCI	Computer Science	4	4
ENG 101 & 102	English Language & Composition	3	6
ENG 101 & 102	English Literature & Composition	3	6
HIST 101 & 102	European History	4	6
HIST 161 & 162	American History	4	6
MATH 162	Calculus AB	3	4
MATH 162 & 163	Calculus BC	3	8
PHYS 151/153L	Physics B	4	4
PHYS 160/163L	Physics C	4	4
SPAN 101 & 102	Spanish Language	3	6
SPAN 101 & 102 and SPAN 201 & 202	Spanish Language	4	12

2) College Level Examination Program

T-VI Course	CLEP	Minimum Score	Cr
CHEM 121L/122L	General Chemistry	52	8
ECON 200	Introduction to Macroeconomics	55	3
ECON 201	Introduction to Microeconomics	55	3
ENG 101	Freshman English*	51	3
ENG 102	College Composition*	57	3
ENG 150	Analysis & Interpretation of Literature*	55	3
ENG 296	American Literature*	50	3
HIST 101 & 102	Western Civilization I & II	50	6
MATH 121	College Algebra	56	3
MATH 123	Trigonometry	61	2
MATH 162	Calculus with Elementary Functions*	60	4
PSCI 200	American Government	55	3
PSY 220	Human Growth & Development	52	3
SOC 101	Introduction to Sociology	52	3
SPAN 101	College Spanish	40	3
SPAN 101 & 102	College Spanish	45	6

*Exam is no longer available; credit is awarded for exams taken previously.

Scores on CLEP and AP must be forwarded to the T-VI Records Office. Scores are considered *official* if they are:

- Sent directly from the Testing Center, or are
- Original scores forwarded to the student, or are
- *AP* scores included on high school or college transcripts as part of the student's permanent record.

The student's T-VI transcript will reflect a grade of CR (credit) for those courses with acceptable CLEP or AP scores. The transcript also will show the credits were obtained by examination. *CR grades are not computed in the student's GPA. Credits count toward graduation but not residency.*

3) Challenge Exams

The Arts and Sciences Department has developed challenge examinations for some of its courses. Exams are scheduled during the last week of each term.

Courses that may be challenged are:

BIO 237	Anatomy & Physiology I (lecture)
BIO 247L	Anatomy & Physiology I (lab) *(must be challenged together)*
BIO 238	Anatomy & Physiology II (lecture)
BIO 248L	Anatomy & Physiology II (lab) *(must be challenged together)*
CSCI 101	Introduction to Film
ENG 210	Computer Literacy
NUTR 125	Nutrition
PSY 101	General Psychology I
PSY 102	General Psychology II

To challenge a course, a student must:

- Obtain a "challenge exam form" and approval from an admissions advisor or a department counselor.
- Pay a $10 per-credit-hour fee at the Cashier's Office.
- Submit the form and schedule the exam through the Arts and Sciences Office, A-102 on Main Campus.
- Present picture I.D. at exam site.

The following restrictions apply:

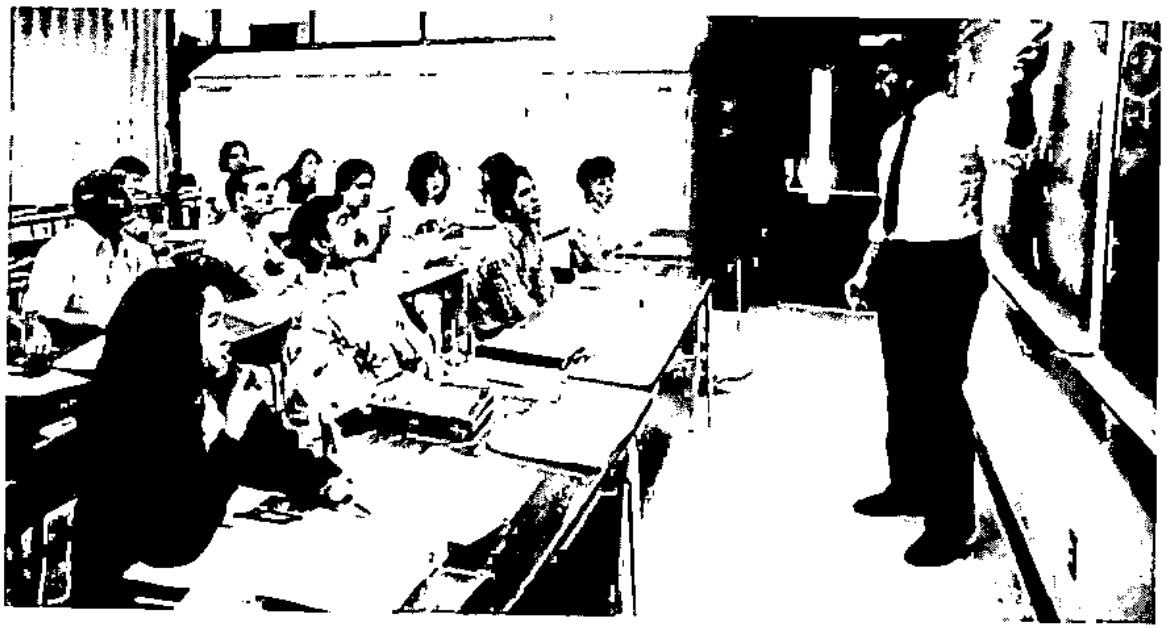
- A student may attempt a challenge only once per course.
- A student may not use the challenge exam to improve a previously recorded grade.
- A student's transcript will reflect a grade of CR (credit) for those courses successfully challenged. *CR grades are not computed in the student's GPA. Courses successfully challenged may count toward graduation but not the residency requirement.*
- Challenge exam credit might not be accepted by other postsecondary institutions.

4) Correspondence Courses

Credit for Arts and Sciences courses may be granted for a maximum of three courses completed by correspondence through a regionally accredited institution.

PERMISSION OF INSTRUCTOR

Students may enroll in some courses by "permission of the instructor." Students wanting to enroll in such a course may obtain the necessary form from departmental counselors or the Admissions Office. Permission of an instructor to enroll does not constitute a waiver of a course, nor does it grant credit for another course. See the appropriate departmental counselor for more information.



DEVELOPMENTAL STUDIES DEPARTMENT

Preparatory Program

1 or 2 Terms, Main and Montoya Campuses

The Preparatory Program offers a variety of courses designed to help students meet admission requirements for certificate and associate degree programs, other degree-granting institutions, and refresher purposes.

Occupational preparatory courses are designed to provide the skills needed in the first term of certificate programs. College preparatory courses (100 level) are designed to meet general academic requirements. Students may combine a program of both occupational and college prep courses to best meet postsecondary goals. Not all combinations of occupational and college prep courses qualify for some types of financial aid, however.

Students in certificate and associate degree programs also are eligible to enroll in any of the Preparatory Program courses.

Preparatory courses are graded S, P, U. They do not earn credit toward certificate or associate degree programs at T-VI, nor do they transfer to other degree-granting institutions. However, grades are recorded in preparatory students' permanent records. Students are not permitted to audit preparatory courses.

To be a full-time student and qualify for financial aid, a student must enroll for at least 12 credit hours in the Preparatory Program, but 15 credit hours is the recommended course load. Students may register for as many credit hours as they need.

Appropriate Preparatory Program courses are offered at both campuses. Several courses are also scheduled at night at both campuses. More information is available from counselors at either the Main or Montoya campus.

PREPARATORY PROGRAM

Recommended Schedule for Certificate Programs	*Hrs Wk*	*Cr Hrs*
Mathematics	10	6
Communications	5	3

A variety of additional courses may be selected from:

Language Skills	5	3
Science	5	3

Instead of communications, students with low reading test scores should take one of the following courses:

Language Development	10	6
Prep Language	10	6

Students needing to remove American College Test (ACT) deficiencies should select from the following courses:

ENG	100	Writing Standard English	5	3
MATH	100	Introductory Algebra	10	6
SCIE	100	Introduction to Natural Sciences	5	3
SSCI	100	Introduction to Social Sciences	5	3

COURSE DESCRIPTIONS

MATHEMATICS

Preparatory students are placed in math courses that best meet their needs, interests and abilities. The results of a math advisement test and/or the math section of the ACT (ACT-M) are used to assist in determining appropriate math placement. Math classes meet two hours per day except as otherwise noted.

PREP MATH—Preparatory Mathematics for Business Occupations, Culinary Arts, Health Occupations, Technologies or Trades (6 cr)

This course begins with an overview of basic mathematics and includes special or advanced topics needed for the student's selected major. Students progress at their own rates with the objective of meeting or exceeding entry-level mathematics skills for their selected majors.

MATH 100—Introductory Algebra (6 cr)

Introductory Algebra is for students who are not prepared to enter intermediate algebra. This course begins with an overview of basic mathematics and then progresses to operations on numbers, polynomials, linear equations, factoring, formulas and word problems. The course is offered in both self-paced and lecture format. Satisfactory completion of MATH 100 signifies that the student is prepared to enroll in MATH 120.

LANGUAGE SKILLS

Courses are offered on two levels. Prep Language is an intensive course designed for students with limited English proficiency. Language Development is an individualized course including the four basic communication skills—speaking, listening, reading and writing—with emphasis on spelling, writing and good English usage. Reading improvement courses also are available.

LANG 011—Prep Language (6 cr)
This is an intensive course in English. Students with limited English proficiency acquire effective speaking and listening skills necessary for successful participation in T-VI preparatory communications and survey courses. Class meets two hours per day.

LANG 021—Language Development (6 cr)
This class helps students improve basic communications skills—speaking, listening, reading and writing—on an individual basis. It helps them follow oral and written instructions accurately and write, spell and use English correctly. Class meets two hours per day.

LANG 041—Prep Reading (3 cr)
This course complements LANG 011. Students with limited English proficiency develop effective reading and writing skills which help them become successful participants in T-VI preparatory reading courses.

LANG 051—Reading Improvement (3 cr)
This course helps students improve reading, vocabulary and comprehension skills. All T-VI students are encouraged to take this course. Performance objectives are mastered in word study, comprehension, study skills, applied skills, spelling and vocabulary building. After midterm, occupationally related materials are part of required reading.

LANG 061—Writing Lab (3 cr)
This course emphasizes practice in clarity, brevity and control. Assigned exercises reflecting a student's selected major are evaluated frequently. A good understanding of the four communication skills—speaking, listening, reading, writing—and a sixth-grade reading level are required.

LANG 071—Spanish for Beginners (3 cr)
Conversational Spanish for non-Spanish-speaking students who will be working in a bilingual society is taught in this class. Information about the Spanish culture and an appreciation of its customs and traditions are included. *This course is not eligible for Veterans Administration benefits.*

ENG 100—Writing Standard English (3 cr)
Intensive study of grammar, syntax, punctuation and usage is included, with concentrated practice in writing paragraphs. Satisfactory completion of ENG 100 guarantees enrollment in ENG 101. Depending on reading and writing abilities, a student may be required to complete satisfactorily LANG 021 or LANG 061 prior to enrolling in ENG 100.

COMMUNICATIONS—SURVEY

Occupational applications of speaking, reading and writing are taught. Students are provided an opportunity to explore further and define their career fields.

COMM SERIES—Communications for Majors in Business Occupations, Health Occupations, Technologies or Trades (3 cr)
Students improve speaking, listening, reading and writing skills as related to their chosen fields. They also learn reference and study skills and the technical vocabulary for their chosen programs.

SURV SERIES—Survey of Majors in Business Occupations, Health Occupations, Technologies or Trades (3 cr)
Students learn more about the majors they have selected—job expectations, job availability, methods, materials and operations of each field. *This course is not eligible for Veterans Administration benefits.*

SURV 071—Introduction to Typing (3 cr)
This course is for students who want or need to learn typewriting or general keyboarding skills. Students in Business Occupations majors who have unique difficulties in learning typewriting are encouraged to enroll. The course also is recommended for students preparing for Data Processing and other majors requiring keyboard skills. *This course is not eligible for Veterans Administration benefits.*

SOCIAL SCIENCE

SSCI 100—Introduction to Social Sciences (3 cr)
SSCI 100 prepares students for entry into any introductory social science course. A basic skills foundation is offered in the areas of reading, writing, listening, speaking and thinking. Selected social science topics are used as the vehicles to teach these skills.

NATURAL SCIENCE

SCIE 011—Introduction to Physics (3 cr)
This survey course is designed for students who plan to enter most Trades or Technologies majors. Introduced are basic concepts of work and energy, matter, forces, friction, heat, light, electricity, sound and motion. The course creates an understanding of physics and its place in modern technology.

SCIE 013—Thinking Strategies (3 cr)
This course is for students who want to improve their general thinking abilities. Several thought processes are explored and applied to general problem-solving situations, math, word problems, standardized testing and group processes. The course is especially recommended for students preparing for Accounting, Data Processing, Electronics and other majors dealing with troubleshooting, and for students weak in math.

SCIE 014 (first 7½ weeks)
SCIE 015 (second 7½ weeks)—Introduction to the Calculator (2 cr)
This 7½-week introductory course, offered twice each term, features scientific and technical operations on Sharp and Hewlett-Packard calculators. Designed primarily for students in or preparing for Technologies or Trades, the course includes algebraic operating method, reverse operating logic, introduction to programming, hexadecimal/decimal conversions, trigonometric functions and coordinate systems, logarithms, multiple memory problems, and applications for mathematics, physics, electronics and mechanics. Class meets one hour per day. *This course is not eligible for Veterans Administration benefits.*

SCIE 100—Introduction to Natural Sciences (3 cr)
SCIE 100 is a skills oriented course which prepares the student for entry into any introductory natural science course. Selected topics from biology, chemistry, geology and physics are used to develop the student's basic study and scientific reasoning skills.

Special Services

Main Campus

The Special Services program is designed to meet the needs of handicapped students enrolled at T-VI. Services are provided to prepare the handicapped student for participation in the world of work and higher education.

At the Developmental Studies level, career counseling, individual program planning, vocational assessment, ancillary services, coordination with community support agencies, and individualized instruction are provided. For students enrolled in certificate and associate degree programs, limited curriculum adjustments are made to accommodate handicapping conditions. Follow-up services, such as counseling, tutoring and job-seeking help, are provided.

Handicapped students entering T-VI through Developmental Studies take regular preparatory courses and are eligible for placement in specially designed support courses.

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

Support Courses	*Hrs Wk*	*Cr Hrs*
Mathematics	10	6
Language	10	6
Spelling	5	3
Targeted Instruction	5	3
Employability Skills	5	3

COURSE DESCRIPTIONS

MATH 021—SS Prep Math (6 cr)
This course provides small group instruction in basic mathematics skills—whole numbers, common fractions, decimal fractions, percents and conversions. The student is placed in a self-paced, individualized, programmed math unit. Students who make sufficient progress are moved into regular preparatory courses. The class meets two hours each day.

LANG 031—SS Language (6 cr)
Small group instruction is provided in basic communication skills—spelling, reading, writing, speaking and listening. The course helps students follow oral and written instructions accurately and write and use English correctly. Students who make sufficient progress are transferred to regular preparatory courses. The class meets two hours per day.

LANG 033—SS Spelling I (3 cr)
This course provides diagnosis and remediation for specific spelling deficiencies. Word structure and the principles and rules of spelling are emphasized. Students making sufficient progress are transferred to regular preparatory courses.

LANG 034—SS Spelling II (3 cr)
(*Prerequisite: LANG 021 or LANG 033*) This course is for students who have progressed satisfactorily in LANG 021 or LANG 033 but require additional remediation of spelling skills before transferring to regular preparatory language classes.

SSVC 001—Targeted Instruction (3 cr)
This course provides intensive, individualized instruction to students who have potential for participation in certificate majors or academic programs but need concentrated help to complete the Preparatory Program. Students receive daily, individualized tutoring in a classroom setting.

SSVC 004—Employability Skills (3 cr)
This course is designed to make the student job-conscious, self-assured and well-prepared for employment. Units include self-assessment, résumé writing, applications, interviewing techniques, on-the-job training, work samples, business vocabularies, writing and composing letters, career exploration, human relations, community resources and job market information.

BUSINESS OCCUPATIONS DEPARTMENT

Business Occupations Learning Centers

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

The BOLCs serve members of the public and T-VI students who want to review or learn a particular subject or skill individually.

Individuals may begin using these centers at any time during a term and stop when requirements have been met. Instruction is offered on new equipment including electronic typewriters, electronic calculators, transcribing machines, microcomputers and audiovisual training aids. Hours are arranged to suit individual needs and as equipment is available.

The Main Campus center is located in Room B-210. 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, 7:30 a.m. to 5 p.m. on Friday, and 9 a.m. to 1 p.m. on Saturday. The fee is $20 per course. For further information, phone 842-6219 at Main Campus, 298-5461 at Montoya Campus.

BOLC SUBJECT/SKILL AREAS

Typing I
Typing II
Typing III, Montoya Campus
Typewriting Skillbuilding
Alphabetic Shorthand I
Century 21 Shorthand I, Main Campus
Forkner Shorthand I
Gregg Shorthand I
Gregg Shorthand II
Machine Shorthand
Shorthand Review
Shorthand Speedbuilding
Telephone Techniques
Communications Review
Proofreading
Business Mathematics Fundamentals
Business Mathematics II
Business Mathematics III, Main Campus
Electronic Calculating
Accounting Fundamentals
Records Management
Machine Transcription
Legal Transcription
Medical Transcription
Medical Terminology
Microcomputer Courses

COURSE DESCRIPTIONS

Typing I
Typing I is an excellent audiovisual course for beginners or for those who need a review of basic techniques and business applications. The content emphasizes business letters, reports and tables.

Typing II
(*Prerequisite: Typing I or placement test*) This continuation of Typing I emphasizes speed, accuracy and production.

Typing III
(*Prerequisite: Typing II or placement test*) This course is a continuation of Typing II with additional speedbuilding and more complex production tasks including abstracted tables, line justification and secretarial projects.

Typewriting Skillbuilding
(*Prerequisite: 30 gross words per minute typing skill*) This course improves typing accuracy and speed using championship methodology.

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.

Century 21 Shorthand I
Students learn to read, write and transcribe this symbolic shorthand system. A writing speed of 50 wpm should be reached upon completion.

Forkner Shorthand I
Students learn to read, write and transcribe this combination alphabetic and symbolic shorthand system. 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.

Gregg Shorthand II
(*Prerequisite: Ability to write Gregg shorthand at 50 words per minute and transcribe into mailable form*) Theory and brief forms are reviewed with emphasis on dictation and transcription. A writing speed of 80 wpm should be reached upon completion.

Machine Shorthand
This course offers an introduction to this alternative shorthand system and provides a foundation for career growth in the courts.

Shorthand Review
This course is for students who have typing and shorthand skills but need review and speedbuilding.

Shorthand Speedbuilding
This course is for individuals who have learned a shorthand theory system and want to concentrate on building dictation speed.

Telephone Techniques
Familiarization with accepted telephone manners and practices is the objective of this mini-course.

Communications Review
Instruction is in grammar, spelling and punctuation.

Proofreading
This course creates an awareness of the most common types of errors in written messages and the standard marks for correcting them.

Business Mathematics Fundamentals
This course provides a review of the fundamental arithmetic operations in solving business problems.

Business Mathematics II
(*Prerequisite: Business Math Fundamentals or placement test*) The mathematics of interest, marketing, payroll and taxes are included in this course.

Business Mathematics III
(*Prerequisite: Business Mathematics II or placement test*) This course includes the mathematics for business ownership, depreciation, compound interest, investments and statistics.

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

Accounting Fundamentals
This course gives the student a basic understanding of accounting principles and their application.

Records Management
Basic principles of alphabetic, numeric and geographic filing are covered.

Machine Transcription
(*Prerequisites: Demonstrated English proficiency and 50 words per minute typing skill/5 errors*) Instruction is provided in the use of transcribing machines to prepare mailable business correspondence.

Legal Transcription
(*Prerequisites: Machine Transcription and 50 words per minute typing skill/5 errors*) Familiarity with legal terminology, forms and transcription is developed.

Medical Transcription
(*Prerequisites: Machine Transcription and 50 words per minute typing skill/5 errors*) This course develops familiarity with medical terminology and transcription.

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.

Microcomputer Courses
Courses available are Computer Literacy, Keyboarding, BASIC Programming, Word Processing (WordPerfect), Electronic Spreadsheet (Lotus 1-2-3), and Database Management (dBase III+). Computer Literacy and a typing speed of 25 wpm are prerequisites for all microcomputer courses except Keyboarding. Additional prerequisites for Word Processing include a typing speed of 50 wpm and proficiency in English and machine transcription. Apple IIe and IBM or IBM-compatible computers are used.

Business Assistance Center

The Business Assistance Center provides training, consulting and referrals to all community business owners and prospective owners. The center contains resource materials such as business and population census information, reference books, periodicals, and computer hardware and software. Consulting, which includes on-site visitations, is provided to qualified applicants.

The center also acts as a business referral service to help business owners and prospective owners locate other service providers from both private and public sectors.

Clients who wish ongoing counseling are required to enroll in one of the Entrepreneurship classes. See page 41 for course descriptions.

The Business Assistance Center is located in the Business Occupations Building, Main Campus, 717 University SE. Hours are Monday through Friday, 8 a.m. to 5 p.m., telephone 247-9579.

Accounting

Associate Degree/Certificate Program
4 Terms, Main and Montoya 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 an associate in applied science degree or certificate. The degree is awarded to students who complete both occupational and Arts and Sciences courses. A certificate is awarded to students who complete the occupational component. Proficiency certificates are awarded for each course completed.

Students have an employable skill after completing all occupational courses listed under Terms I and II. A student leaving the program at this point will receive a bookkeeping certificate if the request is made within 12 months of the exit date.

Students may select from a number of support courses, at least two of which must be accounting courses. A minimum of 15 students is required for a support course to be offered. A typing skill of 25 words per minute is required of students before they enroll in some second term courses. Typing courses are available in the Developmental Studies Department, Business Occupations Learning Centers and Continuing Education Division.

Many courses are offered by the Continuing Education Division in the evening. Courses with corresponding numbers are approved for substitution. Several courses in this program may be transferred to four-year institutions (see program advisor).

All occupational courses must be passed with a minimum grade of C to qualify for graduation.

A student may elect to accept full-time training-related employment during the last term of the program. This option is available after midterm only for occupational courses and if the student is in good academic standing. Students are responsible for completing course requirements and should see the program advisor for details.

Supply fees are charged for some courses (see page 16).

ACCOUNTING PROGRAM

			Hrs Wk	Cr Hrs
Term I				
ACCT	101L	Accounting Principles Lab I...	10	6
ACCT	111	Accounting Math/Calculators	5	3
BA	113	Introduction to Business (7½ weeks)	5	2
BA	121	Business Communications I ...	5	3
BA	131	Human Relations (7½ weeks) .	5	2
		*Communications Elective		3
Term II				
ACCT	102L	Accounting Principles Lab II ..	10	6
BA	122	Business Communications II...	5	3
BA	133	Principles of Management.....	5	3
BA	150	Introduction to Computer Processing	5	3
		*Social Science/Humanities Elective		3
Term III				
ACCT	201L	Intermediate Accounting Lab I.	5	3
ACCT	240	Tax Accounting I	5	3
ACCT	252	Computer Lab I	5	3
ACCT	260	Cost Accounting.....	5	3
*MATH	120	Intermediate Algebra.....		3
		'Support Course	5	3
Term IV				
ACCT	202L	Intermediate Accounting Lab II	5	3
ACCT	253	Computer Lab II.....	5	3
BA	211	Business Law	5	3
*ENG	101	Writing with Readings in Exposition (this course may be taken any term)		3
*MATH	145	Introduction to Probability and Statistics.....		3
		Two (2) Accounting Support Courses.....	10	6
		Totals	1500	73
Accounting Support Courses				
ACCT	241	Tax Accounting II	5	3
ACCT	270	Governmental Accounting	5	3
ACCT	271	Auditing	5	3
ACCT	272	Accounting Systems Design ...	5	3
ACCT	280	Managerial Accounting.....	5	3
Support Courses				
ACCT	298	Supervised Work Experience ..	10	6
BA	215	Money and Banking	5	3
BA	226	Principles of Finance.....	5	3
BA	240	Investments	5	3
*ECON	101	Principles of Economics.....	5	3

**Arts and Sciences courses (required for associate degree unless listed as a support course). Course descriptions on pages 23–29.*

'Required for certificate only.

COURSE DESCRIPTIONS

ACCT 101L—Accounting Principles Lab I (6 cr)
(*Prerequisite or corequisite: ACCT 111*) This is an introductory course in the theory and practice of accounting.

ACCT 102L—Accounting Principles Lab II (6 cr)
(*Prerequisites: ACCT 101L, ACCT 111*) Planning of and accounting for the partnership and corporate forms of business organization are covered. A brief introduction to cost accounting also is included. Upon successful completion of this course, the student should be a competent bookkeeper for most small business organizations.

ACCT 111—Accounting Math/Calculators (3 cr)
This course covers basic arithmetic operations, familiarizes the student with a wide range of accounting procedures for which mathematics is required, and develops touch method skills using electronic calculators.

ACCT 201L—Intermediate Accounting Lab I (3 cr)
(*Prerequisite: ACCT 102L*) This lab 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 202L—Intermediate Accounting Lab II (3 cr)
(*Prerequisite: ACCT 201L*) Accounting for current and long-term liabilities, capital stock transactions, dividends, retained earnings, income tax allocation, cash flow statements, and analysis and interpretation of financial statements are covered in this course.

ACCT 240—Tax Accounting I (3 cr)
(*Prerequisite: ACCT 101L*) This course primarily examines the fundamental characteristics of federal income taxes as applied to individuals.

ACCT 241—Tax Accounting II (3 cr)
(*Prerequisite: ACCT 240*) This course examines corporations, estate and gift taxes, fiduciaries, tax planning and tax shelters.

ACCT 252—Computer Lab I (3 cr)
(*Prerequisites: ACCT 102L, BA 150*) This IBM-compatible microcomputer lab uses LOTUS 1-2-3 for accounting and business applications.

ACCT 253—Computer Lab II (3 cr)
(*Prerequisites: ACCT 102L, BA 150*) This microcomputer lab includes payroll, inventory control, accounts payable, and general ledger. Students use prepared integrated business software on microcomputers.

ACCT 260—Cost Accounting (3 cr)
(*Prerequisite: ACCT 102L*) This course emphasizes job order and process costing for construction and manufacturing.

ACCT 270—Governmental Accounting (3 cr)
(*Prerequisite: ACCT 102L*) This course provides the student with training in accounting for governmental and other non-profit entities.

ACCT 271—Auditing (3 cr)
(*Prerequisite: ACCT 102L*) Auditing procedure, reports and working papers are studied and analyzed. Audit practices for verification of assets, liabilities, expense and revenue accounts are stressed. Internal control techniques are studied to develop the student's ability to conserve assets.

ACCT 272—Accounting Systems Design (3 cr)
(*Prerequisite: ACCT 102L*) Students study systems development through the design of a chart of accounts, an accounting manual, flow charts, control and support systems and reports to management.

ACCT 280—Managerial Accounting (3 cr)
(*Prerequisite: ACCT 102L*) Students learn how accounting data can be interpreted and used by management in planning and controlling business activities.

ACCT 298—Supervised Work Experience (6 cr)
(*Prerequisite: ACCT 102L*) Students work a minimum of 150 hours at accounting-related supervised work stations. The student trainee is paid by the cooperating firm and supervised jointly by T-VI and the employer.

BA 113—Introduction to Business (7½ weeks) (2 cr)
The structure of business, its activities and problems are surveyed in this course. An understanding of the nature of the business world also is provided.

BA 121—Business Communications I (3 cr)
The student learns to communicate effectively through the study of writing fundamentals. Students also have the opportunity to develop oral and listening skills.

BA 122—Business Communications II (3 cr)
(*Prerequisites: BA 121 and 25 words a minute typing skill*) The student learns to write effective business letters, reports and memoranda. Continued use of oral communication and listening skills is stressed.

BA 131—Human Relations (7½ weeks) (2 cr)
This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and the work ethic is stressed.

BA 133—Principles of Management (3 cr)
This introductory course helps the student understand basic management functions including planning, organizing, staffing, directing and controlling.

BA 150—Introduction to Computer Processing (3 cr)
(*Prerequisite: 25 words a minute typing skill*) This course introduces automated information systems, computer hardware, data entry, business software applications and BASIC programming language. Hands-on experience with microcomputers is provided.

BA 211—Business Law (3 cr)
This course provides a basic knowledge of law as it applies to all business dealings in our society. Particular emphasis is placed on the Uniform Commercial Code. Practical problems in law are considered.

BA 215—Money and Banking (3 cr)
(*Prerequisite: ACCT 102L*) This course covers the history, nature and function of money. Methods of institutional control and theories of monetary policy are included.

BA 226—Principles of Finance (3 cr)
(*Prerequisite: ACCT 102L*) Concepts and theories of finance are covered including the history of money, monetary systems and credit. Forms of business organizations, capital budgeting, source of funds, marketing securities, capital structure, foreign expansion and reorganization of a business firm are examined.

BA 240—Investments (3 cr)
(*Prerequisite: ACCT 102L*) Students study investment analysis, management, objectives, values and risks.

Business Administration

Associate Degree/Certificate Program
4 Terms, Main and Montoya 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.

Emphasis in the first three terms is on written and verbal communications, management and accounting principles. Students have an employable skill after completing all occupational courses listed under Terms I and II. A student leaving the program at this point will receive a bookkeeping certificate if the request is made within 12 months of the exit date. Those students completing all occupational courses in Terms I, II and III receive business administration certificates. Students receive a proficiency certificate for each course completed.

An Associate in Applied Science Degree in Business Administration is awarded to students who complete both the occupational and Arts and Sciences components in the four terms as listed below. Students concentrate in one of four areas—merchandising, small business management, real estate or general business.

A structured sequence for the real estate concentration is necessary early in the program. One or two real estate courses should be taken each term. These courses are offered in the evening through the Continuing Education Division.

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

Students may select from the list of support courses in their specialty to prepare for their employment goals. Not all support courses are offered each term, and a minimum of 15 students is required for a support course to be offered.

Many courses are offered by the Continuing Education Division in the evening. Courses with corresponding numbers are approved for substitution.

Several courses in the program may be transferred to four-year institutions. (See program advisor for details.)

All occupational courses must be passed with a minimum grade of C to qualify for graduation.

A student may elect to accept full-time training-related employment during the last term of the program. This option is available after midterm only for occupational courses and if the student is in good academic standing. Students are responsible for completing course requirements and should see the program advisor for details.

Supply fees are charged for some courses (see page 16).

BUSINESS ADMINISTRATION PROGRAM

			Hrs Wk	Cr Hrs
Term I				
ACCT	101L	Accounting Principles Lab I ...	10	6
ACCT	111	Accounting Math/Calculators ..	5	3
BA	113	Introduction to Business (7½ weeks)	5	2
BA	121	Business Communications I ...	5	3
BA	131	Human Relations (7½ weeks) .	5	2
		*Communications Elective	3	3
Term II				
ACCT	102L	Accounting Principles Lab II ..	10	6
BA	122	Business Communications II...	5	3
BA	133	Principles of Management.....	5	3
BA	150	Introduction to Computer Processing	5	3
		*Humanities/Social Science Elective	3	3
Term III				
ACCT	252	Computer Lab I	5	3
or				
ACCT	260	Cost Accounting.....	5	3
BA	211	Business Law	5	3
BA	222L	Principles of Marketing Lab ...	5	3
BA	284L	Salesmanship.....	5	3
*ENG	101	Writing with Readings in Exposition	3	3
*MATH	120	Intermediate Algebra.....	3	3
		[2]Support Courses	5–10	3–6
		Business Administration Certificate		
Term IV				
		SPECIAL CONCENTRATION OPTIONS		
MERCHANDISING				
BA	251	Retail Merchandising Management	5	3
BA	284L	Salesmanship.....	5	3
*ECON	101	Introduction to Economics.....	3	3
*PHIL	245B	Business Ethics.....	3	3
		Approved Support Courses	5–10	3–6
SMALL BUSINESS MANAGEMENT				
BA	284L	Salesmanship.....	5	3
*ECON	101	Introduction to Economics.....	3	3
ENTR	101L	Entrepreneurship.....	10	6
*PHIL	245B	Business Ethics.....	3	3
		Approved Support Course	3–5	3

REAL ESTATE

All real estate courses are offered evenings through the Continuing Education Division and should be interspersed throughout the entire program.

BA	270	Real Estate Law	4	3
BA	271	Real Estate Practice	4	3
		Approved Support Course (1)	4	3
BA	272	Real Estate Appraisal	4	3
or				
BA	273	Real Estate Finance	4	3
or				
BA	274	Real Estate Investment	4	3
or				
BA	275	Property Management	4	3
or				
BA	276	Land Use Planning	4	3
or				
BA	277	Real Estate Comprehensive Contracts	4	3
or				
BA	278	Real Estate and Taxes	4	3
BA	284L	Salesmanship	5	3
*ECON	101	Introduction to Economics	5	3
*PHIL	245B	Business Ethics	3	3

GENERAL BUSINESS

BA	284L	Salesmanship	5	3
BA	298	Supervised Work Experience	10	6
*ECON	101	Introduction to Economics	3	3
*PHIL	245B	Business Ethics	3	3
		Approved Support Courses	5–10	3–6
		Totals	1545–1695	70–76

Support Courses

ACCT	240	Tax Accounting I	5	3
ACCT	252	Computer Lab I	5	3
ACCT	253	Computer Lab II	5	3
ACCT	260	Cost Accounting	5	3
ACCT	272	Accounting Systems Design	5	3
ACCT	280	Managerial Accounting	5	3
BA	111	Communications (7½ weeks)	5	2
BA	215	Money and Banking	5	3
BA	226	Principles of Finance	5	3
BA	240	Investments	5	3
BA	251	Retail Merchandising Management	5	3
BA	260	Purchasing	5	3
BA	285	Fashion Concepts and Merchandising (Continuing Education)	5	3
BA	286	Advertising (Continuing Education)	5	3
BA	287	Delta Epsilon Chi Competition	2	1
BA	298	Supervised Work Experience	10	6
ENTR	101L	Entrepreneurship Lab	10	6
ENTR	102	Small Business Start-up	3	3

**Arts and Sciences courses. Course descriptions on pages 23–29.*

[1]For certificate students only. Degree students take BA 284L during Term IV.

[2]Certificate students may take 3–6 credit hours in support courses. Degree students take 3 credit hours in support courses.

COURSE DESCRIPTIONS

ACCT 101L—Accounting Principles Lab I (6 cr)
(*Prerequisite or corequisite: ACCT 111*) This is an introductory course in the theory and practice of accounting.

ACCT 102L—Accounting Principles Lab II (6 cr)
(*Prerequisites: ACCT 101L, ACCT 111*) This is a continuation of ACCT 101L. Planning and accounting for the partnership and corporate forms of business organization are covered. A brief introduction to cost accounting also is included. Upon successful completion of this course, the student—with minimal supervision—should be a competent bookkeeper for most small business organizations.

ACCT 111—Accounting Math/Calculators (3 cr)
This course covers basic arithmetic operations, familiarizes the student with a wide range of business applications for which math is required, and develops touch method skills using electronic calculators.

ACCT 240—Tax Accounting I (3 cr)
(*Prerequisites: ACCT 101L*) This course primarily examines the fundamental characteristics of federal income taxes as applied to individuals.

ACCT 252—Computer Lab I (3 cr)
(*Prerequisites: ACCT 102L, BA 150*) This IBM-compatible microcomputer lab uses LOTUS 1-2-3 for accounting and business applications.

ACCT 253—Computer Lab II (3 cr)
(*Prerequisites: ACCT 102L, BA 150*) This microcomputer lab includes payroll, inventory control, accounts payable and general ledger. Students use prepared integrated business software on microcomputers.

ACCT 260—Cost Accounting (3 cr)
(*Prerequisite: ACCT 102L*) This course emphasizes construction and manufacturing as compared to merchandising or service businesses. The student performs the accounting operations for estimating and bidding. Labor and overhead factors of production are studied, and reports are prepared.

ACCT 272—Accounting Systems Design (3 cr)
(*Prerequisite: ACCT 102L*) Students study systems development through the design of a chart of accounts, an accounting manual, flow charts, control and support systems and reports to management.

ACCT 280—Managerial Accounting (3 cr)
(*Prerequisites: ACCT 102L*) Students learn how accounting data can be interpreted and used by management in planning and controlling business activities.

BA 111—Communications (7½ weeks) (2 cr)
(*Offered for Trades and Technologies students only*) The primary focus of this course is to develop effective communications skills. Course content includes fundamentals of grammar, punctuation and word usage. Effective expression in basic technical writing is stressed.

BA 113—Introduction to Business (7½ weeks) (2 cr)
The structure of business, its activities and problems are surveyed in this course. An understanding of the nature of the business world and its career opportunities also is provided.

BA 121—Business Communications I (3 cr)
The student learns to communicate effectively through the study of writing fundamentals. Students also have the opportunity to develop oral and listening skills.

BA 122—Business Communications II (3 cr)
(*Prerequisites: BA 121 and 25 words a minute typing skill*) The student learns to write effective business letters, reports and memoranda. Continued use of oral communication and listening skills is stressed.

BA 131—Human Relations (7½ weeks) (2 cr)
(*Available also for Trades and Technologies students*) This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and work ethics is stressed.

BA 133—Principles of Management (3 cr)
This introductory course helps the student understand basic management functions including planning, organizing, staffing, directing and controlling.

BA 150—Introduction to Computer Processing (3 cr)
(*Prerequisite: 25 words a minute typing skill*) This course covers automated information systems, computer hardware, data entry, business software applications and BASIC programming language. Hands-on experience with microcomputers is provided.

BA 211—Business Law (3 cr)
This course provides a basic knowledge of law as it applies to all business dealings in our society. Particular emphasis is on the Uniform Commercial Code. Practical problems in law are considered.

BA 215—Money and Banking (3 cr)
(*Prerequisite: ACCT 102L*) This course covers the history, nature and function of money. Methods of institutional control and theories of monetary policy are included.

BA 222L—Principles of Marketing Lab (3 cr)
(*Prerequisite: BA 133*) This course is designed to study total marketing concepts—from the production of goods to delivery to the potential customer—from a management point of view. A computer simulation project is included.

BA 226—Principles of Finance (3 cr)
(*Prerequisite: ACCT 102L*) Concepts and theories of finance are covered including the history of money, monetary systems and credit. Forms of business organizations, capital budgeting, source of funds, marketing securities, capital structure, foreign expansion and reorganization of a business firm are examined.

BA 240—Investments (3 cr)
(*Prerequisite: ACCT 102L*) Students study investment analysis, management, objectives, values and risks.

BA 251—Retail Merchandising Management (3 cr)
Students study methods and practice of retail merchandising including target market decisions, buying, pricing, store locations and strategic planning. Computer lab assignments are included.

BA 260—Purchasing (3 cr)
This course covers problems involved in public and private sector purchasing. Topics include value analysis, solicitation process and negotiation techniques, vendor selection, purchasing law, transportation considerations and inventory control practices.

BA 284L—Salesmanship (3 cr)
Personal selling skills are accented along with how to promote oneself, goods and services.

BA 285—Fashion Concepts and Merchandising (3 cr)
This introductory class covers fashion terminology, elements of design, apparel sizing and styling, basic construction and current trends in the fashion industry.

BA 286—Advertising (3 cr)
This class gives the student a basic understanding of the many elements of advertising. The advertising plan, media selection and schedule, budget, design and production, and advertising effectiveness are included.

BA 287—Delta Epsilon Chi Competition (1 cr)
This course prepares students to compete at state and national career development conferences. Students use sample written tests, role-playing case problems and classroom assignments that involve salesmanship, marketing, problem solving and human relations.

BA 298—Supervised Work Experience (6 cr)
(*Prerequisite: ACCT 102L*) Students work a minimum of 150 hours at business/training-related supervised work stations. The student trainee is paid by the cooperating firm and supervised jointly by T-VI and the employer.

ENTR 101L—Entrepreneurship Lab (6 cr)
During the first few days of the term, the instructor meets with each student to determine specific goals, problems or needs. Programs are then tailored to the individual. Daily tasks/activities are accomplished through lecture, group activities and independent work. Special workshop or seminar-type activities are scheduled throughout the term to deal with common areas of concern.

ENTR 102—Small Business Start-Up (3 cr)
This is an open entry, individualized course for students in the process of starting their own businesses. Students work in their enterprises while under the supervision of the instructor.

Cashier-Sales

Certificate Program
1 Term, Main Campus

Persons who want to learn a skill quickly and find a job as soon as possible should consider this cashier-sales program.

It is a course for those preparing for entry-level jobs in retail and service occupations. It also will benefit students who want to explore sales as a possible career.

The cashier-sales laboratory teaches the skills of salesmanship, the cash register touch system and human relations. Students work with various makes and models of electromechanical and electronic cash registers and a computerized cash register/scanner.

The 15-week program provides up to 225 hours of classroom instruction and a minimum of 150 hours of paid supervised work experience with an approved cooperating employer. Students who complete the course receive certificates.

This program does not qualify students for Veterans Administration training benefits or other student financial aid.

There is a $15 supply fee for CASH 101L.

CASHIER-SALES PROGRAM

Course Requirements			*Hrs Wk*	*Cr Hrs*
CASH	101L	Cashier-Sales Lab	15	9
CASH	198	Supervised Work Experience	10	6
		Totals	375	15

COURSE DESCRIPTIONS

CASH 101L—Cashier-Sales Lab (9 cr)
Fundamentals of cashiering, merchandising math and retail salesmanship are taught in this course. Human and customer relations are covered extensively.

CASH 198—Supervised Work Experience (6 cr)
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.

Entrepreneurship
(Small Business Start-Up and Operation)

Main Campus

The Entrepreneurship program is for persons who plan to open a small business and those who own or manage a business and want further training in principles, operations and/or expansion.

Students entering the program may enroll in ENTR 101L and/or ENTR 102. ENTR 103 is for those who have been in business at least one year, and requires permission of the instructor.

A $15 supply fee is charged for ENTR 101L.

COURSE DESCRIPTIONS

ENTR 101L—Entrepreneurship Lab (6 cr)
During the first few days of the term, the instructor meets with each student to determine specific goals, problems or needs. Programs are then tailored to the individual. Daily tasks/activities are accomplished through lecture, group activities and independent work. Special workshop or seminar-type activities are scheduled throughout the term to deal with common areas of concern.

ENTR 102—Small Business Start-Up (3 cr)
(*Admission by permission of instructor*) This is an open-entry, individualized course for students in the process of starting their own businesses. Students work in their enterprises while under the guidance of the instructor.

ENTR 103—Small Business Problems (1–3 cr)
(*Admission by permission of instructor*) This open-entry course is limited to owners or managers who have been in business for at least one year and have a specific problem area which needs attention. The focus is on solving the immediate problem and setting up problem management techniques for the future.

Legal Assistant Studies

Associate Degree
4 Terms, Montoya Campus

The purpose of the Associate in Applied Science Degree in Legal Assistant Studies is to train qualified men and women for entry into the legal profession.

Legal assistants are skilled professionals who perform tasks and services under the direct supervision of a licensed attorney. Responsibilities include statistical and record research, data analysis, drafting legal documents, and interviewing and assisting clients and witnesses. Employment opportunities include placement in legal firms, corporate legal departments, insurance companies, real estate and title insurance firms, and banks. Public sector opportunities with community legal service programs and federal, state and local government agencies are expected to increase over the next few years.

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

Applicants must have an ACT score of at least 14 in social sciences and meet the other requirements listed on page 13.

To earn an associate degree, a student must successfully complete 63 credit hours of laboratory work, related legal theory and Arts and Sciences courses. Proficiency certificates are given to students for each course completed. All occupational courses must be passed with a minimum grade of C to qualify for graduation.

Supply fees are charged for some courses (see page 16).

LEGAL ASSISTANT STUDIES PROGRAM

			Cr Hrs
Term I			
*CSCI	101	Computer Literacy	3
*ENG	101	Writing with Readings in Exposition	3
LAS	101	Introduction to Legal Assistant Studies	3
LAS	123	Torts	3
*PSY		General Psychology Elective	3
Term II			
*COMM	221	Interpersonal Communication	3
*ENG	119	Technical Communications	3
LAS	102	Business Organizations	3
LAS	111	American Law and Ethics	3
LAS	124	Legal Research and Writing I	3

Note: All first- and second-term core courses are prerequisites for third- and fourth-term core courses.

Term III			
LAS	201	Contract Law	3
LAS	203	Civil Litigation, Investigation and Discovery	3
LAS	204	Legal Research and Writing II	3
*MATH	120	Intermediate Algebra	3
*PSCI	200	U.S. Politics	3
Term IV			
LAS	220	Criminal Procedure/Domestic Relations	3
LAS	221	Wills, Probate and Estate Planning	3
LAS	298	Supervised Work Experience	6
*PHIL	156	Logic and Critical Thinking	3
		Support Course	3
		Total	63

Support Courses			
ACCT	101L	Accounting Principles Lab I	3
LAS	211	Real Estate Law	3
LAS	230	Advanced Civil Litigation	3
LAS	232	Personal Injury: Legal and Medical Aspects	3
LAS	234	Administrative Law	3
LAS	236	Discrimination/Labor/Employer-Employee Relations	3
LAS	238	Law Office Management and Human Relations	3

**Arts and Sciences courses. Course descriptions on pages 23–29.*

COURSE DESCRIPTIONS

ACCT 101L—Accounting Principles Lab I (6 cr)
(*Prerequisite or corequisite: ACCT 111*) This is an introductory course in the theory and practice of accounting.

LAS 101—Introduction to Legal Assistant Studies (3 cr)
This course covers the definition and role of the legal assistant, human relations, law office management techniques, legal terminology, interviewing techniques and methods of discovery.

LAS 102—Business Organizations (3 cr)
(*Prerequisites: LAS 101, LAS 123*) Various types of business entities including corporations, partnerships, joint ventures and sole proprietorships are examined in this course.

LAS 111—American Law and Ethics (3 cr)
(Prerequisites: LAS 101, LAS 123) The American judicial system is studied with focus on New Mexico's state judicial system. Covered are a study of the nature, meaning and sources of law, history of Anglo-American law, organization of modern legal systems, trends in the legal profession, and an overview of different legal areas including family law, corporations, estates, wills, real estate, criminal law, torts and contracts. An explanation of social and ethical problems associated with the legal profession is included.

LAS 123—Torts (3 cr)
This is a course in substantive tort law, concentrating on negligence, products liability, nonphysical injuries and their remedies and defenses. Students are given an overview of the trial process and draft pleadings and other legal documents.

LAS 124—Legal Research and Writing I (3 cr)
(Prerequisites: CSCI 101, ENG 101, LAS 101, LAS 123) The student is introduced to the principles and skills of writing case briefs and legal memoranda, as well as basic legal research including Westlaw training. Significant time is spent at the law library.

LAS 201—Contract Law (3 cr)
(Prerequisites: All core courses in first two terms) This course is an introduction to the law of contracts, rights and responsibilities, consideration, types of contracts, remedies and assignments.

LAS 203—Civil Litigation, Investigation and Discovery (3 cr)
(Prerequisites: All core courses in first two terms) Jurisdiction, commencement of actions, service of process, pleadings and discovery are discussed in this course. Rules of civil procedure for the various courts, as well as the rules of evidence and appellate procedure are reviewed.

LAS 204—Legal Research and Writing II (3 cr)
(Prerequisites: All core courses in first two terms) As a continuation of Legal Research and Writing I, this course is designed to provide training in more advanced legal research problems. It requires the preparation of sophisticated legal memoranda and appellate briefs.

LAS 211—Real Estate Law (3 cr)
(Prerequisites: All core courses in first two terms) This course is designed to provide knowledge of the fundamental rights of ownership, obligations of the real estate agent regarding contractual encumbrances, transfers, fiduciary rights and obligations owed to the parties represented, and basic contract law.

LAS 220—Criminal Procedure/Domestic Relations (3 cr)
The first half of this course focuses on criminal procedure including search and seizure law and preparation of cases from both the prosecution and defense perspectives. The second half focuses on local domestic relations court practices.

LAS 221—Wills, Probate and Estate Planning (3 cr)
(Prerequisites: All core courses in first two terms) This course covers drafting of wills and trusts, administration of estates, formal and informal probate proceedings and estate tax returns.

LAS 230—Advanced Civil Litigation (3 cr)
(Prerequisite: LAS 203) Students become involved in the litigation process by participating in a hypothetical case, completing tasks from client interviewing to preparation for appeal.

LAS 232—Personal Injury: Legal and Medical Aspects (3 cr)
(Prerequisite: LAS 123) This course deals with personal injuries and litigation in the areas of tort, workers' compensation and social security.

LAS 234—Administrative Law (3 cr)
Studies pertaining to policies, practices and procedures of governmental agencies, and state and local administrations are included in this course.

LAS 236—Discrimination/Labor/Employer-Employee Relations (3 cr)
This course includes an overview of hiring and firing, wages, grievance investigations, union and nonunion operations, efficient resolution of problems and controversies, employer preventive programs, discipline, wrongful discharge, employment records maintenance, safety and health, and liability.

LAS 238—Law Office Management and Human Relations (3 cr)
(Prerequisite: CSCI 101) This two-part course covers the administrative and human dynamics of working in a legal environment.

LAS 298—Supervised Work Experience (6 cr)
(Prerequisites: All core courses in first three terms) Students work a minimum of 150 hours at legal-assistant-related work stations. The student may be paid by the cooperating firm, and is jointly supervised by T-VI and the employer.

Secretarial Studies

Associate Degree/Certificate Program
4 Terms, Main and Montoya 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. The secretarial graduate has a choice of seeking employment in many fields: legal, medical, governmental, technical, service and educational.

The Secretarial Studies student has four options for successful completion of training goals:

Certificate Programs

First two terms	Receptionist Certificate
Three terms	Clerical Certificate
Three terms plus shorthand	Secretarial Certificate

Degree Program

Four terms	Associate Degree

Students acquire an employable skill upon successful completion of the second term. If a student leaves the program at this point, a receptionist certificate is awarded if requested within 12 months of the exit date.

Students choose one of four specialties: Electronic Office, Information Processing, Medical Records/Receptionist or Legal. All options are not offered every term nor are they all offered at each campus. Students earn a certificate indicating the specialty area.

Students who also demonstrate a shorthand proficiency receive a secretarial certificate. Proficiency certificates are given to students for each course completed.

An associate in applied science degree may be earned by completing four terms of occupational courses, including shorthand, and 15 credit hours of Arts and Sciences courses. All occupational courses must be passed with a minimum grade of C to qualify for a certificate or degree.

A student may elect to accept full-time training-related employment during the last term of the program. This option is available after midterm only for occupational courses and if the student is in good academic standing. Students are responsible for completing course requirements and should see the program advisor for details.

An entering student with a strong background in clerical or secretarial skills may challenge any course by examination and substitute a more advanced course or add a support course.

Secretarial Studies associate degree candidates may want to take the Certified Professional Secretary (CPS) review courses as support courses. CPS is the nationally recognized rating for secretarial proficiency. (See page 114 of the catalog for course descriptions.)

Individuals who have already attained a CPS rating may receive a possible 34 credit hours toward the Secretarial Studies associate degree. Contact the program advisor at either campus for more information about advanced placement.

Upon completion of this program, courses may be transferred to the University of New Mexico for credit toward a Bachelor's Degree in Business Education (see Secretarial Studies program advisor). Some Secretarial Studies courses may be taken in the evening through the Continuing Education Division. Courses with corresponding numbers are approved for substitution.

Supply fees are charged for some courses (see page 16).

SECRETARIAL STUDIES CERTIFICATE (RECEPTIONIST/CLERICAL/ SECRETARIAL)

			Hrs Wk	Cr Hrs
Term I				
BA	131	Human Relations (7½ weeks)	5	2
SS	101L	Typing Lab I	10	6
SS	111	Business Math/Calculators	5	3
SS	121	Office Communications I	5	3
SS	132	Information Processing Concepts (7½ weeks)	5	2
SS	134	Shorthand I Gregg (optional)	5	3
or				
SS	135	Shorthand I Alphabetic (optional)	5	3
Term II				
SS	102L	Typing Lab II	10	6
SS	112	Secretarial Accounting	5	3
SS	122	Office Communications II	5	3
SS	133	Word Processing	5	3
SS	136	Shorthand II (optional)	5	3
Term III				
SS	201L	Information Processing Lab	10	6
or				
SS	202L	Medical Records/Receptionist Lab	10	6
or				
SS	203L	Electronic Office Lab	10	6
or				
SS	298L	Supervised Work Experience	10	6
SS	230	Office Communications III	5	3
SS	234	Shorthand III (optional)	5	3
SS	250	Machine Transcription (skill building)	5	3
SS	260	Business Procedures	5	3
		Totals	1350	55

Note: A shorthand proficiency of 80 wpm is required for a secretarial certificate.

SECRETARIAL STUDIES ASSOCIATE DEGREE (SECRETARIAL)

The following additional courses are required to earn the Secretarial Studies associate degree:

			Hrs Wk	Cr Hrs
[1]BA	113	Introduction to Business (7½ weeks)	5	2
*COMM	221	Interpersonal Communication		3
*ENG	101	Writing with Readings in Exposition		3
*MATH	120	Intermediate Algebra		3
SS	134	Shorthand I (Gregg)	5	3
or				
SS	135	Shorthand I (Alphabetic)	5	3
SS	136	Shorthand II	5	3
SS	234	Shorthand III	5	3
		*Arts and Sciences Elective		3
		*Social Science/Humanities Elective		3
		Totals	1575	70

SECRETARIAL STUDIES CERTIFICATE (LEGAL)

			Hrs Wk	Cr Hrs
Term I				
[2]BA	131	Human Relations (7½ weeks)	5	2
SS	101L	Typing Lab I	10	6
SS	111	Business Math/Calculators	5	3
SS	121	Office Communications I	5	3
SS	132	Information Processing Concepts (7½ weeks)	5	2
Term II				
SS	102L	Typing Lab II	10	6
SS	112	Secretarial Accounting	5	3
SS	122	Office Communications II	5	3
SS	133	Word Processing	5	3
SS	134	Shorthand I (Gregg)	5	3
or				
SS	135	Shorthand I (Alphabetic)	5	3
Term III				
BA	211	Business Law	5	3
SS	136	Shorthand II	5	3
SS	201L	Information Processing Lab	10	6
or				
SS	203L	Electronic Office Lab	10	6
or				
SS	298L	Supervised Work Experience	10	6
SS	204	Legal Typing I	5	3
SS	240	Legal Terminology/Procedures	5	3
		Totals	1275	52

SECRETARIAL STUDIES ASSOCIATE DEGREE (LEGAL)

			Hrs Wk	Cr Hrs
Term III				
BA	211	Business Law	5	3
SS	136	Shorthand II	5	3
SS	201L	Information Processing Lab	10	6
or				
SS	203L	Electronic Office Lab	10	6
or				
SS	298L	Supervised Work Experience	10	6
SS	204L	Legal Typing I	5	3
Term IV				
SS	205	Legal Typing II	5	3
SS	230	Office Communications III	5	3
SS	240	Legal Terminology/Procedures	5	3

Associate degree students should take the following Arts and Sciences courses throughout their program:

*COMM	221	Interpersonal Communications		3
*ENG	101	Writing with Readings in Exposition		3
*ENG	102	Analytic Writing		3
*MATH	120	Intermediate Algebra		3
		*Social Science/Elective		3
		Totals	1650	73

Support Courses

[1]ACCT	101L	Accounting Principles Lab I	10	6
[1]BA	113	Introduction to Business (7½ weeks)	5	2
[1]BA	133	Principles of Management	5	3
[1]BA	150	Introduction to Computer Processing	5	3
BA	211	Business Law	5	3
[1]BA	222	Principles of Marketing	5	3
[1]COMM	130	Public Speaking	3	3
[1]COMM	240	Organizational Communications	3	3
[1]LAS	123	Torts	3	3
[1]PHIL	156	Logic and Critical Thinking	3	3
[1]PHIL	245B	Business Ethics	3	3
[1]PSCI	220	Comparative Government and Politics	3	3
[1]SOC	111	Criminal Justice System	3	3
[1]SOC	212	Juvenile Delinquency	3	3
[1]SOC	213	Criminology	3	3
[1]SS	113	Cashiering	5	3
SS	134	Shorthand I (Gregg)	5	3
SS	135	Shorthand I (Alphabetic)	5	3
SS	136	Shorthand II	5	3
SS	204	Legal Typing I	5	3
[1]SS	234	Shorthand III	5	3
SS	240	Legal Terminology and Procedures	5	3
SS	270	CPS Review, Part I		3
SS	271	CPS Review, Part II		3

[1]*Arts and Sciences courses. Course descriptions on pages 23–29.*
[2]*To be taken in place of BA 131.*
[3]*Degree students take BA 113 in place of BA 131.*
[4]*Certificate and degree programs with legal specialty will accept only these support courses.*

COURSE DESCRIPTIONS

ACCT 101L—Accounting Principles Lab I (6 cr)
(*Prerequisite or corequisite: ACCT 111*) This is an introductory course in the theory and practice of accounting.

BA 113—Introduction to Business (7½ weeks) (2 cr)
The structure of business, its activities and problems are surveyed in this course. An understanding of the nature of the business world also is provided.

BA 131—Human Relations (7½ weeks) (2 cr)
This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and the work ethic is stressed.

BA 133—Principles of Management (3 cr)
In this introductory course, students develop an understanding of the basic management functions including planning, organizing, staffing, directing and controlling.

BA 150—Introduction to Computer Processing (3 cr)
(*Prerequisite: 25 words a minute typing skill*) This course introduces automated information systems, computer hardware, data entry, business software applications and BASIC programming language. Hands-on experience with microcomputers is provided.

BA 211—Business Law (3 cr)
This course provides a basic knowledge of law as it applies to all business dealings in our society. Particular emphasis is on the Uniform Commercial Code. Practical problems in law are considered.

BA 222—Principles of Marketing (3 cr)
This course is designed to study total marketing concepts from the production of goods to delivery to the potential customer—from a management point of view.

SS 101L—Typing Lab I (6 cr)
This course builds the student's skills to a typing proficiency of at least 40 words per minute. The student practices typing of business letters, memos, business forms and manuscripts.

SS 102L—Typing Lab II (6 cr)
(*Prerequisite: SS 101L*) Typing competence of at least 50 words per minute is the goal. Students produce mailable business letters, manuscripts, tables, business forms and other correspondence.

SS 111—Business Mathematics/Calculators (3 cr)
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.

SS 112—Secretarial Accounting (3 cr)
(*Prerequisite: SS 111, SS 132*) 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. Payroll accounting also is covered. Students complete a computerized payroll package.

SS 113—Cashiering (3 cr)
Use of various cash registers, including the ability to solve procedural problems that occur at a register and checkout station, is developed in this course. Instruction also focuses on bank teller applications.

SS 121—Office Communications I (3 cr)
This course is an introduction to oral and written communications with emphasis on vocabulary building, spelling, grammar, punctuation, oral expression and listening skills.

SS 122—Office Communications II (3 cr)
(*Prerequisites: SS 101L, SS 121*) This course is a continuation of SS 121 with greater emphasis on punctuation, and sentence and paragraph construction. Students receive an introduction to telephone techniques.

SS 132—Information Processing Concepts (7½ weeks) (2 cr)
This course provides the student with an understanding of the computer and the word processor—how they work, how they process data to produce useful information, and how they can be integrated as a tool in the work environment.

SS 133—Word Processing (3 cr)
(*Prerequisites: SS 101L, SS 132*) Students receive instruction in the use of text editing word processors and word processing software on the microcomputer. Emphasis is on practical office applications.

SS 134—Shorthand I (Gregg) (3 cr)
This introductory course covers the theory and writing of Gregg shorthand. A writing speed of 50 words per minute should be reached upon completion.

SS 135—Shorthand I (Alphabetic) (3 cr)
Reading and writing of ABC Stenoscript shorthand is learned. A writing speed of 50 words per minute should be reached upon completion.

SS 136—Shorthand II (3 cr)
(*Prerequisite: SS 134 or SS 135*) The ability to write shorthand at a rate of 70 words per minute is sought with emphasis on speed, accuracy, grammar, punctuation and transcription speed.

SS 201L—Information Processing Lab (6 cr)
(*Prerequisites: SS 102L, SS 132, SS 133*) Advanced instruction is provided in the use of microcomputer/word processing equipment. Applications include advanced word processing, electronic spreadsheets, list processing and database management.

SS 202L—Medical Records/Receptionist Lab (6 cr)
(*Prerequisites: SS 102L, SS 111, SS 122, SS 133*) Course content includes basic anatomy, medical terminology, transcription, word processing, record keeping, insurance form completion, appointment handling, telephone techniques and medical ethics.

SS 203L—Electronic Office Lab (6 cr)
(*Prerequisites: SS 102L, SS 133; prerequisite or corequisite: SS 112*) This lab offers the culmination of clerical applications in a realistic office environment using microcomputers, electronic typewriters, transcribers, calculators and telephones. Students apply advanced word processing and spreadsheet or database management to a variety of activities including office documents, payroll and related accounting procedures, mailing lists and inventory. Time management, decision making and priority setting are emphasized.

SS 204—Legal Typing I (3 cr)
(*Prerequisite: SS 102L*) Instruction is in the preparation of mailable legal correspondence and forms from different types of input including machine transcription, copy type and preprinted forms.

SS 205—Legal Typing II
(*Prerequisite: SS 204*) Typing competence of at least 60 words per minute is the goal of this course. Students produce mailable documents covering four major fields of law—real estate and property transfer, litigation, wills and probate, and corporate. Machine transcription activities involve language usage and a variety of formats and documents.

SS 230—Office Communications III (3 cr)
(*Prerequisites: SS 101L, SS 122*) Principles of writing and composing business correspondence are covered. Continued emphasis is on grammar, punctuation, spelling, oral communication and listening skills.

SS 234—Shorthand III (3 cr)
(*Prerequisite: SS 136*) The goal for this course is a minimum dictation speed of 80 words per minute on new materials and transcription at a minimum rate of 20 words per minute.

SS 240—Legal Terminology/Procedures (3 cr)
(*Prerequisite: SS 102L*) Meaning and spelling of legal terminology, familiarization with legal procedures, and client relationships are included in this course.

SS 250—Machine Transcription (3 cr)
(*Prerequisites: SS 102L, SS 122*) This course builds speed and accuracy in the transcription of mailable copy.

SS 260—Business Procedures (3 cr)
(*Prerequisites: SS 102L, SS 122*) Office procedures, records management, human relations and job portfolio preparation are included in this course.

SS 270—CPS Review, Part I (3 cr)
This course prepares individuals for the Certified Professional Secretary examination. Topics covered are behavioral science in business, business law, and economics and management.

SS 271—CPS Review, Part II (3 cr)
This course prepares individuals for the Certified Professional Secretary examination. Topics covered are accounting, office administration and communications, and office technology.

SS 298L—Supervised Work Experience (6 cr)
(*Prerequisites: SS 101L, 55 words per minute typing speed*) 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.

HEALTH OCCUPATIONS DEPARTMENT

T-VI's Health Occupations Department includes the following nursing programs: Associate Degree in Nursing, Nursing Assistant, Practical Nurse, Perioperative Registered Nurse Specialist, Licensed Practical Nurse Refresher and Registered Nurse Refresher. Other Health Occupations majors are: Health Unit Clerk, Medical Laboratory Technician, Phlebotomist and Respiratory Therapy Technician. The Practical Nurse and Associate Degree in Nursing programs are cosponsored by T-VI and Presbyterian Hospital Center.

Special topics courses, identified with a 296, are offered on demand and when a sufficient number of people apply. Courses are based on an approved curriculum and follow the same standards as any courses offered in the department. Certificates are awarded upon completion of course requirements.

Classes for most programs are held in the C Building at Main Campus. The Helene Fuld Library and audiovisual collection, 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.

ADMISSION: Applicants for all Health Occupations programs except Nursing Assistant must have a high school or General Educational Development (GED) diploma because of licensing or health care employer requirements. There is also a math skill requirement met by making a satisfactory score on a math examination.

Health Unit Clerk is offered fall and winter terms only. Phlebotomist, Licensed Practical Nurse Refresher, Registered Nurse Refresher and special topics courses are offered on demand. Contact the Health Occupations Department for information on starting dates and application procedures.

The Practical Nurse and Respiratory Therapy Technician programs have beginning groups in the fall term only. The Medical Laboratory Technician program has a beginning group in the winter term only.

Health Unit Clerk

Certificate Program
1 Term, Main Campus

The Health Unit Clerk program trains persons to work in hospitals, elder care centers, outpatient clinics and physicians' offices. Transcribing doctors' written and verbal orders, typing, ordering supplies, answering the telephone, working with computers, and giving information to patients, visitors and staff are typical activities.

To be admitted, applicants must have a high school diploma or GED, read at the seventh grade level, pass the admissions math test and type 25 words per minute. Applicants also must be able to write clearly and accurately and have the ability to speak distinctly to others.

There is a $30 personal equipment fee which covers the required uniform top, parking fees and health tests. Neutral-colored slacks 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 hospitals and hospital outpatient clinics. A grade of C or better is required for all coursework. A certificate is awarded upon completion.

Health Unit Clerk is offered in the fall and winter terms only.

HEALTH UNIT CLERK PROGRAM

Course Requirements			*Contact Hrs*	*Cr Hrs*
HUC	101L	Health Unit Clerk Theory and Lab	225	8
HUC	121C	Health Unit Clerk Clinical Practice	150	7
		Totals	375	15

COURSE DESCRIPTIONS

HUC 101L—Health Unit Clerk Theory and Lab (8 cr)
This course combines a number of topics including orientation to the hospital, patient and role of the health unit clerk. Presentations and practice of medical terms, anatomy, abbreviations, communications, pharmacological terms, computerized patient information systems, forms and order transcriptions are included.

HUC 121C—Health Unit Clerk Clinical Practice (7 cr)
Supervised clinical experience takes place in local hospitals and hospital out-patient clinics during the last six weeks of the program.

Medical Laboratory Technician

Associate Degree
5 Terms, Main Campus

The five-term 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 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 under the supervision of a pathologist and medical technologist.

To be admitted, students must meet the degree program admission requirements listed on page 13. In addition to satisfactory ACT scores in math and English, applicants must score at least 18 in natural sciences. Applicants must also meet the following general requirements for admission:

- Submit transcripts of previous education including high school, vocational school or college. College transcripts must be official.
- Score at least 85% on the health occupations basic math entrance test. Applicants may retest once. Applicants with two unsuccessful attempts on the test must successfully complete health math in the Developmental Studies Department before they can be accepted into the program.
- Have a personal interview with a program representative. Interviews are scheduled after applicants complete preadmission requirements.
- If selected for the program, submit completed health forms with evidence of current immunizations and a physical examination before beginning the practicum portion.

Applicants will be admitted to the program on a space available basis once all admission requirements are met. The program begins in the winter term of each year and has a capacity of 20 students.

Medical Laboratory Technician students will obtain both academic instruction and practical experience. A grade of C or better must be earned in all courses to progress through the program and graduate with an associate in science degree. The clinical practicum experience at affiliated hospitals and laboratories is designed to provide actual experience in performing laboratory tests under the direction of a supervisor. Students must arrange for their own transportation to the hospitals or labs.

There is an equipment charge of $40 for two lab coats, parking fee and name tag. Each MLT laboratory course also has a $15 fee.

Arts and Sciences courses listed in the curriculum may be taken prior to entering the program. If a student is selected for the program, credit for these courses will be given if a grade of C or better was earned in the course and lab.

MEDICAL LABORATORY TECHNICIAN PROGRAM

			Contact Hrs	*Cr Hrs*
Term I				
[1]BIO		Science Requirement—Biology		4
[1]ENG	101	Writing with Readings in Exposition		3
[1]MATH		Mathematics Requirement—Algebra		3
MLT	110L	Introduction to Medical Technology	90	4
		[2]Communications Elective (not required)		3
Term II				
[1]BIO		Science Requirement—Anatomy and Physiology		4
[1]CHEM		Science Requirement—Chemistry		4
MLT	112L	Clinical Immunology	60	2
MLT	151C	Clinical Experience Urinalysis/Phlebotomy	180	4
Term III				
[1]BIO		Science Requirement—Microbiology		4
[1]CHEM		Science Requirement—Chemistry		4
[3]MLT	201L	Clinical Chemistry	165	7

Term IV				
MLT	202L	Clinical Microbiology.....	135	5
[4]MLT	203L	Clinical Hematology/ Coagulation.....	150	6
[4]MLT	204L	Clinical Immunohematology	75	3
Term V				
MLT	250C	Clinical Experience.....	540	12
		[*]Humanities/Social Science Elective		3
		Totals.....	1395	72–75

[*]*Arts and Sciences courses. Course descriptions on pages 23–29.*

[1]*The following courses at T-VI are recommended to meet these requirements:*

Science Requirement—Biology
BIO 123 and BIO 124L
Mathematics Requirement—Algebra
MATH 120 (with a minimum grade of B)
MATH 121 (is strongly recommended as a better preparation for CHEM 121L or if considering transfer to Bachelor's Degree Medical Technology Program at UNM)
Science Requirement—Anatomy and Physiology
BIO 136 and BIO 139L
Science Requirement—Chemistry
CHEM 121L (Term II)
CHEM 122L (Term III)
Science Requirement—Microbiology
BIO 239 and BIO 239L

NOTE: Additional college courses may be considered for transfer credit if completed at an accredited college or university with a grade of C or better and equivalent credits. Official transcripts must be sent to the T-VI Records Office for consideration of transfer credit eligibility prior to admission to the program.

[2]*Communications elective not required for graduation but necessary for transfer to Bachelor's Degree Medical Technology program at UNM.*

[4]*Courses taught by the University of New Mexico faculty at the Medical Laboratory Sciences Building on the UNM campus. Students are charged T-VI tuition rates for these courses.*

COURSE DESCRIPTIONS

MLT 110L—Introduction to Medical Technology (4 cr)
(*Corequisite: MATH 120*) 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, phlebotomy skills and safety procedures.

MLT 112L—Clinical Immunology (2 cr)
(*Prerequisite: MLT 110L*) This course offers a basic study of the body's immune response and serological methods used in testing for immunological reactions.

MLT 151C—Clinical Experience Urinalysis/Phlebotomy (4 cr)
(*Prerequisite: MLT 110L*) This course is designed for students to practice procedures learned in urinalysis and phlebotomy by giving them practical experience at affiliated hospitals.

MLT 201L—Clinical Chemistry (7 cr)
(*Prerequisites: CHEM 121L, MLT 110L, MLT 112L, MLT 151C*) 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.

MLT 202L—Clinical Microbiology (5 cr)
(*Prerequisites: BIO 201, BIO 211L, MLT 110L, MLT 112L*) 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 203L—Clinical Hematology/Coagulation (6 cr)
(*Prerequisites: MLT 110L, MLT 112L, MLT 151C, MLT 201L, MLT 202L*) A basic study is presented of normal and abnormal blood cell enumeration and morphology, and the coagulation mechanisms. Included are the principles of routine testing methods involved in cell counting, evaluation of coagulation factors and other routine procedures performed in the hematology laboratory. There also is laboratory experience in the performance of basic procedures used in a clinical hematology laboratory.

MLT 204L—Clinical Immunohematology (3 cr)
(*Prerequisites: MLT 110L, MLT 112L, MLT 151C, MLT 201L, MLT 202L*) This course is a basic study of theory, principles and test methods for determining blood group typing, antibody detection and identification, crossmatching and component therapy. Laboratory experiences are included for practicing the basic procedures to perform in a clinical immunohematology lab.

MLT 250C—Clinical Experience (12 cr)
(*Prerequisites: MLT 110L, MLT 112L, MLT 151C, MLT 201L, MLT 202L, MLT 203L, MLT 204L*) 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 MLT 201L, MLT 202L, MLT 203L, MLT 204L and MLT 112L.

Phlebotomist

Certificate Program
10 Weeks, Main Campus

The primary work of a phlebotomist is to draw blood specimens from health care clients for testing. A phlebotomist generally works part time in a medical laboratory under the supervision of a registered technologist.

The job includes establishing a professional relationship with the client, selecting and preparing the skin puncture 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 recordkeeping. The job also requires a lot of walking, bending and standing.

Applicants must have a high school diploma or GED, verbal ability to communicate with clients, basic math skills for calculating dosages and timing tests, and manual dexterity required to handle laboratory equipment. The student must be able to read orders and labels associated with the procedures. To be admitted, applicants must pass the admissions math test and read at the seventh grade level.

To receive a certificate, a student must complete the 10-week program, which includes 250 hours of classroom instruction and clinical experience in local hospitals and/or clinics, with a grade of C or better in all coursework.

A $45 equipment fee covers the cost of a lab coat, health tests, name tags, parking fees and other equipment.

The program is offered on the basis of demand and need. Information on starting dates is available from the Health Occupations Department.

This program does not qualify students for Veterans Administration benefits or other financial aid.

PHLEBOTOMIST PROGRAM

Course Requirements			*Contact Hrs*	*Cr Hrs*
PHLB	101L	Phlebotomist Theory and Lab..	160	6
PHLB	121C	Phlebotomist Clinical Practice..	90	3
		Totals.....	250	9

COURSE DESCRIPTIONS

PHLB 101L—Phlebotomist Theory and Lab (6 cr)
Students learn the procedures for collecting blood and other specimens from patients. Interpersonal relationships with patients, peers and staff are stressed. An introduction to the anatomy and physiology of the major body systems, computer processes and laboratory clerical duties also is included.

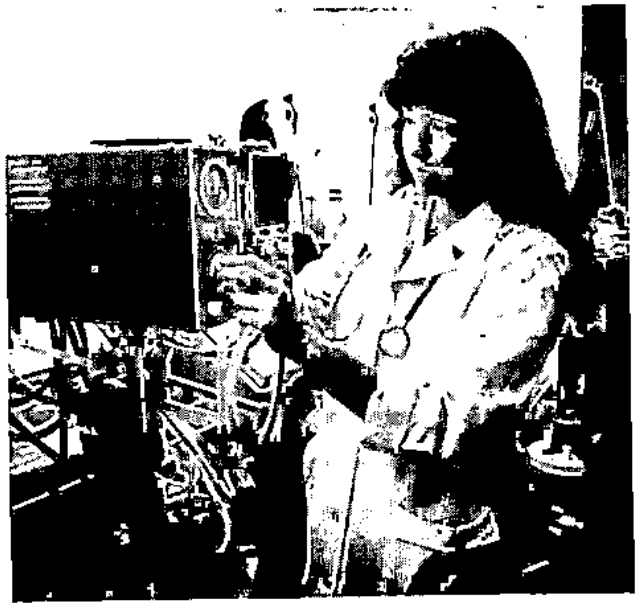
PHLB 121C—Phlebotomist Clinical Practice (3 cr)
Students practice skills and apply the theory learned in class during supervised clinical practice in city hospitals and/or clinics.

Respiratory Therapy Technician

Certificate Program
3 Terms, Main Campus

The Respiratory Therapy Technician program teaches the knowledge and skills required for treatment, management, control 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.

Employment opportunities for respiratory therapy technicians are available nationwide in urban and rural health care facilities including veteran and military base hospitals. The newest employment opportunities are with medical equipment suppliers and agencies providing home health care to pulmonary patients.



The program is accredited by the American Medical Association's Council on Allied Health Education and Accreditation and the Joint Review Committee for Respiratory Therapy Education. Graduates are eligible to take the National Board for Respiratory Care certification exam to obtain Certified Respiratory Therapy Technician credentials. Successful completion of this exam also allows individuals to be recognized as Licensed Respiratory Care Practitioners in New Mexico.

Graduates may wish to continue their training by completing a second year of coursework at the University of New Mexico. This additional training prepares certified technicians to become registered therapists. An Associate of Applied Science Degree is awarded by the UNM School of Medicine/Allied Health Sciences Center upon completion of the required coursework.

Twenty-two qualified applicants will be selected to start Respiratory Therapy Technician coursework each fall term. Additional qualified applicants—if not selected to fill vacancies that occur prior to the start of classes—will be eligible to start coursework the succeeding fall term. Required Arts and Sciences courses may be completed during this waiting period.

Selection of students is based upon the date the application is received in the Admissions Office and proof that all entrance requirements are met.

To meet entrance requirements an applicant must:

- Complete T-VI admissions application form.
- Provide proof of high school or GED diploma.
- Complete the ACT or submit test scores.

  Minimum ACT scores: Composite 15
  Math 12
  Natural Science ... 18

  —If the composite score is at least 15 but the math score is less than 12, the applicant must successfully complete a 100-level math course prior to entering the program.

  —If the composite score is at least 15 but the natural science score is less than 18, the applicant must successfully complete a 100-level course in natural science prior to entering the program.

  —If the composite score is less than 15, the applicant must either successfully complete 100-level courses in all subjects where scores are deficient prior to entering the program or retake the ACT and achieve minimum scores.

Applicants who have successfully completed 15 credit hours of Arts and Sciences courses, including communications and math, at a regionally accredited college or university need not take the ACT. Official transcripts of college work must be submitted to T-VI.

- Complete a personal interview with a Respiratory Therapy Technician program faculty member.
- Submit a completed physical examination form.

Respiratory therapy students pay a $75 equipment fee when they begin the program to cover the cost of the required uniform, identification badges and parking fees. Additional costs include purchase of a stethoscope, bandage scissors and graduation pin, and the pre-entrance physical exam.

Arts and Sciences courses which are part of the Respiratory Therapy Technician curriculum may be taken prior to entering the program. When a student enters the program, credit will be given for courses with final grades of C or better.

Students admitted to the program must earn a grade of C or better in all courses to progress through the program and graduate.

RESPIRATORY THERAPY TECHNICIAN PROGRAM

Term I			*Contact Hrs*	*Cr Hrs*
*BIO		Science Requirement—Biology		4
*MATH		Mathematics Requirement—Algebra		3
RTT	110	Respiratory Therapy Principles and Practices I .	45	3
RTT	115L	Respiratory Therapy Lab I ..	45	1
RTT	121C	Clinical Experiences I	225	5

Term II				
*BIO		Science Requirement—Anatomy and Physiology		4
RTT	111	Respiratory Therapy Principles and Practices II	45	3
RTT	116L	Respiratory Therapy Lab II	45	1
RTT	122C	Clinical Experiences II	250	5
*RTT	131	Physics of Respiratory Therapy	45	3
Term III				
RTT	112	Respiratory Therapy Principles and Practices III	75	5
RTT	117L	Respiratory Therapy Lab III	45	1
RTT	123C	Clinical Experiences III	250	5
RTT	132	Cardiopulmonary Physiology	45	3
*SSCI		Psychology/Sociology Elective		3
		Totals	1115	49

*Arts and Sciences courses. Course descriptions on pages 23–29.

The following courses at T-VI are recommended to meet these requirements:

Science Requirement—Biology
BIO 123 and BIO 124L

Mathematics Requirement—Algebra
MATH 120

Science Requirement—Anatomy and Physiology
BIO 136 and BIO 139L

Physics Requirement
RTT 131 is offered as part of the curriculum. A college physics course may be accepted as transfer credit in lieu of RTT 131.

Psychology/Sociology Elective
PSY 101 or SOC 101

NOTE: Additional college courses may be considered for transfer credit if completed at an accredited college or university with a grade of C or better and equivalent credits. Official transcripts must be sent to the T-VI Records Office for consideration of transfer credit eligibility prior to admission to the program.

COURSE DESCRIPTIONS

RTT 110—Respiratory Therapy Principles and Practices I (3 cr)
(*Corequisites: BIO and MATH requirements, RTT 115L, RTT 121C*) This course covers respiratory therapy as a paramedical profession—the personal qualifications, ethics, expectations and opportunities, medical terminology and charting. It also covers practices and procedures of basic respiratory care including cardiopulmonary clinical assessment, medical gas administration, oxygen therapy, principles of microbiology, infection control and equipment maintenance.

RTT 111—Respiratory Therapy Principles and Practices II (3 cr)
(*Prerequisites: RTT 110, RTT 115L, RTT 121C; corequisites: A&P requirement, RTT 116L, RTT 122C, RTT 131*) Additional theory of respiratory therapy procedures is presented with emphasis on breathing treatments, chest physiotherapy and airway management. Basic principles of pharmacology are taught along with the procedure of administering medicated aerosol therapy. The concepts and skills required to perform basic pulmonary function testing are included.

RTT 112—Respiratory Therapy Principles and Practices III (5 cr)
(*Prerequisites: RTT 111, RTT 116L, RTT 122C; corequisites: RTT 117L, RTT 123C, RTT 132*) Concepts and principles of critical care are introduced for patients with life threatening diseases. Emphasis is on learning mechanical ventilatory support for neonatal, pediatric and adult patients who need life support maintenance. Concepts and theories of critical care medicine are introduced.

RTT 115L—Respiratory Therapy Lab I (1 cr)
(*Corequisites: RTT 110, RTT 121C*) Students practice basic respiratory care procedures, using state-of-the-art equipment in the learning laboratory and in simulated patient situations.

RTT 116L—Respiratory Therapy Lab II (1 cr)
(*Corequisites: RTT 111, RTT 122C, RTT 131*) Students practice additional respiratory care procedures learned in RTT 111. Students use equipment in simulated patient situations.

RTT 117L—Respiratory Therapy Lab III (1 cr)
(*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 cr)
(*Corequisites: RTT 110, RTT 115L*) 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 cr)
(*Corequisites: RTT 111, RTT 116L, RTT 131*) Supervised clinical experiences continue in area hospitals and health care facilities. Students also visit patients in the home setting, supervised by qualified personnel working with medical equipment supply companies in Albuquerque.

RTT 123C—Clinical Experiences III* (5 cr)
(*Corequisites: RTT 112, RTT 117L, RTT 132*) Supervised clinical experiences in the hospital setting 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 cr)
(*Corequisites: RTT 111, RTT 116L, RTT 122C*) The basic concepts of physics as they relate to physiology of the lungs, gas laws, gas flow and mechanics of the breathing process are covered and applied to the operation of respiratory therapy equipment.

RTT 132—Cardiopulmonary Physiology (3 cr)
(*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.

**During clinical experiences, students meet for formal lectures on the pathophysiology of the cardiopulmonary system. The lectures are given by the respiratory therapy program's medical director, one of his associates, or other physicians in the community. Clinical pathologic disorders which require respiratory therapy diagnosis, treatment and care are covered.*

Advanced Placement
(Respiratory Therapy Technician)

There are two ways in which advanced standing can be granted to Respiratory Therapy Technician applicants.

The first is through credit for equivalent coursework completed at an accredited technical-vocational school, college or university. Credit may be given when the T-VI Records Office receives official transcripts showing grades of C or better on equivalent courses.

The second, for people with documented respiratory therapy work experience, is through challenge exams. Persons wanting to challenge Term I coursework may apply at the Health Occupations Department during the month of July. Challenge exams will be given in August. A written exam is used to challenge theory courses. A competency test using respiratory therapy equipment under simulated conditions in the learning laboratory is used to challenge lab and clinical coursework.

Applicants also must meet all prerequisites for admission into the program and have acceptable composite, math and natural science ACT scores.

Those with previous respiratory therapy work experience under medical supervision must document at least 225 hours to challenge Term I coursework and another 255 hours to challenge Term II coursework. Those taking challenge exams must score at least 71% on each component to receive Term I credit. Challenge exams may be taken only once. Persons given challenge credit for Term I will be admitted in January for Term II on a space-available basis.

Persons successfully completing all Term I requirements may apply to challenge Term II coursework. Term II challenge applications will be accepted during November and tests will be scheduled in December.

Portions of Term III may be challenged depending on prior clinical work experiences which must total at least 700 hours under medical supervision. Dates for challenging Term III coursework will be scheduled on an individual basis.

Challenge and transfer students accepted must submit transcripts of prior education and proof of high school graduation or GED. They must pay required T-VI fees, purchase school uniforms and other needed equipment, and have a physical examination before admission.

NURSING PROGRAMS

Nursing Assistant

Certificate Program
1 Term, Main Campus

This program trains students in nursing skills required for the care and comfort of the sick in hospitals, outpatient 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 as nursing assistants.

To be admitted, applicants must pass the admissions math test and read at the seventh grade level. Good communication skills and the ability to care for others are necessary for this program. Applicants must have a New Mexico driver's license and a car because students must provide their own transportation to the various health care agencies and patients' homes. City buses are not adequate for meeting transportation needs.

The 15-week program includes 315 instructional hours. Nine weeks are spent in the classroom and laboratory, followed by six weeks of extensive supervised clinical training in local hospitals, nursing homes, outpatient clinics and home health care agencies. A student attends an average of 22 hours per week throughout the program.

A $30 equipment fee covers the cost of the required uniform top, stethoscope, health test, parking fees and a transfer belt. A watch with a second hand, uniform slacks, shirt and shoes are required but not covered by the fee.

NURSING ASSISTANT PROGRAM

Course Requirements			*Contact Hrs*	*Cr Hrs*
NA	101	Nursing Assistant Theory	73	4
NA	110L	Nursing Assistant Lab	45	2
NA	121C	Nursing Assistant Clinical Experiences	124	6
NA	131	Health Communications	48	3
NA	141	Mathematics	25	1
		Totals	315	16

COURSE DESCRIPTIONS

NA 101—Nursing Assistant Theory (4 cr)
During the first nine weeks, students attend classes covering basic nursing skills used in health care agencies and homes. Also covered are home management, community resources, purchase and preparation of foods.

NA 110L—Nursing Assistant Lab (2 cr)
Students practice basic nursing skills in the laboratory.

NA 121C—Nursing Assistant Clinical Experiences (6 cr)
Four of the last six weeks of the program include supervised practice of nursing skills in hospitals, elder care centers or outpatient clinics throughout the city. The other two weeks cover home health experiences and include nursing care of patients in selected home settings.

NA 131—Health Communications (3 cr)
This course includes introductions to medical terminology, anatomy and physiology, and nutrition. The basic structure and normal function of the body systems and some of the health problems which can occur in those systems are covered.

NA 141—Mathematics (1 cr)
Basic math is reviewed in this course with practice working selected problems.

Practical Nurse

Certificate Program
3 Terms, Main Campus

This program prepares students 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). This program is *not* a prerequisite for the Associate Degree Nursing program.

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 T-VI's nursing programs are scheduled monthly. These sessions review levels of nursing, the admission process and program requirements. Individuals interested in nursing are strongly encouraged to attend one of these sessions. Contact the Health Occupations Department for the dates and times of the sessions. In addition, it is recommended strongly that applicants have a personal interview with the Health Occupations counselor or nursing program director.

To be eligible for selection for the Practical Nurse program, an applicant must:

- Provide proof of a high school diploma or GED.
- Earn satisfactory American College Test (ACT) scores: math (8), composite (15).
- Score 85% on the Health Occupations basic math entrance test. Applicants may retest once. Applicants with two unsuccessful attempts on the test must satisfactorily complete health math in the Developmental Studies Department before they can be accepted into the program.

Applicants are admitted to the program on the basis of their application dates after all admission requirements are met. After admission to the program, students must submit:

- Completed physical examination and health forms with evidence of current immunizations before beginning clinical courses.
- Evidence of current certification in cardiopulmonary resuscitation before beginning clinical courses. CPR certification must be kept current throughout the program.

The Practical Nurse program includes Arts and Sciences courses for which college credit is awarded. Those courses must be taken prior to, or as scheduled in, the curriculum plan. Students are encouraged to take some Arts and Sciences courses prior to entering the program. A minimum grade of C must be earned in all courses (nursing and Arts and Sciences) to continue in the program and graduate.

Students must attend classes, observations and clinical experiences as scheduled, and arrange for their own transportation to the agencies and hospitals.

There is an $80 personal equipment fee for required uniforms, stethoscope, scissors, parking fees, transfer belts and identification tags. 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.

PRACTICAL NURSE PROGRAM

			Contact Hrs	Cr Hrs
Term I				
*[1]BIO	136	Human Anatomy and Physiology	45	3
*[1]BIO	139L	Human Anatomy and Physiology Lab	45	1
[2]NURS	110	Fundamentals of Nursing/ Theory	60	4
[2]NURS	121C	Fundamentals of Nursing/ Clinical	135	3
*NUTR	125	Nutrition	45	3
*[3]PSY	102	General Psychology II	45	3
Term II				
*COMM	221	Interpersonal Communication	45	3
[2]NURS	111	Medical-Surgical Nursing/ Theory	60	4
[2]NURS	122C	Medical-Surgical Nursing/ Clinical	135	*3
*PHIL	245	Biomedical Ethics	45	3
PN	131	Pharmacology	45	3
Term III				
PN	112	Maternity-Pediatric-Medical-Surgical Theory	135	9
*PN	123C	Maternity-Pediatric-Medical-Surgical Clinical	315	7
		Totals	1155	49

**Arts and Sciences courses. Course descriptions on pages 23–29.*

[1]BIO 237/247L (if taken before September 1989) or BIO 237/247L and BIO 238/248L (if taken after August 1989) may be substituted.

[2]Nursing course descriptions on page 59.

[3]PSY 220 may be substituted.

Note: Students planning to go on for the Associate Degree in Nursing are encouraged to take BIO 237/247L and BIO 238/248L.

COURSE DESCRIPTIONS

PN 112—Maternity-Pediatric-Medical-Surgical Theory (9 cr)

(Prerequisites: NURS 111/122C, PN 131; corequisite: PN 123C) The developmental self-care needs of clients of all ages, emphasizing pediatrics and the child-bearing family, are correlated with the nursing process. The legal/ethical role of the practical nurse is presented.

PN 123C—Maternity-Pediatric-Medical-Surgical Clinical (7 cr)

(Prerequisites: NURS 111/122C; corequisite: PN 112) Clinical experiences in maternity, pediatric and medical-surgical areas support the theory portion of the course.

PN 131—Pharmacology (3 cr)

(Prerequisites: BIO 136/139L, NURS 110/121C; corequisites: NURS 111/122C) This course covers 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 given drugs are discussed. Nursing implications and responsibilities are integrated.

Presbyterian Hospital School of Practical Nursing

The Presbyterian Hospital School of Practical Nursing was started in 1956 at Presbyterian Hospital. In 1965, T-VI assumed administrative responsibility for the school. Presbyterian Hospital Center supports the school through financial contributions and by providing clinical facilities for patient care experiences. The Presbyterian Hospital 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 1980. It is also included in T-VI's accreditation from the Commission on Higher Education of North Central Association of Colleges and Schools.

Advanced Placement
(Practical Nurse)

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 and Sciences courses required in the Practical Nurse program must be transferred, taken or challenged through the Arts and Sciences Department. These courses include: BIO 136/139L—Human Anatomy and Physiology for Non-Majors, PSY 102—General Psychology II, PHIL 245M—Biomedical Ethics, COMM 221—Interpersonal Communication, and NUTR 125—Nutrition.

The nursing courses must be transferred, taken, or challenged through the Health Occupations Department. These courses include: NURS 110/121C—Fundamentals of Nursing Theory/Clinical, NURS 111/122C—Medical-Surgical Nursing Theory/Clinical and PN 131—Pharmacology.

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 to T-VI's Practical Nurse program should contact the program director.

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 health/nursing-related field within a post-secondary educational institution (e.g.; military corpsperson, physician's assistant).
- Performance of basic nursing skills during employment in a health-related setting within the last three years.

Applicants for challenge must submit an application to the Practical Nurse program and meet the program admission requirements. In addition, the applicant must meet the Arts and Sciences course requirements scheduled in the curriculum prior to the desired point of entry. The challenge process includes theory and laboratory exams.

The challenge exam for NURS 110/121C is a comprehensive examination of the theory and laboratory content. The challenge exam for NURS 111/122C is the Nursing Mobility Profile I—Part I published by the National League for Nursing and a laboratory examination.

Challenge exams for the nursing courses are offered three times a year in January, June and September. For specific information, contact the Health Occupations Department.

Applicants who successfully challenge NURS 110/121C and NURS 111/122C must complete PN 131 and an orientation to the program before entering PN 112/123C.

Successful challenge students are admitted to the program on a space-available basis. Challenge students who meet the program objectives are considered full graduates and are eligible to take the licensing examination administered by the New Mexico State Board of Nursing.

OTHER ADMISSION REQUIREMENTS: Challenge and transfer students admitted to the program must meet these additional requirements:

- Submit transcripts of prior education and proof of high school graduation or GED.
- Submit completed physical examination and health forms with evidence of current immunizations.
- Submit evidence of current certification in cardiopulmonary resuscitation. CPR certification must be kept current throughout the program.
- Purchase school uniforms and other needed equipment.
- Pay required T-VI fees.

Nursing

Associate Degree
4 Terms, Main Campus

This program prepares technical nurses who 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 Practical Nurse program is *not* a prerequisite for this program.

Orientation sessions for T-VI's nursing programs are scheduled monthly. These sessions review levels of nursing, the admission process and program requirements. Individuals interested in nursing are strongly encouraged to attend one of these sessions. Contact the Health Occupations Department for the dates and times of the sessions. In addition, it is recommended strongly that applicants have a personal interview with the Health Occupations counselor or the nursing program director.

The associate degree in nursing program is approved by the New Mexico State Board of Nursing (NMSBN). Graduates are eligible to take the licensing examination for nurses administered by the NMSBN.

In addition to the degree program admission requirements listed on page 13, Associate in Science Degree in Nursing applicants must have satisfactory ACT scores of 18 in natural sciences and 14 in social sciences, and must meet the following general requirements for admission:

- Submit transcripts of previous education including high school, vocational school or college. College transcripts must be official.
- Provide proof of meeting the chemistry/biology course requirements. These may be met by:
  - —Completion of BIO 123/124L—Biology for Health Sciences, and Chemistry 111/112L—Introduction to Chemistry. This approach is recommended strongly for those students who plan to further their education in nursing.
  - —Completion of BIO 115—Biophysical Science. This approach is recommended *only* for those students who *do not* plan to further their nursing education beyond the associate degree.
  - —A year of high school chemistry and a year of advanced high school biology. Written approval from the Arts and Sciences Department is required.

- Score 85% on the Health Occupations basic math entrance test. Applicants may retest once. Applicants with two unsuccessful attempts on the test must satisfactorily complete health math in the Developmental Studies Department before they can be accepted into the nursing program.

Once all admission requirements are met, applicants are admitted to the program on the basis of their application dates. After admission to the program students must submit:

- Completed physical examination and health forms with evidence of current immunizations before beginning clinical courses.
- Evidence of current certification in cardiopulmonary resuscitation before beginning clinical courses. CPR certification must be kept current throughout the program.

Arts and Sciences courses must be taken prior to, or as scheduled in, the curriculum plan. Required biology courses must have been taken within five years of the date of application to the Nursing program. Some substitute placement of Arts and Sciences courses may be allowed.

Students must earn a minimum grade of C in all courses to advance to the next term and graduate. Students must attend classes, observation and clinical experiences as scheduled, and arrange for their own transportation to the agencies and hospitals.

There are equipment fees of $80 the first term for required uniforms, stethoscope, scissors, transfer belts, parking fees and identification tags. There is a $10 fee the third term for equipment and parking fees. 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.

ASSOCIATE DEGREE IN NURSING PROGRAM

			Contact Hrs	Cr Hrs
Term I				
*BIO	237	Anatomy and Physiology I		3
*BIO	247L	Anatomy and Physiology I Lab		1
*ENG	101	Writing with Readings in Exposition		3
NURS	110	Fundamentals of Nursing Theory	60	4
NURS	121C	Fundamentals of Nursing Clinical.....	135	3
*PSY	101	General Psychology I		3
or				
*PSY	102	General Psychology II		3
Term II				
*BIO	238	Anatomy and Physiology II....		3
*BIO	248L	Anatomy and Physiology II Lab		1
NURS	111	Medical-Surgical Nursing Theory	60	4
NURS	122C	Medical-Surgical Nursing Clinical.....	135	3
*NUTR	125	Nutrition.....		3
*PSY	220	Developmental Psychology		3
Term III				
*BIO	239	Microbiology for Health Sciences.....		3
*BIO	239L	Microbiology for Health Sciences Lab.....		1
NURS	210	Maternity Nursing Theory	45	3
NURS	211	Psychiatric Nursing Theory....	45	3
NURS	221C	Maternity Nursing Clinical	90	2
NURS	222C	Psychiatric Nursing Clinical ...	90	2
NURS	231	Pharmacology in Nursing.....	45	3
Term IV				
NURS	212	Pediatric-Advanced Medical Surgical Nursing Theory	75	5
NURS	223C	Pediatric-Advanced Medical Surgical Nursing Clinical ...	225	5
NURS	241	Nursing Seminar.....	15	1
*PHIL	245M	Biomedical Ethics		3
		†Elective		3
		Totals	1020	68

*Arts and Sciences courses. Course descriptions on pages 23–29.

†May not be a biology course. List of recommended courses available from department counselor.

COURSE DESCRIPTIONS

NURS 110—Fundamentals of Nursing Theory (4 cr)
(*Prerequisites or corequisites: BIO 237/247L, PSY 101 or PSY 102; corequisite: NURS 121C*) The conceptual framework of the curriculum and nursing process is introduced. The concepts of the individual, society, health and nursing are developed within the nursing theory of Orem's self-care deficit model. Nursing skills are developed to meet the universal and developmental needs of individuals across cultures, with topics including communication, teaching-learning, health care delivery systems, legal/ethical role of nurses, introduction to pharmacology and medication administration.

NURS 111—Medical-Surgical Nursing Theory (4 cr)
(*Prerequisites: BIO 238/248L, NURS 110/121C, PSY 101 or PSY 102; corequisites: NURS 122C, NUTR 125, PSY 220*) This course offers a theoretical study of the nursing process for adult clients. Nursing process including assessment, planning, implementation and evaluation is used to meet self-care deficits of clients unable to meet their own needs due to common illnesses or injuries. The role of the nurse in promoting developmental self-care requirements in adult clients with health problems is presented.

NURS 121C—Fundamentals of Nursing Clinical (3 cr)
(*Corequisite: NURS 110*) Laboratory and clinical experiences allow the student to carry out activities required to meet universal, developmental, and health problem self-care requirements.

NURS 122C—Medical-Surgical Nursing Clinical (3 cr)
(*Corequisite: NURS 111*) Students have practicum with adult clients in medical-surgical acute-care facilities and with elderly adult clients in long-term care facilities and a variety of well/elderly community agencies. The students apply the theoretical content covered in NURS 111 to the clinical area.

NURS 210—Maternity Nursing Theory (3 cr)
(*Prerequisites: BIO 238/248L, NURS 111/122C, NUTR 125, PSY 220; corequisites: NURS 211/222C, NURS 221C*) The study of the childbearing family with universal, developmental and health deviation self-care requirements is presented. Students are able to integrate the nursing process, client education, nursing care systems and assessment skills.

NURS 211—Psychiatric Nursing Theory (3 cr)
(*Prerequisites: BIO 238/248L, NURS 111/122C, NUTR 125, PSY 220; corequisites: NURS 210/221C, NURS 222C*) 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 clients. The course also presents concepts of various psychotherapeutic approaches used in psychiatric settings.

NURS 212—Pediatric-Advanced Medical Surgical Nursing Theory (5 cr)
(*Prerequisites: NURS 210/221C, NURS 211/222C; pre- or corequisites: BIO 239/239L, NURS 231; corequisite: NURS 241*) This course presents a theoretical study of the nursing process using nursing systems as defined by Orem to care for children and adults. The nursing process is used to meet health problems of children and adults unable to meet their own needs due to developmental factors or more complex health conditions. The roles of the professional nurse in working with families are presented.

NURS 221C—Maternity Nursing Clinical (2 cr)
(*Corequisite: NURS 210*) This course allows the clinical application of theoretical concepts presented in NURS 210.

NURS 222C—Psychiatric Nursing Clinical (2 cr)
(*Corequisite: NURS 211*) Clinical experiences provide the opportunity for students to apply theoretical concepts through establishing therapeutic relationships, participating in groups and interdisciplinary meetings, and visiting community mental health agencies.

NURS 223C—Pediatric-Advanced Medical Surgical Nursing Clinical (5 cr)
(Corequisite: NURS 212) A clinical practicum provides application of theoretical concepts in the care of children and families in acute-care facilities and in adult clients with more complex health conditions as studied in NURS 212.

NURS 231—Pharmacology in Nursing (3 cr)
(Prerequisites: BIO 238/248L, NURS 111/122C) This course presents the concepts necessary for judgment in the use of chemical agents and the theoretical base required to administer medications. Information presented includes the role of the nurse in assisting the client with self-administration of medications, history of pharmacology, drugs and their therapeutic use, adverse reactions, precautions, contraindications, food and drug interactions, psychosocial aspects of drug use and drug abuse.

NURS 241—Nursing Seminar (1 cr)
(Prerequisites: NURS 210/221C, NURS 211/222C; corequisites: NURS 212/223C) Students discuss the role of the registered nurse in relation to trends, legal/ethical issues, professional relationships and health care delivery. The course is designed to develop critical thinking in legal/ethical issues in professional nursing.

Advanced Placement
(Associate in Science Degree in Nursing)

To apply for advanced standing in the Nursing associate degree program, individuals must meet the general requirements for admission into an associate degree program as listed on page 13.

Orientation sessions for T-VI's nursing programs are scheduled monthly. These sessions review levels of nursing, the admission process and program requirements. Individuals interested in nursing are strongly encouraged to attend one of these sessions. Contact the Health Occupations Department for the dates and times of the sessions. In addition, it is recommended strongly that applicants have a personal interview with the Health Occupations counselor or the nursing program director.

Advanced placement may be granted in three ways:

1. **Challenge**—Challenge exam for students who meet one of the following criteria:
   - Completion of a formal course of study in a health/nursing related field within a post-secondary educational institution (e.g.; military corpsperson, physician's assistant).
   - Performance of basic nursing skills during employment in a health-related setting within the last three years.

Applicants for challenge must submit an application to the associate degree program and meet the program admission requirements. In addition, the applicant must meet the Arts and Sciences course requirements scheduled in the curriculum prior to the desired point of entry. The challenge process includes theory and laboratory exams.

The challenge exam for NURS 110/121C is a comprehensive examination of the theory and laboratory content. The challenge exam for NURS 111/122C is the Nursing Mobility Profile I—Part I published by the National League for Nursing and a laboratory examination.

Challenge exams for the nursing courses are offered three times a year in January, June and September. For specific information, contact the Health Occupations Department.

Applicants who successfully challenge NURS 110/121C and NURS 111/122C must complete NURS 201 before entering NURS 210/221C and NURS 211/223C.

Successful challenge students are admitted to the program on a space-available basis.

Challenge students who meet the program objectives are considered full graduates and are eligible to take the licensing examination administered by the New Mexico State Board of Nursing.

2. **Transfer**—Transfer from an approved associate degree or baccalaureate nursing program with equivalent courses. To apply for transfer, the individual must submit evidence of completion of equivalent courses with minimum grades of C. In addition, transfer students are required to take NURS 201—Nursing Concepts for LPNs and Transfer Students. Transfer students are required to enroll a minimum of one term and complete 15 credit hours.

3. **LPN Mobility**—Admission of licensed practical nurses. The associate degree program is designed to admit qualified licensed practical nurses into the second year. In addition to meeting the general requirements for admission into an associate degree program as listed on page 13, applicants must meet the following requirements:

   - Provide proof of meeting the chemistry/biology course requirements. These may be met by:
     —Completion of BIO 123/124L—Biology for Health Sciences, and CHEM 111/112L—Introduction to Chemistry. This approach is recommended strongly for those students who plan to further their education in nursing.
     —Completion of BIO 115L—Biophysical Sciences. This approach is recommended *only* for those students who *do not* plan to further their nursing education beyond the associate degree.
     —A year of high school chemistry and a year of advanced high school biology. Written approval from the Arts and Sciences Department is required.
   - Submit transcripts of previous education including high school, vocational school or college. College transcripts must be official.
   - Submit proof of current LPN license.
   - Provide proof of completion or challenge of the following courses within five years of the date of application with a minimum grade of C:
     —BIO 237/247L—Anatomy and Physiology I
     —BIO 238/248L—Anatomy and Physiology II
   - Complete PSY 101 or 102—General Psychology
   - Complete PSY 220—Developmental Psychology.
   - Complete or challenge NUTR 125—Nutrition.
   - Complete NURS 201 with a minimum grade of C.
   - Complete or challenge at least one of the following courses:
     —ENG 101—Writing with Readings in Exposition
     —PHIL 245M—Biomedical Ethics
     —Elective—three credit hours. Biology courses are not acceptable.
   - Take the Nursing Mobility Profile I examination if an approved postsecondary practical nurse program has not been completed. The exam also may be required if the applicant has not been active in nursing during the last five years.

After admission to the program, students must submit:

- Completed physical examination and health forms with evidence of current immunizations before beginning clinical courses.
- Evidence of current certification in cardiopulmonary resuscitation before beginning clinical courses. CPR certification must be kept current throughout the program.

Applicants for advanced standing may complete additional courses required for the associate degree in nursing before beginning the second year nursing courses. This enables them to complete the program on a part-time basis.

Students pay $10 for equipment and parking. 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 DESCRIPTION

NURS 201—Nursing Concepts for LPNs and Transfer Students (2 cr)

This course is an introduction to the conceptual framework of the nursing program and an in-depth study of the nursing process. The process of role change from LPN to RN is included. This course is required for LPNs and transfer applicants who seek advanced placement in the associate degree program.

Perioperative Registered Nurse Specialist

Certificate Program
1 Term, Main Campus

This 15-week course provides registered nurses 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; 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.

Applicants must be registered nurses with six months' clinical nursing experience within the last two years and be currently certified in cardiopulmonary resuscitation. Applicants also must submit proof of current immunizations, a physical examination within the last year, and a current New Mexico nursing license.

There is a $25 supply fee and students are required to purchase their own textbooks.

Students must make grades of C or better in all coursework to receive a certificate.

PERIOPERATIVE REGISTERED NURSE SPECIALIST PROGRAM

Course Requirements			*Contact Hrs*	*Cr Hrs*
PRNS	255L	Perioperative Registered Nurse Specialist Theory/Lab.....	125	8
PRNS	265C	Perioperative Registered Nurse Specialist Clinical Experience.....	250	6
		Totals.....	375	14

COURSE DESCRIPTIONS

PRNS 255L—Perioperative Registered Nurse Specialist Theory/Lab (8 cr)

This course content is divided into five units—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.

PRNS 265C—Perioperative Registered Nurse Specialist Clinical Experience (6 cr)

Students apply new and previously learned concepts to perioperative nursing in hospital operating rooms.

Licensed Practical Nurse Refresher

Certificate Program
6 Weeks, Main Campus

This 180 hour, six-week 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.

Refresher courses are offered on the basis of demand and need, availability of clinical experiences and qualified faculty. No definite dates are set, and interested persons should contact the Health Occupations Department for more information. Thirty-two people are admitted to each course.

Participants pay a $15 registration fee, $15 supply fee, and the cost of required textbooks. White uniform and shoes, a stethoscope and 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.

This program does not qualify students for Veterans Administration benefits or other financial aid.

LICENSED PRACTICAL NURSE REFRESHER PROGRAM

Course Requirements			Contact Hrs	Cr Hrs
LPNR	155L	Refresher Theory/Lab	90	6
LPNR	165C	Refresher Clinical Experience	90	2
		Total	180	8

COURSE DESCRIPTIONS

LPNR 155L—Refresher Theory/Lab (6 cr)
Medical and surgical trends, new procedures and techniques, and pharmacology are covered in the theory portion of the program.

LPNR 165C—Refresher Clinical Experience (2 cr)
Medical and surgical clinical experiences include administration of medications.

Registered Nurse Refresher

Certificate Program
6 Weeks, Main Campus

This six-week refresher course meets the requirements of the Nursing Practice Act of New Mexico for registered nurses who have not worked in nursing for the past five years. Theory classes and clinical experiences focus on medical and surgical trends, pharmacology, cardiac care, maternity and other current subjects.

No definite dates are set since refresher courses are offered on the basis of demand and need. Applicants are admitted on a first-come, first-served basis and enrollment is limited to 32 persons.

Participants pay a $15 registration fee, $15 supply fee, and the cost of required textbooks. White uniform and shoes, a stethoscope and 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.

This program does not qualify students for Veterans Administration benefits or other financial aid.

REGISTERED NURSE REFRESHER PROGRAM

Course Requirements			Contact Hrs	Cr Hrs
RNR	255L	Refresher Theory/Lab	90	6
RNR	265C	Refresher Clinical Experience	90	2
		Totals	180	8

COURSE DESCRIPTIONS

RNR 255L—Refresher Theory/Lab (6 cr)
Trends in medical-surgical, geriatric, maternal-child and psychiatric nursing, pharmacology, and fluid and electrolytes are covered in the course.

RNR 265C—Refresher Clinical Experience (2 cr)
Students have supervised medical and surgical clinical experiences including patient care, medication administration, IVs and uses of current equipment.

TECHNOLOGIES DEPARTMENT

Programs in the Technologies Department are among the longest at the Institute. All programs are four terms (16 months). Technologies programs also have the highest math skill entry requirements.

Students in three programs—Electronics Technology, Instrumentation and Control Technology and Laser Electro-Optic Technology—can choose to complete either an associate in applied science degree or a certificate.

Because the Technologies programs are in high demand, interested persons should apply as early as possible.

Electronics Engineering Technology and the third and fourth terms of Laser Electro-Optic Technology are offered at the Montoya Campus. The Data Processing Technology program is offered at both campuses. Other Technologies programs are offered only at the Main Campus.

There are beginning groups each term in all Technologies majors except Laser Electro-Optics which starts new groups every other term. Courses in the Continuing Education Division with matching course numbers will transfer to the Technologies Department.

SUPPORT COURSES

The optional support courses that are available to Technologies students are listed below. At least 12 students must sign up for an optional support course before it can be offered, and each student must meet the required prerequisites. Common support courses are:

Course Title			*Hrs Wk*	*Cr Hrs*
BA	111	Communications (7½ weeks)	5	2
BA	131	Human Relations (7½ weeks)	5	2
DP	172L	FORTRAN Programming	5	3
DP	173L	Pascal Programming	5	3
DP	174L	BASIC Language Programming	5	3
DP	175L	C Language Programming	5	3
DP	176L	Introduction to Microcomputers	5	3

COURSE DESCRIPTIONS

BA 111—Communications (7½ weeks) (2 cr)
(*Offered for Trades and Technologies students only*) The primary focus of this course is to develop effective communications skills. Course content includes fundamentals of grammar, punctuation and word usage. Effective expression in written communications is stressed.

BA 131—Human Relations (7½ weeks) (2 cr)
(*Available also for Trades and Technologies students*) This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and the work ethic is stressed.

DP 172L—FORTRAN Programming (3 cr)
This is an introductory course in FORTRAN IV computer programming.

DP 173L—Pascal Programming (3 cr)
This class uses microcomputers and covers the Pascal language for personal or mainframe computers.

DP 174L—BASIC Language Programming (3 cr)
This introduction to BASIC includes use of input and output statements, arithmetic operations, comparison and branching commands, use of subroutines and the library functions. Algorithms associated with technological computations are developed.

DP 175L—C Language Programming (3 cr)
(*Prerequisite: A programming language*) This course is an introduction to C programming language using microcomputers.

DP 176L—Introduction to Microcomputers (3 cr)
Instruction is provided in computer vocabulary. Students learn how to use personal computers to perform tasks related to their studies.

Architectural/Engineering Drafting Technology

Certificate Program
4 Terms, Main Campus

Drafting is an excellent employment skill for persons who like to draw, have construction experience, or have a strong interest in building design or the construction process. The potential for advancement into jobs with increasing responsibility and wider scope is good.

The Architectural/Engineering Drafting Technology program includes the principles of architectural and engineering graphics and the theory and practice of construction technology. 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.

Students use computer assisted drafting (CAD) software on microprocessors to do various types of drafting projects.

The program provides a strong foundation for pursuing a degree in engineering or architecture. Several courses combine to provide the basis for waiving specified courses in the School of Architecture at the University of New Mexico.

To earn a certificate, students must complete successfully a total of 1725 hours of which 675 are laboratory work and 1050 are related theory. A grade of C or better in each Architectural/Engineering Drafting Technology course is required for a certificate.

A student may leave the program when a training objective is reached and receive a rating certificate detailing the skills completed.

Students pay a personal equipment fee of $55 when taking ARDR 101L and another $40 when taking ARDR 201L.

Note: Students are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during the first term.

ARCHITECTURAL/ENGINEERING DRAFTING TECHNOLOGY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
ARDR	101L	Residential Drafting	12	8
ARDR	102	Architectural Mathematics	5	3
ARDR	103	Residential Materials and Methods	5	3
ARDR	104L	Introduction to CAD	3	1
[1]BA	111	Communications (7½ weeks)	5	2
[1]BA	131	Human Relations (7½ weeks)	5	2
Term II				
ARDR	111L	Architectural Drafting	12	8
ARDR	112	Architectural Trigonometry	5	3
ARDR	113	Commercial Design Development	5	3
ARDR	114L	Architectural CAD	3	1
ARDR	115	Energy Systems	5	3
Term III				
ARDR	201L	Structural Drafting	12	8
ARDR	202	Structural Mathematics	5	3
ARDR	204L	Structural CAD	3	1
ARDR	206	Structural Detailing	5	3
ARDR	217	Project Management	5	3
Term IV				
ARDR	211L	M/E Systems Drafting	10	6
ARDR	213	M/E Systems Analysis	10	6
ARDR	214L	M/E Systems CAD	5	3
		Totals	1725	70
Support Courses				
ARDR	171	Architectural Design	5	3
ARDR	172	Architectural Rendering	5	3
ARDR	173	Technical Sketching	5	3
ARDR	271	Construction Management	5	3
ARDR	272	Computer Estimating	5	3

[1]*Course descriptions on page 64.*

COURSE DESCRIPTIONS

ARDR 101L—Residential Drafting (8 cr)
(*Corequisites: ARDR 103, ARDR 104L*) This course introduces general drafting theory and techniques needed to produce working drawings and related contract documents for residential structures. The development of graphic skills is emphasized. The student also learns to use manufacturers' technical data and standard reference works in developing drawings.

ARDR 102—Architectural Mathematics (3 cr)
This course covers basic concepts of algebra and geometry with emphasis on architectural and engineering applications and calculator usage.

ARDR 103—Residential Materials and Methods (3 cr)
Properties of building materials are related to building design and construction methods. Blueprint reading, zoning, building codes, material estimates, energy conservation, and alternative building technologies are covered. The student learns the City of Albuquerque's requirements for obtaining a building permit.

ARDR 104L—Introduction to CAD (1 cr)
(*Corequisite: ARDR 101L*) This course includes an introduction to the microcomputer and its operating system, text and basic concepts in computer assisted drafting (CAD).

ARDR 111L—Architectural Drafting (8 cr)
(*Prerequisite: ARDR 101L; corequisites: ARDR 112, ARDR 113, ARDR 114L*) The student's drafting skills are expanded to include the style and media commonly used in architects' offices. Students produce selected working drawings for light commercial structures using appropriate professional reference materials to solve typical problems.

ARDR 112—Architectural Trigonometry (3 cr)
(Prerequisite: ARDR 102) This course uses a calculator approach to trigonometry that includes architectural applications such as site planning.

ARDR 113—Commercial Design Development (3 cr)
(Prerequisites: ARDR 101L, ARDR 103) This course follows the sequence of critical decisions that take a commercial project from conceptual design to detailed architectural drawings. These decisions include site development, code compliance, setting vertical dimensions, and the selection of wall, floor and ceiling systems. Typical light commercial construction materials and detailing are explained throughout and illustrated with example blueprints and specifications.

ARDR 114L—Architectural CAD (1 cr)
(Prerequisite: ARDR 104L; corequisite: ARDR 111L) The student builds on CAD skills developed in Introduction to CAD. Intermediate drawing and editing commands are learned and electronic spreadsheets are introduced.

ARDR 115—Energy Systems (3 cr)
(Prerequisites: ARDR 101L, ARDR 103) This course teaches the use of current energy conservation techniques including passive solar design. Concepts covered include comfort zones, building orientation, heat transfer, thermal mass and overall efficiency calculations. The student applies these techniques to an original residential design.

ARDR 171—Architectural Design (3 cr)
This course includes two and three dimensional abstract exercises that teach basic design concepts. These principles are applied to various built environment circumstances. Sketch drawings and study models are made to develop and explain the application of selected design concepts.

ARDR 172—Architectural Rendering (3 cr)
Techniques in architectural rendering and illustration are explored. Students work with axonometric and perspective drawings in a variety of media such as pencil sketching, inking and color.

ARDR 173—Technical Sketching (3 cr)
This course encourages students to develop visual 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 various black and white media.

ARDR 201L—Structural Drafting (8 cr)
(Prerequisite: ARDR 111L; corequisites: ARDR 202, ARDR 204L, ARDR 206, ARDR 217) Students are introduced to the drafting styles and conventions used in consulting engineers' offices. They develop representative drawings of precast and site cast concrete, structural steel and heavy timber structures. Blueprint reading and the development of appropriate graphic skills using a variety of media are emphasized.

ARDR 202—Structural Mathematics (3 cr)
(Prerequisites: ARDR 111L, ARDR 112) This course covers the basic principles of physics as they apply to construction and structural analysis. The student is introduced to structural design in wood, steel and concrete. Students learn to set up and solve elementary beam design problems.

ARDR 204L—Structural CAD (1 cr)
(Prerequisite: ARDR 114L; corequisite: ARDR 201L) Intermediate CAD drawing and editing skills are expanded, and structural drafting applications are developed. Three dimensional views are introduced.

ARDR 206—Structural Detailing (3 cr)
(Prerequisite: ARDR 111L) This class introduces typical fabricating shop practices for structural steel, reinforcing steel and precast concrete. Preparation of both erection and production drawings is presented; the notational conventions and graphic standards of shop detailing are emphasized. Blueprint reading and extensive use of industry manuals are required.

ARDR 211L—M/E Systems Drafting (6 cr)
(Prerequisite: ARDR 201L; corequisites: ARDR 213, ARDR 214L) The student learns conventional drafting methods of mechanical and electrical systems. This includes overlaying electrical, heating, ventilation and plumbing systems on architectural views. Engineering drawings are developed and engineering graphic skills are expanded with emphasis on inking techniques.

ARDR 213—M/E Systems Analysis (6 cr)
(Prerequisites: ARDR 115, ARDR 201L) This theory course presents general and layout information and code requirements for commercial systems. Topics include power and lighting, plumbing and air conditioning. Microprocessor software applications are used to expedite the design process.

ARDR 214L—M/E Systems CAD (3 cr)
(Prerequisite: ARDR 204L; corequisites: ARDR 211L, ARDR 213) The student develops complete engineering drawings of mechanical and/or electrical systems on the computer. Isometric system drawings and installation details are included.

ARDR 217—Project Management (3 cr)
(Prerequisites: ARDR 111L, ARDR 113) This course includes the discussion of contracts, fees, bidding and construction administration. Structural drawings in steel and concrete are used to illustrate the coordination among architect, fabrication firm and general contractor. Principles of cost estimation and project scheduling are introduced with special reference to heavy construction projects. Typical structural materials and processes are explained throughout.

ARDR 271—Construction Management (3 cr)
(Prerequisite: ARDR 101L; corequisite: ARDR 113) 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 each. Students analyze how well and widely these systems are used in industrial, utility and commercial segments of construction. Microcomputer software is used where applicable.

ARDR 272—Computer Estimating (3 cr)
(Prerequisite: ARDR 101L; corequisite: ARDR 113) Determination of probable costs of construction projects is emphasized. Topics include making quantity take-offs, determining local unit costs and job scheduling. Microcomputer software is used extensively.

See also the common support course descriptions on page 64.

Civil and Surveying Technology

Certificate Program
4 Terms, Main Campus

Civil and Surveying Technology provides students with job-entry skills as surveyors, cartographic technicians and design (civil) drafters. Positions are with surveying, mining, engineering and drafting organizations.

The program uses labs that contain modern drafting machines, drafting stations, theodolites, levels, total stations and electronic distance meters. A minicomputer with work stations, digitizers, graphics CRTs and plotters also is used.

To earn a certificate, students must complete successfully 1680 hours of which 1035 are laboratory work and 645 are related theory.

The program requires that instructional hours in the plane surveying course be alternated in Terms II and IV. During those terms, students attend classes up to seven hours two days a week and four hours the remaining days.

Students must pay a $45 personal equipment fee when taking C&S 101L and another $40 when taking C&S 111. A grade of C or better in each Civil and Surveying Technology course is required for a certificate.

Note: Students are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during term one.

CIVIL AND SURVEYING TECHNOLOGY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
'BA	111	Communications (7½ weeks)..	5	2
'BA	131	Human Relations (7½ weeks) .	5	2
C&S	101L	Civil and Surveying Lab/ Theory I.....	15	9
C&S	102	Civil and Surveying Mathematics I.....	10	6
Term II				
C&S	111	Cartographic Techniques Lab/ Theory	15	9
C&S	112	Civil and Surveying Mathematics II.....	5	3
C&S	113	Plane Surveying I.....	6	3
Term III				
C&S	203L	Plane Surveying II.....	9	5
C&S	204L	Photogrammetric Techniques Lab/Theory	3	1
C&S	206	Boundary Law and Public Land Surveys	5	3
C&S	207L	Computer-Assisted Civil Drafting	3	3
C&S	215	BASIC Language Programming	10	6
Term IV				
C&S	211L	Civil Design Lab/Theory	15	9
C&S	213L	Plane Surveying III	6	3
C&S	218	Technical and Legal Communications	5	3
		Totals	1680	67
Support Course				
C&S	273	Introduction to Computer Assisted Drafting.....		2

'*Course descriptions on page 64.*

COURSE DESCRIPTIONS

C&S 101L—Civil and Surveying Lab/Theory I (9 cr)
This course introduces general drafting theory and techniques needed to produce a variety of engineering drawings and survey maps. Emphasis is on development of graphic skills and freehand lettering. The student also learns to trace from rough sketches and manuscripts and develop maps from field notes.

C&S 102—Civil and Surveying Mathematics I (6 cr)
This course applies algebra, geometry and numerical trigonometry concepts to the surveying field. A computer-related course could be substituted for part of the math course with permission of the program advisor.

C&S 111—Cartographic Techniques Lab/Theory (9 cr)
(*Prerequisite: C&S 101L*) This course includes an introduction to mapping followed by practice in inking lines and lettering on vellum and drafting film. Tracings are made of topographic, geological and plan/profile maps. Format development precedes techniques and practice in negative scribing, and preparation and reproduction of mechanical separations.

C&S 112—Civil and Surveying Mathematics II (3 cr)
(*Prerequisite: C&S 102*) Trigonometry is related in detail to surveying and civil problems. The course includes traversing, adjustments, area calculations, intersections and partitioning.

C&S 113—Plane Surveying I (3 cr)
(*Corequisite: C&S 112*) The student learns basic techniques and equipment used in surveying including tape, level, theodolite and engineering transit. Field work and related computations are done in leveling, distance and angle measurement and traversing related to mapping.

C&S 203L—Plane Surveying II (5 cr)
(*Prerequisites: C&S 112, C&S 113*) Instruction includes practice in the use of one-second theodolites, EDMs and total stations, precise leveling, stadia surveys, control surveys, computerized surveying systems and computer data reduction. Field observations and office calculations for determining azimuth by solar observation are included, and a retracement of a U.S. Public Land survey is conducted.

C&S 204L—Photogrammetric Techniques Lab/Theory (1 cr)
(*Prerequisite: C&S 111*) This course includes theory in aerial photography, geometry of single vertical photographs and overlapping aerial photos, flight planning and establishment of ground control. Students learn the use of modern stereoscopic plotting instruments and map compilation leading to the preparation of maps from aerial photos.

C&S 206—Boundary Law and Public Land Surveys (3 cr)
(*Prerequisite: C&S 112*) A study of modern surveying methods is related to resurveys of U.S. Public Lands, corner restoration and researching GLO plats and field notes. Boundary survey law and techniques are introduced. Extensive practice in the use of the National Geodetic Survey (NGS) Horizontal and Vertical Networks and the New Mexico State Coordinate System is provided along with training in law library use and courthouse record research.

C&S 207L—Computer-Assisted Civil Drafting (3 cr)
(*Prerequisites: C&S 112, C&S 113; corequisite: C&S 204L*) The student learns how to operate the digitizer, plotter and graphics CRT using the CAST system. The input of coordinates, boundary or subdivision points from the keyboard or from COGO output is followed by the creation of label, text and annotation files and drafting sequences for plotted finished drawings.

C&S 211L—Civil Design Lab/Theory (9 cr)
(*Prerequisite: C&S 204L; corequisites: C&S 213L, C&S 218*) Students practice development and calculation techniques to analyze route surveys and produce highway, utility plan and profile drawings. An original subdivision, including drainage plans, is designed to subdivision ordinance specifications.

C&S 213L—Plane Surveying III (3 cr)
(*Prerequisites: C&S 203L, C&S 206*) Included are grid and radial topographic surveys; GPS surveys; horizontal and vertical curve calculations, design and layout; earthwork measurements; fluid mechanics; and design of a sanitary sewer system.

C&S 215—BASIC Language Programming (6 cr)
(*Prerequisite: C&S 112*) This introduction to BASIC includes the use of input and output statements, arithmetic operations, comparison and branching commands, use of subroutines and library functions. Algorithms and programs associated with surveying and engineering computations are developed.

C&S 218—Technical and Legal Communications (3 cr)
(*Prerequisite: C&S 206; corequisite: C&S 211L*) Reading, writing and speaking skills are developed through practice in writing and interpreting land descriptions and interpretation and application of codes and specifications related to subdivision and design ordinances.

C&S 273—Introduction to Computer Assisted Drafting (2 cr)
Microcomputer CAD hardware and software are introduced including format and execution of basic command verbs; creation, editing and saving of drawing files; and generation of hardcopy output.

See also the common support course descriptions on page 64.

Data Processing Technology

Certificate Program
4 Terms, Main and Montoya Campuses

In this program, students learn to solve information and management problems using computer hardware. Graduates are prepared for jobs as business applications programmers, which can be the first step in a career in the computer field.

Computers currently used at T-VI are the IBM 4361, disk drives, tape drives, 3278 CRT displays, printer and reader, and a variety of microcomputers.

The first and second terms give students a sound background in fundamental skills used on a wide variety of computer and computer-related equipment. The third and fourth terms continue to build computer application skills with emphasis on problem-solving techniques and the man-machine interface. Microprocessor and mainframe environments are used in teaching five widely used programming languages, with a number of computer languages offered as optional courses. A grade of C or better in each Data Processing Technology course is required for a certificate.

To earn a certificate, students must complete successfully 1650 instructional hours of which 825 are laboratory work and 825 are related theory.

Students must pay a supply fee at the beginning of each term for some courses. (See page 16.)

Note: Students are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during the first term.

DATA PROCESSING TECHNOLOGY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
[1]BA	111	Communications (7½ weeks)	5	2
[1]BA	131	Human Relations (7½ weeks)	5	2
DP	101L	ANSI COBOL	10	6
DP	102	Introduction to Computers/JCL	5	3
DP	103	Computer Mathematics I	5	3
DP	104	Data Processing Accounting I	5	3
Term II				
DP	111L	Advanced ANSI COBOL	10	6
DP	112L	VSE JCL/VSAM Utilities	10	6
DP	113	Computer Mathematics II	5	3
DP	114	Data Processing Accounting II	5	3
Term III				
DP	201L	Programming Techniques	5	3
DP	205L	Assembler Language Programming	10	6
DP	206L	BASIC Language Programming	5	3
DP	207	Business Systems Analysis and Design	5	3
Term IV				
DP	208L	Report Program Generator II	5	3
DP	211L	Programming Projects	5	3
DP	215L	Computer System Software	5	3
DP	218	Database Concepts	5	3
DP	219L	C Language Programming	5	3
		Totals	1650	67
Support Courses				
DP	172L	Fortran Programming	5	3
DP	173L	Pascal Programming	5	3
DP	217	Operating Systems Design and Implementation	5	3
DP	220	ADA Language Programming	5	3

[1]*Course descriptions on page 64.*

COURSE DESCRIPTIONS

DP 101L—ANSI COBOL (6 cr)
(*Corequisite: DP 102*) Structured programming projects directly related to business and accounting applications are designed, coded, debugged and executed using a mainframe or microcomputer.

DP 102—Introduction to Computers/Job Control Language (JCL) (3 cr)
Instruction is provided in computer vocabulary, logic and control, and structured programming techniques including hierarchy charts and topdown planning. Also included are utilities, sorts and JCL for mainframe and microcomputer systems.

DP 103—Computer Mathematics I (3 cr)
Algebra fundamentals are covered in this course along with selected business and management math applications. Microcomputers are used to assist in the instructional process.

DP 104—Data Processing Accounting I (3 cr)
Students learn data accounting theory, practice and terms, and their relation to computer data processing.

DP 111L—Advanced ANSI COBOL (6 cr)
(*Prerequisite: DP 101L*) This course continues development of programming skills in the ANSI COBOL language with emphasis on indexed file processing, file update and subprogram concepts. Programming is done on mainframes and microcomputers.

DP 112L—VSE JCL/VSAM/Utilities (6 cr)
(*Prerequisites: DP 101L, DP 102*) IBM DOS/VSE Job Control, Editor, Power, Job Entry System, Procedures, Utilities and VSAM File Structures are studied.

DP 113—Computer Mathematics II (3 cr)
(*Prerequisite: DP 103*) This course continues the development of algebra, business math skills and introductory statistics. Elementary BASIC programs are used to teach formulas on microcomputers.

DP 114—Data Processing Accounting II (3 cr)
(*Prerequisite: DP 104*) Students learn the vocabulary and concepts used in manufacturing and corporation accounting. Emphasis is placed on computerized accounting on microcomputers.

DP 172L—FORTRAN Programming (3 cr)
This is an introductory course in FORTRAN IV computer programming.

DP 173L—Pascal Programming (3 cr)
This class uses microcomputers and covers the Pascal language for personal or mainframe computers

DP 201L—Programming Techniques (3 cr)
(*Prerequisites: DP 111L, DP 112L*) This course involves development of an interactive, on-line business application using a commercial screen generator, plus VSAM file handling and command level CICS.

DP 205L—Assembler Language Programming (6 cr)
(*Prerequisites: DP 111L, DP 112L*) Students learn programming techniques necessary to write Assembler language programs.

DP 206L—BASIC Language Programming (3 cr)
(*Prerequisite: DP 102*) This course uses the BASIC language to further the student's knowledge of interactive programming, routines using menu selection, and search and retrieval routines. Also covered are file structures, database techniques, statistics, management methods and string manipulations. Mainframe and/or microcomputers are used.

DP 207—Business Systems Analysis and Design (3 cr)
(*Prerequisites: DP 111L, DP 114*) This course teaches structured techniques of systems analysis and design. The systems life cycle is presented and several methods of analyzing existing systems are covered. Microcomputers are used to write documentation and run project management software.

DP 208L—Report Program Generator II (3 cr)
(*Prerequisite: DP 112L*) Students are introduced to the RPG II programming language used in business organizations.

DP 211L—Programming Projects (3 cr)
(*Prerequisites: All Term I, II and III courses*) This course is a continuation of Programming Techniques with emphasis on individualized or group data processing projects.

DP 215L—Computer System Software (3 cr)
(*Prerequisite: DP 205L*) This course covers topics designed to increase understanding of the use of microcomputers. This includes the study of operating systems, macro assembler programming, and microcomputer software packages.

DP 217—Operating Systems Design and Implementation (3 cr)
(*Prerequisite: DP 112L*) This course covers the theory of computer operating systems and introduces the student to the concepts of the Unix operating system.

DP 218—Database Concepts (3 cr)
(*Prerequisites: DP 112L, DP 201L, DP 207*) General concepts and organization of database systems are included along with practical application of Database Management Systems through the use of networks, telecommunication lines and hardware. Mainframe and/or microcomputers are used.

DP 219L—C Language Programming (3 cr)
(*Prerequisite: DP 205L*) This course is an introduction to C programming language using microcomputers.

DP 220—ADA Language Programming (3 cr)
(*Prerequisite: DP 201L*) This is an introductory course in ADA language programming.

See also the common support course descriptions on page 64.

Design Drafting Engineering Technology

Associate Degree
4 Terms, Main Campus

Design Drafting Engineering Technology is a complex field of drafting for persons with a strong interest in electronics and mechanical design. The program, which results in an associate in applied science degree, contains an equal amount of time spent on electrical/electronic drafting concepts and mechanical drafting concepts.

The program also 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 using microcomputers and state-of-the-art software.

A well-rounded curriculum enables graduates to seek employment with engineering and scientific research organizations. Modern drafting stations, drafting machines and other typical drafting equipment are used along with microcomputers.

For admittance to the program, ACT scores of 17 in English and 12 in mathematics are required. Scores of 18 in natural sciences and 14 in social sciences are recommended. For further admission information, see the section on admission policies.

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 calculator.

DESIGN DRAFTING ENGINEERING TECHNOLOGY PROGRAM

			Cr Hrs
Term I			
DDET	101L	Introduction to Technical Drafting	3
DDET	102L	Manufacturing Methods	3
DDET	103L	Basic CADD	1
*ENG	101	Writing with Readings in Exposition	3
*MATH	121	College Algebra	3
or			
*MATH	150	Advanced Algebra	3
		*Humanities/Social Science Elective	3
Term II			
*CSCI	155	Introduction to Programming	4
DDET	111L	Mechanical Detailing	3
DDET	112L	Basic Electronic Drafting	2
DDET	113L	Intermediate CADD	1
*ENG	119	Technical Communications	3
*MATH	162	Calculus I	4
or			
*MATH	180	Elementary Calculus	3
Term III			
DDET	201L	Descriptive Geometry	3
DDET	202L	Applied Electronic Drafting	2
DDET	203L	Advanced CADD	1
DDET	204L	Machine Design Layout	3
*PHYS	151/		
	153L	General Physics/Lab	4
or			
*PHYS	160	General Physics	4
		*Humanities/Social Science Elective	3

Term IV

*CHEM	111/ 112L	Introduction to Chemistry/Lab	4
or			
*CHEM	121L	General Chemistry	4
DDET	211L	Electromechanical Drafting	3
DDET	212	Applied Engineering Mechanics	3
DDET	213L	Technical Computer Applications	1
DDET	214	Manufacturing Materials	3
		*Humanities/Social Science Elective	3
		Total	65–66

Support Courses

DDET	296	Special Projects	1–3
DDET	299	Cooperative Training	3–6
[1]DP	174L	BASIC Language Programming	3
[1]DP	175L	C Language Programming	3
[2]ELEC	103L	Electronics Fundamentals	9
[2]ELEC	105L	Digital Circuits	3
MATT	170	Basic Tool	3

**Arts and Sciences courses. Course descriptions on pages 23–29.*

[1]*Course descriptions on page 64.*

[2]*Course descriptions on page 73.*

COURSE DESCRIPTIONS

DDET 101L—Introduction to Technical Drafting (3 cr)
This course is an introduction to fundamental drafting techniques including proper care and use of drafting equipment, lettering, sketching, linework, scaling, geometric construction, orthographic projection, sections and conventions.

DDET 102L—Manufacturing Methods (3 cr)
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 methodology.

DDET 103L—Basic CADD (1 cr)
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 hardcopy output.

DDET 111L—Mechanical Detailing (3 cr)
(*Prerequisite: DDET 101L*) 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.

DDET 112L—Basic Electronic Drafting (2 cr)
(*Prerequisite: DDET 101L*) This course presents electronic drafting fundamentals including symbolic representation of electronic components and devices, block and connection diagramming, cable drawings and circuit schematics.

DDET 113L—Intermediate CADD (1 cr)
(*Prerequisite DDET 103L*) The student continues use of CADD software in an applied situation. Advanced drawings include insertions, layering, auto-dimensioning, attributes, constructing library files and developing wireframe models.

DDET 201L—Descriptive Geometry (3 cr)
A graphical analysis of the relationship between points, lines and planes in space is presented.

DDET 202L—Applied Electronic Drafting (2 cr)
(*Prerequisite: DDET 112L*) This course introduces electronic drafting techniques unique to printed circuit board design including development of both discrete and integrated component layouts, artwork, fabrication and assembly drawings and chassis design.

DDET 203L—Advanced CADD (1 cr)
(*Prerequisite: DDET 113L*) Students produce complete technical drawings by merging principles of CADD with standard drafting rules and conventions.

DDET 204L—Machine Design Layout (3 cr)
(*Prerequisite: DDET 111L*) Students apply machine element principles to machine design 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. Layout formats are assembled.

DDET 211L—Electromechanical Drafting (3 cr)
(*Prerequisites: DDET 202L, DDET 204L*) This course involves the design and drafting of electromechanical systems using combined concepts learned and practiced in previous machine and electronics drafting courses.

DDET 212—Applied Engineering Mechanics (3 cr)
(*Prerequisites: MATH 162 or MATH 180, PHYS 151/153L or PHYS 160*) This course analyzes the forces on mechanical elements at rest and in motion. The study of statics and dynamics also is included.

DDET 213L—Technical Computer Applications (1 cr)
(*Prerequisite: DDET 203L*) Students use the computer to solve engineering and related problems.

DDET 214—Manufacturing Materials (3 cr)
Students analyze and evaluate the engineering characteristics of materials used in modern manufacturing technology in typical applications.

DDET 296—Special Projects (1–3 cr)
(*Corequisites: All Term IV courses and permission from the department dean*) The student is given a problem to investigate and solve. The student then designs and drafts the solution using a combination of drafting techniques.

DDET 299—Cooperative Training (3–6 cr)
(*Prerequisites: All Term IV courses*) In cooperation with local industry, the student works for one term on a cooperative basis in an appropriate training program.

MATT 170—Basic Tool (3 cr)
This course familiarizes students with the functional world of manufacturing and industry. Subject matter covers types, applications and use of hand and power tools; types, applications and specifications of common hardware; measuring equipment and inspection techniques; clearances, tolerances, fit and allowances; machine tool operation and applications including drilling, grinding, milling, turning, tapping and boring.

See also the common support course descriptions on page 64.

Electromechanical Drafting Technology

Associate Degree
Main Campus

This associate in applied science degree is offered to students who have graduated from the Electromechanical Drafting certificate program within the last four years.

ACT scores of 17 in English and 12 in mathematics are required for admission to the program. Scores of 18 in natural sciences and 14 in social sciences are recommended. For further admission information, see the section on admission policies.

To earn the degree, students must complete 19 or 20 credit hours of Arts and Sciences courses and the two technical courses listed below. Students may be required to take additional technical courses. Further information on this program is available from the program counselor for the Technologies Department.

Note: Persons wanting to begin studies in this field should refer to the Design Drafting Engineering Technology program on page 70.

ELECTROMECHANICAL DRAFTING DEGREE COMPLETION PROGRAM

Arts and Sciences Requirements (19–20 cr)

Communications			
*ENG	101	Writing with Readings in Exposition	3
*ENG	119	Technical Communications	3
Mathematics/Natural Science			
*MATH	121	College Algebra	3
or			
*MATH	150	Advanced Algebra	3
*MATH	162	Calculus I	4
or			
*MATH	180	Elementary Calculus	3
*PHYS	151/ 153L	Physics/Lab	4
or			
*PHYS	160	General Physics	4
Humanities/Social Science			
*Elective			3
		Total	19–20

Additional Core Requirements (6 cr)

DDET	291	Advanced CADD	3
DDET	296	Special Projects	3
		Total	6

*Course descriptions on pages 23–29.

COURSE DESCRIPTIONS

DDET 291—Advanced CADD (3 cr)
This course involves project work using advanced CADD concepts. The projects are in the field of electromechanical drafting.

DDET 296—Special Projects (3 cr)
(Prerequisite: Completion of the Electromechanical Drafting program and permission from the department dean) The student is given a problem in the area and asked to do a complete investigation and come up with the correct solution. The student designs the solution using a combination of drafting techniques.

Electronics Technology

Associate Degree/Certificate Program
4 Terms, Main Campus

The Electronics Technology program, which offers both certificate and associate degree options, provides the student with a broad base of skills in analog and digital circuits.

Training is provided in the fundamental concepts of electronics with emphasis on digital equipment such as computers and electronic control devices. Circuits which have application in the semiconductor, digital equipment manufacturing, measurement and control, communications and display industries are studied.

Lab 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.

For a certificate in Electronics, the student must complete successfully 1650 hours of which 1025 hours are laboratory work and 625 are theory. To qualify for an electronics communications endorsement on the certificate, the student must complete an additional 150 hours in RF Fundamentals and Telecommunications.

The associate in applied science degree program provides graduates with additional science and technical skills for the support of engineering activities. For admittance to the degree program, ACT scores of 17 in English and 12 in mathematics are required. Scores of 18 in natural sciences and 14 in social sciences are recommended.

Certificate program graduates who want to earn

a degree must fulfill the Arts and Sciences and residency requirements, and satisfy core requirements according to the catalog in effect when the degree work was started. A grade of C or better in each electronics course is required for a degree or certificate.

There is a $10 supply fee for ELEC 116.

Note: Certificate program students are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during the first term.

ELECTRONICS TECHNOLOGY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
†BA	111	Communications (7½ weeks)	5	2
†BA	131	Human Relations (7½ weeks)	5	2
ELEC	103L	Electronics Fundamentals	15	9
ELEC	104	Electronics Mathematics	5	3
ELEC	105L	Digital Circuits	5	3
*ENG	119	Technical Communications		3
		*Humanities/Social Science Elective		3
Term II				
ELEC	115L	Semiconductor Devices	10	6
ELEC	116	Introduction to Microcomputers	5	3
ELEC	117	Introduction to Lasers	5	3
ELEC	118L	Electromechanical Devices	10	6
*MATH	162	Calculus I		4
or				
*MATH	180	Elementary Calculus		3
Term III				
ELEC	202L	Electronic Circuits	10	6
ELEC	203L	Introduction to Microprocessors	10	6
ELEC	204L	Introduction to Computer Programming	5	3
*PHYS	151/153L	Physics/Lab		4
or				
*PHYS	160	General Physics		4
Term IV				
*CHEM	111/112L	Introduction to Chemistry/Lab		4
or				
*CHEM	121L	General Chemistry		4
ELEC	212L	Electronic Applications	10	6
ELEC	214L	Troubleshooting Techniques	5	3
ELEC	215L	Advanced Microprocessors	10	6
		Totals	1650	84/85
Support Courses				
ELEC	271	RF Fundamentals	5	3
ELEC	272	Telecommunications	5	3
ELEC	274L	Soldering Techniques (7½ weeks)	5	2
ELEC	275L	Industrial Systems (7½ weeks)	5	2

Arts and Sciences courses required for associate degree. Course descriptions on pages 23–29.
†*Course descriptions on page 64.*

COURSE DESCRIPTIONS

ELEC 103L—Electronics Fundamentals (9 cr)
(*Corequisite: ELEC 104 or strong mathematics background*) This course covers the basic concepts of DC and AC electronics with emphasis on Kirchhoff's Law, circuit analysis and component application with troubleshooting. Students obtain skills in constructing circuits from schematic diagrams and in the use of oscilloscopes, function generators and multimeters in laboratory exercises.

ELEC 104—Electronics Mathematics (3 cr)
This course covers algebra and trigonometry with emphasis on DC and AC circuit analysis.

ELEC 105L—Digital Circuits (3 cr)
(*Corequisite: ELEC 104 or strong mathematics background*) The fundamental concepts and applications of digital logic circuits are covered. Number systems and arithmetic operations are studied. Boolean algebra is applied to combinational logic. The basic logic gates and MSI and LSI circuits are used to develop operational digital circuits.

ELEC 115L—Semiconductor Devices (6 cr)
(*Prerequisites: ELEC 103L, ELEC 104*) This course covers the study of semiconductor devices, diodes, transistors, op amps and JFETS, and their application in simple power supplies and amplifiers. Students obtain skills in constructing, analyzing and troubleshooting semiconductor circuits.

ELEC 116—Introduction to Microcomputers (3 cr)
(*Prerequisites: ELEC 103L, ELEC 105L*) This course covers microcomputer architecture, MS-DOS, word processing, digital and analog circuit analysis software, computer assisted drafting and an introduction to computer programming.

ELEC 117—Introduction to Lasers (3 cr)
(*Prerequisites: ELEC 103L, ELEC 104*) This course introduces the student to the basic operation of the laser. The helium neon laser is used to discuss the nature of light, laser operation and laser safety.

ELEC 118L—Electromechanical Devices (6 cr)
(*Prerequisites: ELEC 103L, ELEC 105L*) This course covers theory and application of mechanical devices and their control circuits. Topics include hydraulics, pneumatics, vacuum, AC and DC stepper motors and servomechanisms. Students obtain skills in the assembly, operation and troubleshooting of small-scale electromechanical systems.

ELEC 202L—Electronic Circuits (6 cr)
(*Prerequisite: ELEC 115L*) Multiple class amplifier circuits, oscillator, signal-conditioning, modulation including receiver circuits, operational amplifiers and A/D, D/A circuits are covered in this course. Students develop, analyze and troubleshoot these circuits in laboratory exercises.

ELEC 203L—Introduction to Microprocessors (6 cr)
(*Prerequisite: ELEC 118L*) The organization of a microcomputer is explained using a block diagram consisting of the 8088 CPU, memory and I/O devices. The importance of the interconnections, address bus, data bus and control signals is emphasized. Students also write assembly language programs to interface their wired circuit boards to the microcomputer. An EPROM is included within the circuits.

ELEC 204L—Introduction to Computer Programming (3 cr)
(*Prerequisite: ELEC 116L*) The student learns to program using the Pascal programming language.

ELEC 212L—Electronic Applications (6 cr)
(*Prerequisite: ELEC 202L*) Students learn applications of switched-mode power supplies, thyristors, various types of transducers and instrumentation for data collection, fiber optics and optoelectronic devices. Related laboratory exercises provide experience in constructing and troubleshooting operating electronic systems.

ELEC 214L—Troubleshooting Techniques (3 cr)
(*Corequisite: ELEC 202L*) This course teaches students to apply troubleshooting techniques to a complete electronic system. Emphasis is on systematic analysis to locate problems.

ELEC 215L—Advanced Microprocessors (6 cr)
(*Prerequisite: ELEC 203L; corequisite: ELEC 212L*) This course introduces the student to programming under MS-DOS. The student writes programs and wires circuits to interface with the computer for an ASCII keyboard, printer, ADCs, DACs, and several serial devices including robotic devices. Modems also are demonstrated.

ELEC 271—RF Fundamentals (3 cr)
(*Prerequisite: ELEC 115L*) This course provides study and analysis of electromagnetic interference and broadcast communications systems including AM, FM, SSB and television.

ELEC 272—Telecommunications (3 cr)
(*Prerequisite: ELEC 271*) This course provides system of transmission line, antenna and microwave theory, and data communication techniques including USARTS, RS-232 interfacing and modems.

ELEC 274L—Soldering Techniques (7½ weeks) (2 cr)
Students use a top repair center to learn high-reliability soldering and desoldering techniques. Nondestructive printed circuit board repairs and component replacement techniques also are used.

ELEC 275L—Industrial Systems (7½ weeks) (2 cr)
(*Prerequisites: ELEC 115L, ELEC 118L*) A plasma etcher is used to introduce students to industrial systems. By analyzing the machine's subsystems and how they interact, students troubleshoot for solutions to equipment and process problems.

See also the common support course descriptions on page 64.

Electronics Engineering Technology

Associate Degree
4 Terms, 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, lab work and considerable homework provide the basis for developing the necessary electronics skills to gain employment in a broad occupational area at levels between the electronics technician and the electrical engineer.

Lab 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 have high standards of excellence.

For the Associate in Applied Science Degree in Electronics Engineering Technology, the student must complete a total of 69 credit hours in Arts and Sciences and technical courses.

For admittance to the program, ACT scores of 17 in English and 12 in mathematics are required. Scores of 18 in natural sciences and 14 in social

sciences are recommended. For further admission information, see the section on admission policies.

A grade of C or better in each electronics engineering course is required for a degree.

Students in this program are required to purchase all textbooks, laboratory manuals, calculator and drafting tool kit.

ELECTRONICS ENGINEERING TECHNOLOGY PROGRAM

			Cr Hrs
Term I			
*ENG	101	Writing with Readings in Exposition	3
ET	109L	Circuit Analysis I	5
ET	117L	Graphics and Analytical Methods	3
*MATH	121	College Algebra	3
or			
*MATH	150	Advanced Algebra	3
Term II			
*CHEM	111/ 112L	Introduction to Chemistry/Lab	4
or			
*CHEM	121L	General Chemistry	4
*ENG	119	Technical Communications	3
ET	119L	Circuit Analysis II	5
ET	137L	Digital Electronics I	3
*MATH	162	Calculus I	4
or			
*MATH	180	Elements of Calculus I	3
Term III			
*CSCI	155	Introduction to Computer Programming	4
ET	209L	Electronic Devices	5
ET	237L	Digital Electronics II	3
ET	244L	Microprocessors	4
		*Humanities/Social Science Elective	3
Term IV			
ET	219L	Electronic Systems	4
ET	229L	Microprocessor Interfacing	4
*PHYS	151/ 153L	Physics/Lab	4
or			
*PHYS	160	General Physics	4
		*Humanities/Social Science Elective	3
		*Math/Science/Technical Elective	3
		Total	69/70
Term V (Optional)			
ET	230L	Cooperative Training	6
Technical Electives			
ET	211	Microprocessor Based Systems	3
ET	215	Telecommunications	3
ET	216	Robotics and Industrial Control Systems	3
ET	217	Power Systems	3
ET	218	Pulse Power	3

**Arts and Sciences courses. Course descriptions on pages 23–29.*

COURSE DESCRIPTIONS

ET 109L—Circuit Analysis I (5 cr)
(*Pre- or corequisites: ENG 101, ET 117L, MATH 150*) This course provides an introduction to electrical circuit elements and the basic methods for circuit analysis. Ohm's Law, Kirchhoff's Law, Mesh and Nodal analysis, Thevenin's and Norton's theorems, capacitance, inductance, and single time-constant circuits are covered.

ET 117L—Graphics and Analytical Methods (3 cr)
(*Corequisite: MATH 150*) The fundamentals of drawing room drafting practices, electrical circuit drawing, terms, symbols and standards are covered in this course. Also included is an introduction to computer-aided graphics using application programs. Techniques used to solve problems using a microprocessor along with graphical presentation of data using computer application programs are covered.

ET 119L—Circuit Analysis II (5 cr)
(*Prerequisite: ET 109L; corequisites: ENG 119, MATH 162*) The techniques for analysis of AC circuits, reactance, impedance, phasor analysis, power factor, and energy considerations are included in this course.

ET 137L—Digital Electronics I (3 cr)
(*Prerequisite: ET 109L*) The analysis and synthesis of combinational logic circuits, Boolean algebra, logic gates, Karnaugh Maps, MSI and LSI integrated circuits are covered in this course. Also included are the interpretation of logic diagrams and techniques of troubleshooting digital circuits.

ET 209L—Electronic Devices (5 cr)
(*Prerequisites: ET 119L and MATH 162*) This course is an introduction to the discrete and integrated circuit devices used in electronic circuits. Included are diodes, Junction and FET transistors, and operational amplifiers as they are used in electronic circuits.

ET 211—Microprocessor Based Systems (3 cr)
(*Corequisite: ET 229L*) This course integrates analog and digital electronics into the study of microprocessor based systems.

ET 215—Telecommunications (3 cr)
(*Prerequisite: ET 244L; corequisite: ET 229L*) Students learn data communication techniques and analog-to-digital applications. Topics studied include UARTS and USARTS, standards of interface such as RS232, protocols for interface, FSK and modems. Telephone switching systems and microwave transmission modes are introduced.

ET 216—Robotics and Industrial Control Systems (3 cr)
(*Prerequisites: All Term I and Term II courses*) This course includes the study and implementation of robot/industrial control systems. Industrial servo systems, both analog and hybrid, are covered. Position and velocity sensors and conversion techniques are included in hybrid servo control systems. The laboratory exercises support and enhance the classroom subject matter.

ET 217—Power Systems (3 cr)
(*Prerequisites: All Term I, Term II and Term III courses*) Analysis of power system parameters, load studies and fault calculations by digital computers are studied.

ET 218—Pulse Power (3 cr)
(*Pre- or corequisite: PHYS 151 or equivalent*) The generation, transmission and measurement of high voltage, pulsed power systems are studied.

ET 219L—Electronic Systems (4 cr)
(*Prerequisite: ET 209L*) The installation, maintenance, calibration and application of electronic systems are covered. Also included are the interpretation of reference material for electronic systems, system integration and checkout, automated data collection and writing technical manuals of instruction.

ET 229L—Microprocessor Interfacing (4 cr)
(*Prerequisites: All Term III courses*) A system of digital circuits is studied using a microcomputer. Interfacing and concepts projects are stressed.

ET 230L—Cooperative Training (6 cr)
(*Prerequisites: All Term IV courses*) In cooperation with local industry, students work in an appropriate training program on a cooperative basis for one term.

ET 237L—Digital Electronics II (3 cr)
(*Prerequisite: ET 137L*) Sequential logic circuits, MSI, LSI and VLSI integrated circuits are covered in this course along with counters, shift-registers, ALUs, memory and interface circuitry for microprocessors.

ET 244L—Microprocessors (4 cr)
(*Corequisites: ET 237L, ET 209L*) This course covers computers and microprocessors for Electronics Technology including the architecture, programming, input/output and applications.

See also the common support course descriptions on page 64.

Instrumentation and Control Technology

Associate Degree/Certificate Program
4 Terms, Main Campus

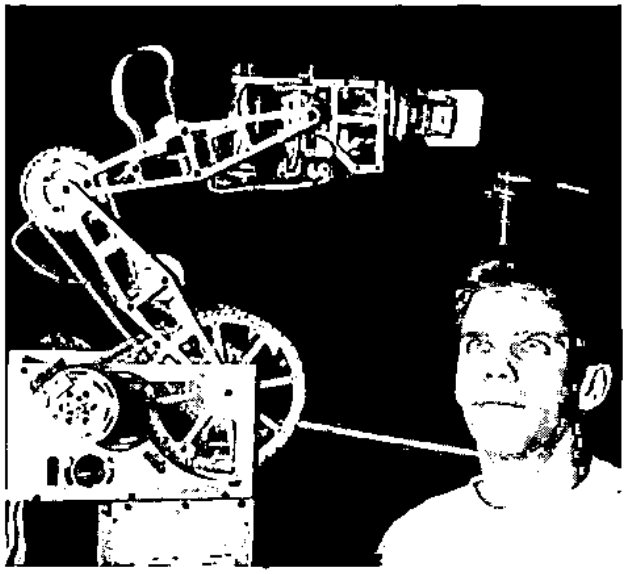
The Instrumentation and Control Technology program provides students with job-entry skills to troubleshoot and repair automated or process control equipment and instrumentation. Students may earn an associate degree or certificate.

Topics covered include digital and analog circuitry, microcomputers, electronic and pneumatic instrumentation, and robotics. The program meets in a modern laboratory containing electronic lab benches and test instruments, oscilloscopes, signal generators, power supplies, digital trainers, microcomputers, servo trainers, hydraulic-pneumatic and process control equipment, and a student shop area.

To qualify for a certificate, students must complete successfully 1725 instructional hours of which 875 are laboratory work and 850 are theory. To qualify for an electronics communications endorsement on the certificate, students must complete an additional 150 hours in RF Fundamentals and Telecommunications.

The associate in applied science degree program provides graduates with additional science and technical skills for the support of engineering activities. For admittance to the degree program, ACT scores of 17 in English and 12 in mathematics are required. Scores of 18 in natural sciences and 14 in social sciences are recommended.

Certificate program graduates who want to earn a degree must fulfill the Arts and Sciences and residency requirements, and satisfy core requirements according to the catalog in effect when the degree work was started. A grade of C or better in each electronics and instrumentation and control technology course is required for a degree or certificate.



There is a $10 supply fee for ELEC 116.

Note: Students seeking a certificate are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during the first term.

INSTRUMENTATION AND CONTROL TECHNOLOGY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
†BA	111	Communications (7½ weeks)	5	2
†BA	131	Human Relations (7½ weeks)	5	2
ELEC	103L	Electronics Fundamentals	15	9
ELEC	104	Electronics Mathematics	5	3
ELEC	105L	Digital Circuits	5	3
*ENG	119	Technical Communications		3
		*Humanities/Social Science Elective		3
Term II				
ELEC	115L	Semiconductor Devices	10	6
ELEC	116	Introduction to Microcomputers	5	3
ELEC	117	Introduction to Lasers	5	3
ELEC	118L	Electromechanical Devices	10	6
*MATH	162	Calculus I		4
or				
*MATH	180	Elementary Calculus		3
Term III				
*CHEM	111/ 112L	Introduction to Chemistry/Lab		4
or				
*CHEM	121L	General Chemistry		4
IC	202L	Linear Circuits	10	6
IC	203L	Control Circuits I	10	6
IC	204L	Introduction to Computer Programming	5	3
Term IV				
IC	212L	Computer I/O and Architecture	10	6
IC	213L	Control Circuits II	10	6
IC	214L	Instrumentation	10	6
*PHYS	151/ 153L	Physics/Lab		4
or				
*PHYS	160	General Physics		4
		Totals	1725	87–88
Support Courses				
ELEC	271	RF Fundamentals	5	3
ELEC	272	Telecommunications	5	3
ELEC	273L	Troubleshooting Techniques	5	3
ELEC	274L	Soldering (7½ weeks)	5	2

**Arts and Sciences courses required for associate degree. Course descriptions on pages 23–29.*
†Course descriptions on page 64.

COURSE DESCRIPTIONS

ELEC 103L—Electronics Fundamentals (9 cr)
(*Corequisite: ELEC 104 or strong mathematics background*) This course covers the basic concepts of DC and AC electronics with emphasis on Kirchhoff's Law, circuit analysis and component application with troubleshooting. Students obtain skills in constructing circuits from schematic diagrams and in the use of oscilloscopes, function generators and multimeters in laboratory exercises.

ELEC 104—Electronics Mathematics (3 cr)
This course covers algebra and trigonometry with emphasis on DC and AC circuit analysis.

ELEC 105L—Digital Circuits (3 cr)
(*Corequisite: ELEC 104 or strong mathematics background*) The fundamental concepts and applications of digital logic circuits are covered. Number systems and arithmetic operations are studied. Boolean algebra is applied to combinational logic. The basic logic gates and MSI and LSI circuits are used to develop operational digital circuits.

ELEC 115L—Semiconductor Devices (6 cr)
(*Prerequisites: ELEC 103L, ELEC 104*) This course covers the study of semiconductor devices, diodes, transistors, op amps and JFETS, and their application in simple power supplies and amplifiers. Students obtain skills in constructing, analyzing and troubleshooting semiconductor circuits.

ELEC 116—Introduction to Microcomputers (3 cr)
(*Prerequisites: ELEC 103L, ELEC 105L*) This course covers microcomputer architecture, MS-DOS, word processing, digital and analog circuit analysis software, computer assisted drafting and an introduction to computer programming.

ELEC 117—Introduction to Lasers (3 cr)
(*Prerequisites: ELEC 103L, ELEC 104*) This course introduces the student to the basic operation of the laser. The helium neon laser is used to discuss the nature of light, laser operation and laser safety.

ELEC 118L—Electromechanical Devices (6 cr)
(*Prerequisites: ELEC 103L, ELEC 105L*) This course covers theory and application of mechanical devices and their control circuits. Topics include hydraulics, pneumatics, vacuum, AC and DC stepper motors and servomechanisms. Students obtain skills in the assembly, operation and troubleshooting of small-scale electromechanical systems.

ELEC 271—RF Fundamentals (3 cr)
(*Prerequisite: ELEC 115L*) This course provides study and analysis of electromagnetic interference and broadcast communications systems including AM, FM, SSB and television.

ELEC 272—Telecommunications (3 cr)
(*Prerequisite: ELEC 271*) This course provides system of transmission line, antenna and microwave theory, and data communication techniques including USARTS, RS-232 interfacing and modems.

ELEC 273L—Troubleshooting Techniques (3 cr)
(*Prerequisites: ELEC 115L, ELEC 118L*) Students learn systems analysis of various electronic equipment. Emphasis is on locating problems. The course includes theoretical work to complement the laboratory assignments.

ELEC 274L—Soldering Techniques (7½ weeks) (2 cr)
Students use a top repair center to learn high-reliability soldering and desoldering techniques. Nondestructive printed circuit board repairs and component replacement techniques also are used.

IC 202L—Linear Circuits (6 cr)
(*Prerequisites: ELEC 115L, ELEC 118L*) This course covers operational amplifiers, audio and video amplifiers, oscillator circuits, modulation methods and thyristor components.

IC 203L—Control Circuits I (6 cr)
(Prerequisites: ELEC 115L, ELEC 118L; corequisite: IC 202L) The student learns to design and construct a computer-controlled robot. Assembly language using the 8088 microprocessor is covered, and several interfacing projects are done including motor control.

IC 204L—Introduction to Computer Programming (3 cr)
(Prerequisite: ELEC 116) The student learns to program using the Pascal programming language. Emphasis is on structured, top-down program construction. Program requirements include input and output formats, arrays and files. A simulation project is required using graphics techniques.

IC 212L—Computer I/O and Architecture (6 cr)
(Prerequisite: IC 203L) This course provides practical experience in microcomputer interfacing and architecture. Topics include interfacing projects involving keyboards, video monitors, UARTS, and analog to digital converters.

IC 213L—Control Circuits II (6 cr)
(Prerequisites: All Term III courses) Topics include robotics, Pascal applications programming, transducer/computer interfacing projects and thyristor motor controls. The PUMA industrial robot with VAL II control language also is covered.

IC 214L—Instrumentation (6 cr)
(Prerequisites: IC 202L, IC 203L) This course covers the theory of process control, voltmeters, oscilloscopes, linear and switching power supplies, signal generators and frequency counters. The accompanying lab involves instrument calibration and troubleshooting. The student learns proper soldering techniques.

See also the common support course descriptions on page 64.

Laser Electro-Optic Technology

Associate Degree/Certificate Program
4 Terms; Main and Montoya Campuses

The technology of lasers and electro-optics requires electronics, digital, laser and optics training for persons interested in a career in this rapidly growing industry. Lasers and electro-optic devices are used in a variety of areas including construction and excavation, welding and cutting operations, communications systems, laboratory testing and measurement, data processing, photography, medicine, military and space projects, and research and development.

Students may graduate with either a certificate or associate degree: To earn a certificate, students must complete successfully 1725 instructional hours of which 900 are laboratory work and 825 are related theory.

The associate in applied science degree program provides graduates with additional science and technical skills for the support of engineering activities. For admittance to the degree program, ACT scores of 17 in English and 12 in mathematics are required. Scores of 18 in natural sciences and 14 in social sciences are recommended.

Certificate program graduates who want to earn a degree must fulfill the Arts and Sciences residency requirements, and satisfy core requirements according to the catalog in effect when the degree work was started. A grade of C or better in each laser course is required for a degree or certificate.

Beginning students are admitted every other term. Terms I and II are taught at the Main Campus and Terms III and IV are taught at the Montoya Campus.

The program's facilities include modern classrooms and laboratories containing state-of-the-art lasers, lenses, mirrors and analytical test equipment.

There is a $10 supply fee for ELEC 116.

Note: Students seeking a certificate are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during the first term.

LASER ELECTRO-OPTIC TECHNOLOGY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
[1]BA	111	Communications (7½ weeks)..	5	2
[1]BA	131	Human Relations (7½ weeks) .	5	2
ELEC	103L	Electronics Fundamentals.....	15	9
ELEC	104	Electronics Mathematics.....	5	3
ELEC	105L	Digital Circuits.....	5	3
*ENG	119	Technical Communications		3
*MATH	162	Calculus I.....		4
or				
*MATH	180	Elementary Calculus		3
Term II				
ELEC	115L	Semiconductor Devices	10	6
ELEC	116	Introduction to Microcomputers	5	3
ELEC	117	Introduction to Lasers.....	5	3
ELEC	118L	Electromechanical Devices	10	6
*PHYS	151/			
	153L	Physics/Lab		4
or				
*PHYS	160	General Physics		4
Term III				
*CHEM	111/			
	112L	Introduction to Chemistry/Lab .		4
or				
*CHEM	121L	General Chemistry.....		4
LEOT	204L	Electronic Circuits.....	10	6
LEOT	205L	Advanced Laser Systems.....	5	3
LEOT	206	Optics	10	6
LEOT	208L	Introduction to Microprocessors.....	5	3
Term IV				
LEOT	212L	Vacuum System Technology...	2	1
LEOT	213L	Electronic Applications.....	3	1
LEOT	214L	Advanced Microprocessors	5	3
LEOT	217L	Advanced Laser Systems with Applications	10	6
LEOT	218L	Laser Measurements	5	3
		*Humanities/Social Science Elective		3
		Totals	1725	86–87
Support Courses				
ELEC	273L	Troubleshooting Techniques ...	5	3
ELEC	274L	Soldering (7½ weeks)	5	2
MATT	171	Basic Tool/CNC	5	3

**Arts and Sciences courses required for associate degree. Course descriptions on pages 23–29.*
[1]Course descriptions on page 64.

COURSE DESCRIPTIONS

ELEC 103L—Electronics Fundamentals (9 cr)
(Corequisite: ELEC 104 or strong mathematics background) This course covers the basic concepts of DC and AC electronics with emphasis on Kirchhoff's Law, circuit analysis and component application with troubleshooting. Students obtain skills in constructing circuits from schematic diagrams and in the use of oscilloscopes, function generators and multimeters in laboratory exercises.

ELEC 104—Electronics Mathematics (3 cr)
This course covers algebra and trigonometry with emphasis on DC and AC circuit analysis.

ELEC 105L—Digital Circuits (3 cr)
(Corequisite: ELEC 104 or strong mathematics background) The fundamental concepts and applications of digital logic circuits are covered. Number systems and arithmetic operations are studied. Boolean algebra is applied to combinational logic. The basic logic gates and MSI and LSI circuits are used to develop operational digital circuits.

ELEC 115L—Semiconductor Devices (6 cr)
(Prerequisites: ELEC 103L, ELEC 104) This course covers the study of semiconductor devices, diodes, transistors, op amps and JFETS, and their application in simple power supplies and amplifiers. Students obtain skills in constructing, analyzing and troubleshooting semiconductor circuits.

ELEC 116—Introduction to Microcomputers (3 cr)
(Prerequisites: ELEC 103L, ELEC 105L) This course covers microcomputer architecture, MS-DOS, word processing, digital and analog circuit analysis software, computer assisted drafting and an introduction to computer programming.

ELEC 117—Introduction to Lasers (3 cr)
(Prerequisites: ELEC 103L, ELEC 104) This course introduces the student to the basic operation of the laser. The helium neon laser is used to discuss the nature of light, laser operation and laser safety.

ELEC 118L—Electromechanical Devices (6 cr)
(Prerequisites: ELEC 103L, ELEC 105L) This course covers theory and application of mechanical devices and their control circuits. Topics include hydraulics, pneumatics, vacuum, AC and DC stepper motors and servomechanisms. Students obtain skills in the assembly, operation and troubleshooting of small-scale electromechanical systems.

ELEC 273L—Troubleshooting Techniques (3 cr)
(Prerequisites: ELEC 115L, ELEC 118L) Students learn systems analysis of various electronic equipment. Emphasis is on locating problems. The course includes theoretical work to complement the laboratory assignments.

ELEC 274L—Soldering Techniques (7½ weeks) (2 cr)
Students use a tôp repair center to learn high-reliability soldering and desoldering techniques. Nondestructive printed circuit board repairs and component replacement techniques also are used.

LEOT 204L—Electronic Circuits (6 cr)
(Prerequisite: ELEC 115L) This course provides a study of multiple class amplifier circuits, oscillator, signal-conditioning, modulation including receiver circuits, and operational amplifiers and A/D, D/A circuits. Students develop, analyze and troubleshoot these circuits in laboratory exercises.

LEOT 205L—Advanced Laser Systems (3 cr)
(Prerequisite: ELEC 117) This course covers the basics of theory and operation of solid state, ion gas, molecular gas and semiconductor lasers. Laboratory experiments stressing safety, accuracy and technical writing skills are performed.

LEOT 206—Optics (6 cr)
(*Prerequisite: ELEC 117*) Principles of geometric and wave optics are studied. Lenses, windows, mirrors and prisms are used to demonstrate imaging, interference and diffraction concepts. Filters, gratings and polarizers also are studied.

LEOT 208L—Introduction to Microprocessors (3 cr)
(*Prerequisite: ELEC 116*) This course covers the architecture, programming, input/output and applications of a microprocessor.

LEOT 212L—Vacuum System Technology (1 cr)
(*Corequisite: ELEC 118L*) This course examines the various types of vacuum equipment used in industry. Laboratory work includes the assembly, maintenance and leak detection of various systems.

LEOT 213L—Electronic Applications (1 cr)
(*Prerequisite: LEOT 204L*) Linear integrated circuits are studied with emphasis on applications in instrumentation, signal generation active filters and control circuits. Power supplies are introduced.

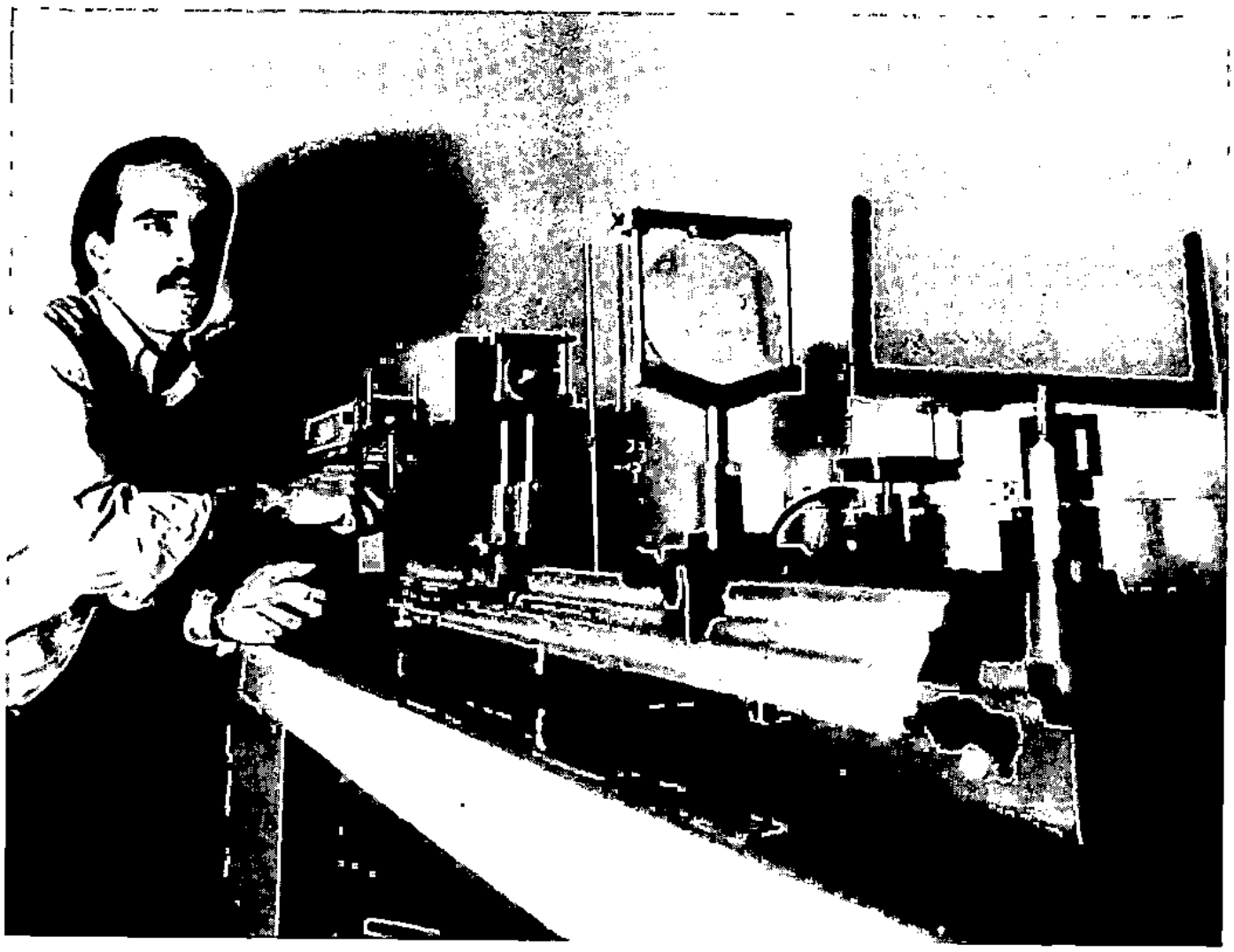
LEOT 214L—Advanced Microprocessors (3 cr)
(*Prerequisite: LEOT 208L*) A system of digital circuits is studied using a microprocessor. Interfacing to various devices is emphasized.

LEOT 217L—Advanced Laser Systems with Applications (6 cr)
(*Prerequisites: LEOT 205L, LEOT 206*) Students perform experiments using fiber optics, A-O Q switch, dye cell, spectrum analyzer and A-O modulator. Electronic instruments are studied for correct usage of application. Students are required to write a technical paper on a topic in the laser electro-optic field.

LEOT 218L—Laser Measurements (3 cr)
(*Corequisite: LEOT 217L*) Detection of radiation is covered. Various devices—calorimeters, photo-multiplier tubes, semiconductor diodes and pyroelectric detectors—and interferometric measurements also are studied.

MATT 171—Basic Tool/CNC (3 cr)
This course includes an introduction to basic machine shop practices. Instruction is provided in safety, hand tools, elementary lathe, mill and drill press. Students are introduced to basic programming concepts related to computer-numerical-control (CNC) turning and machining centers and computer-aided-design (CAD) systems.

See also the common support course descriptions on page 64.



TRADES DEPARTMENT

Trades is the largest skill cluster at T-VI. Most classes meet on the Main Campus in classrooms; indoor, outdoor and off-campus lab spaces; and live work areas. The Commercial Printing program is located at the Montoya Campus. Admission information is available at either campus.

Most Trades programs accept new students at the beginning of each term. Each applicant has an interview with an admission counselor and also may be interviewed by the program counselor during the admission process.

Trades students must furnish their own shop clothes appropriate for their particular programs. All students, instructors, instructional aides and visitors must wear approved safety glasses or goggles which conform to ANSI 287.1 in classes where they are required.

Students are encouraged to participate in T-VI's chapter of the Vocational Industrial Clubs of America (VICA). VICA activities are an integral part of the Trades curriculum.

SPECIFIC ENTRANCE REQUIREMENTS

All Trades programs have in common the following three entrance requirements: Applicants must pass math and reading tests, be able to lift materials and equipment weighing 50 pounds, and be free of allergies or health conditions which cannot be controlled and would endanger their own or others' safety.

Specific requirements of individual programs are as follows:

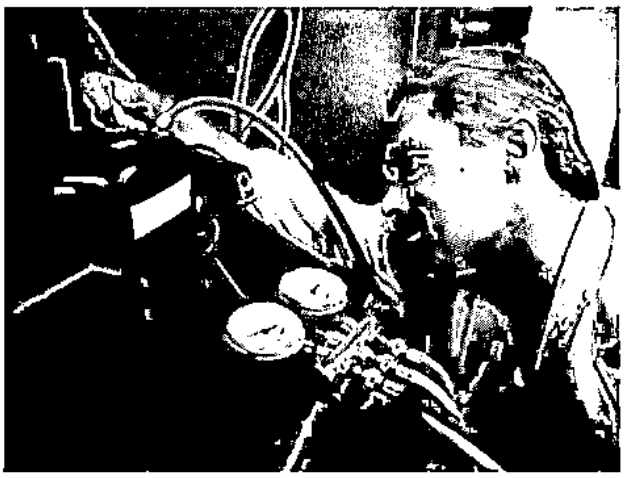
AIR CONDITIONING, HEATING AND REFRIGERATION: Must be free of chronic respiratory diseases and allergies to sheet metal fluxes and metals, and have normal color differentiation.

CARPENTRY: Must be free of chronic wood or wood product allergies.

COMMERCIAL PRINTING: Must be free of chronic allergies to lubricants, solvents, inks and photographic chemicals, and have normal color differentiation with near- and far-point depth perception.

CRIMINAL JUSTICE: Must have ACT scores of 17 in English, 12 in math and 14 in social sciences if pursuing the associate degree. Must purchase all textbooks and supplies for the program.

CULINARY ARTS: Must be free of chronic allergies to detergents and soap. *Health Requirement:* To enroll in this field, it is necessary to present a certificate to T-VI stating that the student is free from tuberculosis in a transmissible form. The certificate must be obtained from and signed by a licensed physician no more than 90 calendar days before the start of classes.



ELECTRICAL TRADES: Must have normal color differentiation.

FIRE SCIENCE: Must have ACT scores of 17 in English, 12 in math, 18 in natural sciences and 14 in social sciences if pursuing the associate degree. Must purchase all textbooks and supplies for the program.

FOOD SERVICE MANAGEMENT: Must purchase textbooks.

MACHINE TOOL TECHNOLOGY: Must be free of chronic respiratory diseases and allergies to oils, solvents and cutting fluids; be able to stand on concrete floors for long periods of time; and have depth perception correctable in both eyes.

PLUMBING: Must be free of chronic respiratory diseases and allergies to plumbing fluxes, oils, glues and plastic compounds.

TRANSPORTATION TRADES: Must be free of chronic respiratory diseases and allergies to fuels and solvents. A valid driver's license and clean driving record are required by most employers.

TRUCK DRIVING:

—Must not have been convicted of or forfeited bond for more than four (4) moving violations in the past three (3) years.

—Must not have more than one (1) at fault, preventable accident in the past three (3) years.

—Must not have been convicted of or forfeited bond for DWI or reckless driving.

—Must have a valid license authorizing operation of vehicles that he/she is to drive.

—Must be able to pass a physical examination as set forth in Section 391.42 of the Federal Motor Carrier Safety Regulations.

—Must be at least 23 years old.

Applicants are required to provide a certified copy of their New Mexico driving record for the past five (5) years and a medical examiner's certificate signed by a physician.

WELDING: Must be free of chronic respiratory diseases and have depth perception correctable in both eyes.

SAFETY NOTE: *It can be dangerous to wear contact lenses in any area where there are fumes from chemicals, solvents and gases. Affected students should plan to wear regular eyeglasses in classes where such hazards exist.*

PREREQUISITE REQUIREMENTS

Students must earn a minimum grade of C to meet all course prerequisite requirements.

GRADUATION REQUIREMENTS

Students must earn a minimum 2.0 grade point average and maintain a minimum grade of C in all required vocational courses.

SUPERVISED WORK EXPERIENCE

Supervised work experience is for students who have acquired most of the skills and work attitudes needed to succeed in an entry-level job. Students may apply for this option during the final term.

This on-the-job experience is a training plan developed by the cooperating employer and T-VI instructional staff. The student must obtain the approval of the instructor, advisor and Trades Department dean, and have an exit interview with the department counselor prior to beginning supervised work experience.

The supervised work experience option does not qualify students for Veterans Administration benefits or other student financial aid. It is not an option for associate degree programs.

APPRENTICESHIP PROGRAMS

Commercial Carpentry Apprenticeship

8 Terms, Main Campus

The Commercial Carpentry Apprenticeship program for persons currently employed in the 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 $20 registration fee each term. Students must purchase textbooks and instructional materials through the local ABC chapter.

COURSE DESCRIPTION

CEAP 199—Commercial Carpentry Apprenticeship (24 cr)
(Prerequisite: Current full-time employment in the carpentry industry) This course consists of 8610 hours of which 8000 hours are supervised on-the-job training with experienced journeymen and 610 hours are related classroom instruction at T-VI. The classroom instruction covers 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

9 Terms, Main Campus

The Culinary Apprenticeship program is offered for persons currently employed full time in the cooking industry.

The three-year program combines on-the-job experience with classroom instruction and results in certified cook skill levels. Beginning students are admitted each term as space permits.

There is a $20 registration fee each term. Students must purchase a special textbook and instructional materials through the local chapter of the American Culinary Federation.

COURSE DESCRIPTION

CUAP 199—Culinary Apprenticeship (27 cr)
(Prerequisite: Current full-time employment in the cooking industry) This course consists of 6000 instructional hours of which 400 hours are theory taught at T-VI and 5600 hours are supervised work experience in a full-time cooking job secured before entering the class. Theory covers culinary history, garde manger (food decorating), food management techniques and front-of-the-house personnel use. A three-step written and practicum final exam, administered in conjunction with the New Mexico Chefs and Cooks Assn., is required to graduate.

Electrical Trades Apprenticeship

8 Terms, Main Campus

The Electrical Trades Apprenticeship program, for persons currently employed full time in the electrical industry, is offered in conjunction with the Independent Electrical Contractors (IEC).

The four-year program combines on-the-job experience with classroom instruction and provides the opportunity for participants to obtain New Mexico journeyman licenses.

There is a $20 registration fee each term. Students must purchase books and instructional materials through the IEC office.

COURSE DESCRIPTION

ETAP 199—Electrical Trades Apprenticeship (24 cr)
(*Prerequisite: Current full-time employment in the electrical trades industry*) This course consists of 8600 hours of which 8000 hours are supervised on-the-job training with electrical journeymen and 600 hours are related classroom instruction at T-VI. The classroom instruction covers safety, electrical theory, blueprint reading and layout, National Electrical Code interpretation, tool usage and motor controls.

Plumbing Apprenticeship

8 Terms, Main Campus

The Plumbing Apprenticeship program, 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 $20 registration fee each term. Students must purchase textbooks and instructional materials through the local ABC chapter.

COURSE DESCRIPTION

PLAP 199—Plumbing Apprenticeship (24 cr)
(*Prerequisite: Current full-time employment in the plumbing industry*) This course consists of 8610 hours of which 8000 hours are supervised on-the-job training with experienced plumbing journeymen and 610 hours are related classroom instruction at T-VI. The classroom instruction covers safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation.

Sheet Metal Apprenticeship

8 Terms, Main Campus

The Sheet Metal Apprenticeship program, 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 four-year program combines on-the-job experience with classroom instruction and provides the opportunity for participants to obtain New Mexico journeyman licenses.

There is a $20 registration fee each term. Students must purchase textbooks and instructional materials through the local ABC chapter.

COURSE DESCRIPTION

SMAP 199—Sheet Metal Apprenticeship (24 cr)
(*Prerequisite: Current full-time employment in the sheet metal industry*) This course consists of 8610 hours of which 8000 hours are supervised on-the-job training with experienced sheet metal journeymen and 610 hours are related classroom instruction at T-VI. The classroom instruction covers safety, shop and trade math, sheet metal processes for shop machinery, triangulation layout, radial line layout, parallel line layout, blueprint reading, and Sheet Metal and Air Conditioning National Assn. (SMACNA) manuals.

Support Courses

At least 12 students must sign up and instructional space must be available before a support course can be offered. As a result, support courses may be canceled because of low enrollment. Not all courses are offered each term. Most are offered only at the Main Campus.

Course			Hrs Wk	Cr Hrs
ACHR	170	Pneumatic Control Systems	5	3
AUTC	102	Math/Basic Electricity	5	3
AUTC	170	Transportation Trades Machining	5	3
CJ	170	First Aid and CPR		1
CJ	296	Special Topics		1–6
'COMM	041	Communications for Trades	5	3
ELTR	170	Pole Climbing	4	2
ELTR	213	Occupational Safety	5	3
FS	296	Special Topics		1–6
FSMG	170	Advanced Food Service Management	5	3
FSMG	171	Food Service Nutrition	5	3
'LANG	061	Writing Lab	5	3
MATT	170	Basic Tool/CNC	5	3
MATT	171	Precision Measurement	5	3
MATT	172	Mechanical Drawing for Metal Trades	5	3
PLMB	170	Energy Management/Solar Applications	5	3
PLMB	171	Plumbing/Heating Control Circuitry	5	3
PLMB	172	Backflow Prevention	5	3
'SCIE	011	Introduction to Physics	5	3
'SCIE	013	Thinking Strategies	5	3
WELD	170	Welding Skills Improvement	5	3
WELD	171	Advanced Welding Skills Improvement	5	3
WELD	296	Welding Special Topics		1–2

'See Developmental Studies Department, page 31, for course descriptions.

COURSE DESCRIPTIONS

ACHR 170—Pneumatic Control Systems (3 cr)
Basic control system components and diagrams are included. Emphasis is on the installation and calibration of typical pneumatic control systems used for environmental control.

AUTC 102—Math/Basic Electricity (3 cr)
The student learns and applies basic math principles as they relate to measuring tools, equipment, graphs and schematics. The theory of mechanical power, basic electricity principles, related terminology and electrical component identification also are covered. An introduction to diagnostic equipment, testing procedures and theory related to heavy equipment, electrical systems, troubleshooting and repair procedures is included.

AUTC 170—Transportation Trades Machining (3 cr)
This course introduces basic machine shop practices particularly as they relate to the auto diesel mechanic. Instruction is provided in safety, hand tools, elementary lathe, mill and drill press. Emphasis is on tapping, rethreading, broken stud removal, thread inserts, shaft straightening, torque wrenches, fasteners, sized nuts and chisel use.

CJ 170—First Aid and CPR (1 cr)
This is an introductory course stressing immediate care and recognition of life threatening injuries and illnesses. Emphasis is on emergency temporary help in order to preserve life.

CJ 296—Special Topics (1–6 cr)
This course includes an in-depth study of problems and the advanced techniques that criminal justice experts use in responding to them.

ELTR 170—Pole Climbing (2 cr)
Instruction is provided in safety, proper use of equipment, climbing and maneuvering techniques up to the 18-foot level on unstepped poles, and the proper use of ladders on poles and span lines.

ELTR 213—Occupational Safety (3 cr)
Training is given in the Red Cross Multimedia System and cardiopulmonary resuscitation, for which Red Cross Certification is issued upon successful completion. An introduction to the Occupational Safety and Health Act (OSHA) regulations is included.

FS 296—Special Topics (1–6 cr)
This course includes an in-depth study of problems and the advanced techniques that firefighter experts use in responding to them.

FSMG 170—Advanced Food Service Management (3 cr)
This course emphasizes the use of computers in the food service industry. The CBORD Menu Development System is used to introduce the student to key analytical reports, interactive menu planning, and cost-oriented and margin-operated operations.

FSMG 171—Food Service Nutrition (3 cr)
This course is a study of food and nutrition as they pertain to the food service industry. The student is introduced to the digestive system, diet control, and vitamins and nutrients.

MATT 170—Basic Tool/CNC (3 cr)
Instruction is provided in safety, hand tools, elementary lathe, mill and drill press. Installation and selection of fasteners and sheet metal fabrication are included. Culminating project is a design problem fabrication of an instrumentation package (power supply). Students are introduced to basic programming concepts related to computer-numerical-control (CNC) turning and machining centers and computer-aided-design (CAD) systems.

MATT 171—Precision Measurement (3 cr)
This course is an introduction to basic measurement principles and techniques. Students are instructed in the care, calibration, uses and applications of outside micrometers, inside micrometers, depth micrometers, vernier calipers, indicators and other measuring equipment specific to their majors.

MATT 172—Mechanical Drawing for Metal Trades (3 cr)
This course provides instruction in the basic techniques of mechanical drawing. The class includes sketching, three-view orthographic projection, sectional views, auxiliary views, basic drafting math, geometric tolerancing, welding symbols and welding layout.

PLMB 170—Energy Management/Solar Applications (3 cr)
This course is for students interested in management of a residential energy package. Instruction is provided in how life styles, design and orientation conserve natural resources. Emphasis is on the selection, installation, maintenance and repair of solar equipment as related to heating water and air.

PLMB 171—Plumbing/Heating Control Circuitry (3 cr)
This course includes installation and troubleshooting of heating control circuits. Control theory, terminology and symbols are covered. Instructional emphasis is on electrical control devices from various manufacturers. Also included are the reading and developing of wiring diagrams and line schematics.

PLMB 172—Backflow Prevention (3 cr)
This course teaches the student to identify, test, troubleshoot and repair backflow prevention assemblies. A minimum of 50 percent of class time is spent in the lab working with assemblies. Successful completion of this course qualifies the student to become a certified backflow prevention assembly tester.

WELD 170—Welding Skills Improvement (3 cr)
This class includes instruction in safety practices, general tools and equipment, sources of heat, operational procedures, metals and their properties, and applications of oxyacetylene and arc welding. Instruction is geared for the specific needs of all majors.

WELD 171—Advanced Welding Skills Improvement (3 cr)
This course provides instruction in advanced welding processes. Mig and tig welding and other processes such as plasma arc, resistance, flux core, carbon and submerged arc welding are included.

WELD 296—Welding Special Topics (1–2 cr)
This flexible course is designed to enable students currently in the welding trade to pursue studies in specialized needs with unique goals. This class also may be taken as an independent or guided study to be used as a refresher course or to sharpen skills prior to certification or recertification exams. Hours are by arrangement.

Air Conditioning, Heating and Refrigeration

Certificate Program
3 Terms, Main Campus

The Air Conditioning, Heating and Refrigeration program prepares students for entry into the installation, maintenance and service field. With on-the-job experience and field training, the graduate of this program should be able to advance quickly.

Training includes installing mechanical equipment, ductwork, 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.

To earn a certificate, a student must complete successfully a total of 1275 instructional hours of which 720 are laboratory work and 555 are related theory.

A student may leave the program when a training objective is reached and receive a proficiency certificate detailing the skills mastered.

Eligible third-term students are encouraged to participate in the supervised work experience program.

Air Conditioning, Heating and Refrigeration students must pay an equipment fee of $90 before entering the first term, $70 before the second term and $70 before the third term.

AIR CONDITIONING, HEATING AND REFRIGERATION PROGRAM

			Hrs Wk	Cr Hrs
Term I				
ACHR	101L	Air Conditioning, Heating and Refrigeration Theory/Lab I	20	12
ACHR	102	Control Circuitry/Math I	5	3
Term II				
ACHR	111L	Air Conditioning, Heating and Refrigeration Theory/Lab II	20	12
ACHR	112	Air Conditioning, Heating and Refrigeration Mathematics II	5	3
ACHR	113	Control Circuitry II	5	3
Term III				
ACHR	201L	Air Conditioning, Heating and Refrigeration Theory/Control Circuitry Lab III	15	9
ACHR	202L	Sheet Metal Theory/Lab	15	9
		Totals	1275	51

Option
Supervised Work Experience

Support Courses
See pages 84–85.

COURSE DESCRIPTIONS

ACHR 101L—Air Conditioning, Heating and Refrigeration Theory/Lab I (12 cr)

Students learn shop safety; basic tools and equipment; applicable laws of physics and chemistry; electrical circuits; electric meters; test and measuring equipment; and installation, maintenance and service procedures for the mechanical refrigeration cycle and components.

ACHR 102—Control Circuitry/Math I (3 cr)

This course is designed to lay the groundwork required for diagnosis and service of refrigeration and electrical equipment with emphasis on DC circuits as applied to Ohm's Law. Students are taught algebra as applied to AC electricity.

ACHR 111L—Air Conditioning, Heating and Refrigeration Theory/Lab II (12 cr)

(*Prerequisites: All Term I courses or equivalent*) Instruction is in the installation, maintenance and service of residential air conditioning, heating and refrigeration systems.

ACHR 112—Air Conditioning, Heating and Refrigeration Mathematics II (3 cr)

(*Prerequisite: ACHR 102 or equivalent*) This course covers calculations required for residential heating and cooling system design including equipment sizing, duct sizing and layout.

ACHR 113—Control Circuitry II (3 cr)

(*Prerequisite: ACHR 102 or equivalent*) This course includes the design, installation and troubleshooting of air conditioning, heating and refrigeration control circuits. Emphasis is on electrical control devices from various manufacturers.

ACHR 201L—Air Conditioning, Heating and Refrigeration Theory/Control Circuitry Lab III (9 cr)

(*Prerequisites: ACHR 102, ACHR 111L or equivalent*) The installation, maintenance and service of commercial air conditioning, heating and various refrigeration systems are covered, along with multizone heating/cooling, chilled water and hot water systems. More advanced control theory and terminology also are covered. Emphasis is on electrical, pneumatic and solid state circuitry as well as electronic and electric control devices, their installation and service.

ACHR 202L—Sheet Metal Theory/Lab (9 cr)

Instruction is provided in sheet metal processes performed with hand, bench, cutting and layout tools; safety; care of tools and equipment; use of materials and supplies; straight pattern development and fabrication. Lab projects are oriented to typical heating and ventilation installations. Study of the design, layout and application of air distribution duct systems for air conditioning also is included.

Automotive Body Repair

Certificate Program
3 Terms, Main Campus

The Automotive Body Repair program prepares students for entry-level employment repairing collision damage on passenger and commercial vehicles. Proper safety procedures, work ethics, and correct selection and use of tools and equipment are stressed.

The program is designed to allow a student to enter the industry at three separate levels. Upon successful completion of Automotive Body Repair Theory/Lab I, the student may receive a detailing proficiency certificate and obtain employment detailing and preparing vehicles for collision/refinishing repairs. Completion of all courses through the second term gives the student additional skills in welding, collision repair procedures and comprehensive refinishing techniques. The student may then receive a basic refinishing proficiency certificate and obtain employment as a painter's helper. The third term upgrades the student's abilities to repair and refinish major collision damage using state-of-the-art pulling and measuring equipment. During the third term, students have the option to apply their skills in a supervised work experience program with employers.

To earn an Auto Body Repair certificate, a student must successfully complete a total of 1125 instructional hours of which 825 are laboratory work and 300 are related theory.

Students must pay a $100 equipment fee before entering the first term, $75 before the second term, and $50 before the third term.

AUTOMOTIVE BODY REPAIR PROGRAM

			Hrs Wk	Cr Hrs
Term I				
AUBO	101L	Automotive Body Repair Theory/Lab I	20	12
AUBO	102	Math/Basic Electricity	5	3
		Detailing Certificate		
Term II				
AUBO	111L	Automotive Body Repair Theory/Lab II	25	15
		Basic Refinishing Certificate		
Term III				
AUBO	201L	Automotive Body Repair Theory/Lab III	25	15
		Totals	1125	45
		Automotive Body Repair Certificate		

Option
Supervised Work Experience

Support Courses
See pages 84–85.

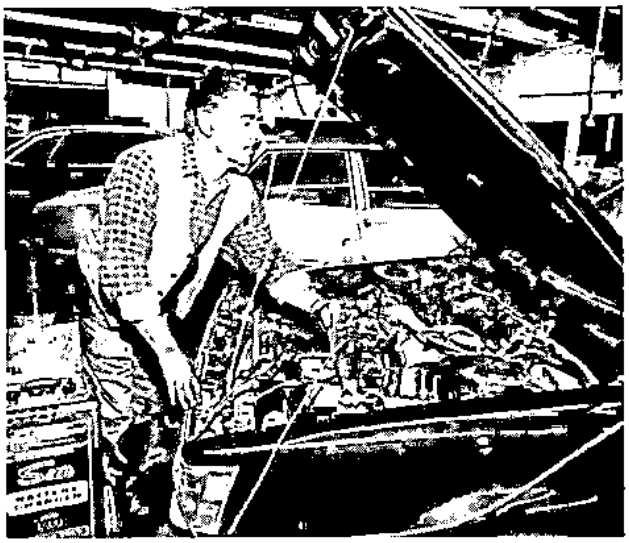
COURSE DESCRIPTIONS

AUBO 101L—Automotive Body Repair Theory/Lab I (12 cr)
The student is introduced to all phases of the auto collision industry including safety procedures, terminology, body and frame construction, tools, equipment, minor damage repair, basic refinishing techniques, detailing, and understanding estimates. Students learn how to set up and operate oxyacetylene, shielded metal-arc and gas metal-arc welding equipment. The procedures for cutting, welding and brazing automotive sheet metal are covered.

AUBO 102—Math/Basic Electricity (3 cr)
The student learns and applies basic math principles as they relate to measuring tools, equipment, graphs and schematics. The theory of mechanical power, basic electricity principles, related terminology, and electrical component identification also are covered. An introduction to diagnostic equipment, testing procedures and theory related to heavy equipment, electrical systems, troubleshooting and repair procedures is included.

AUBO 111L—Automotive Body Repair Theory/Lab II (15 cr)
(Prerequisites: All Term I courses or equivalent) The student receives instruction in safety, body shop tools and equipment, and removal and replacement of body parts. This course covers cleaning, sanding, masking, all phases of surface preparation, metal treatment, undercoats, and comprehensive refinishing systems; air conditioning diagnosis, testing, repair and servicing; and instruction in basic shielded metal-arc, gas metal-arc, gas tungsten-arc and plastic welding techniques.

AUBO 201L—Automotive Body Repair Theory/Lab III (15 cr)
(Prerequisites: All Term II courses or equivalent) This course covers comprehensive metal repair, body panel replacement, sectioning, repair to cooling, related electrical systems, alignment and fitting techniques, under body and frame measurement, body shell alignment procedures and estimating techniques. The student performs a wide variety of refinishing jobs duplicating a modern auto collision production shop environment.



Automotive Technology

Certificate Program
3 Terms, Main Campus

The Automotive Technology program is designed to provide individuals with the skills needed to diagnose and repair mechanical problems on automobiles and light trucks. Proper safety procedures along with the correct use and selection of hand tools and test equipment is stressed. The program is designed to qualify the successful student as an entry-level general automobile technician.

The employment outlook for qualified auto technicians is excellent. Employment opportunities include such positions as basic servicing, general mechanic, specialist, service writer, shop foreman, service manager, sales representative and service station attendant.

The program is designed to allow a student to enter the industry at three separate levels. Upon successful completion of Automotive Technology Theory/Lab I, the student may receive a basic auto servicing proficiency certificate and obtain employment servicing automobiles and performing brake system and suspension repair, front end alignment and engine repairs. Upon successful completion of Automotive Technology Theory/Lab I and Math/Basic Electricity, the student is eligible for Term II.

Completion of Term II gives the student additional skills with transmissions, drive trains and air conditioning. Upon completion of Automotive Technology Theory/Lab II, the student may receive a basic auto repair proficiency certificate and obtain employment performing minor repairs and servicing automobiles and light duty trucks. Upon successful completion of Automotive Technology Theory/Lab II and Transportation Electronics, the student is eligible for Term III.

Term III upgrades the student's abilities to diagnose and repair electrical systems including computer-controlled components. During Term III, students have the option to apply their skills in a supervised work experience program with cooperating employers.

To earn an Automotive Technology certificate, a student must successfully complete a total of 1125 instructional hours of which 750 are laboratory work and 375 are related courses including theory.

Students must pay an equipment fee of $100 before entering the first term, $90 for the second term, and $90 for the third term.

AUTOMOTIVE TECHNOLOGY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
AUTC	101L	Automotive Technology Theory/Lab I	20	12
AUTC	102	Math/Basic Electricity	5	3
		Basic Auto Servicing Certificate		
Term II				
AUTC	111L	Automotive Technology Theory/Lab II	20	12
AUTC	113	Transportation Electronics	5	3
		Basic Auto Repair Certificate		
Term III				
AUTC	201L	Automotive Technology Theory/Lab III	25	15
		Totals	1125	45
		Automotive Technology Certificate		

Option
Supervised Work Experience

Support Courses
See pages 84–85.

COURSE DESCRIPTIONS

AUTC 101L—Automotive Technology Theory/Lab I (12 cr)
This course is designed to teach the student the skills needed to perform common automotive service work. Inspection, repair and replacement of brakes; use of precision measuring tools; cooling, lubricating, ignition, fuel, emission and exhaust systems are covered. The course also provides the student with instruction on automotive chassis, steering, suspension systems, related hardware and wheel alignment. Basic internal combustion engine theory and the principles of basic engine overhaul are studied.

AUTC 102—Math/Basic Electricity (3 cr)
This course teaches the student basic math principles as they relate to measuring tools, equipment, graphs and schematics. The theory of mechanical power, basic electricity principles, related terminology, and electronic component identification also are covered. The students are introduced to diagnosis equipment testing procedures and theory related to automotive electrical systems troubleshooting and repair procedures.

AUTC 111L—Automotive Technology Theory/Lab II (12 cr)
(*Prerequisites: AUTC 101L, AUTC 102 or equivalent*) This course covers diagnostic and repair procedures involving clutches, manually shifted and automatic transmissions, transaxles and differential units. Air conditioning diagnosis, testing, repair and servicing also are included. The entire drive train is covered.

AUTC 113—Transportation Electronics (3 cr)
(*Prerequisites: AUTC 101L, AUTC 102 or equivalent*) This course provides the information required to test and replace malfunctioning electronic components. The theory of solid-state devices, basic principles of electronics, and interpretation of circuit diagrams are included. Signal tracing characteristics and the operation of semi-conduction diodes and rectifier circuits are covered. Lab experiments are conducted on full wave and voltage rectifiers, transistors, thyristors, integrated circuits, operational amplifiers, digital gates and timing circuits.

AUTC 201L—Automotive Technology Theory/Lab III (15 cr)
(*Prerequisites: AUTC 111L, AUTC 113*) This course covers the theory, diagnosis and repair of electrical components, fuel systems, and heating and air conditioning systems. Students also learn to tune-up vehicles. Emission control standards and components are covered.

Carpentry

Certificate Program
2 Terms, Main Campus

The Carpentry program provides students with practical and realistic job skills to enter the construction industry. Classes meet on and off campus and in indoor and outdoor labs specifically designed for cabinetmaking and residential construction.

During the first term, the fundamentals of residential framing and tools of the trade are taught. In the second term, emphasis is on residential and light commercial work, maintenance and remodeling along with instruction on interior finish carpentry, basic construction and installation of cabinets and millwork.

To earn a framing proficiency certificate, a student must complete 375 instructional hours of which 225 are laboratory work and 150 are related theory, math and blueprint reading. Continuing students can earn a Carpentry certificate by successfully completing another 375 hours of lab and related instruction.

A student may leave the program when a training objective has been reached and receive a proficiency certificate detailing the skills mastered.

Carpentry students must pay an equipment fee of $100 before entering the first term and an additional $70 for the second term. They also must provide their own carpenter's overalls or nail apron.

CARPENTRY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
CARP	101L	Carpentry Theory/Lab I	20	12
CARP	102	Carpentry Math/Blueprint Reading I	5	3
		Framing Certificate		
Term II				
CARP	111L	Carpentry Theory/Lab II	20	12
CARP	112	Carpentry Math/Blueprint Reading II	5	3
		Totals	750	30
		Carpentry Certificate		

Option
Supervised Work Experience

Support Courses
See pages 84–85.

COURSE DESCRIPTIONS

CARP 101L—Carpentry Theory/Lab I (12 cr)
Instruction is provided in hand and power tools, site layout and foundations, rough framing, roof framing, structural shell basics, stair construction, exterior finish and safety.

CARP 102—Carpentry Mathematics/Blueprint Reading I (3 cr)
This course provides instruction in whole numbers, combining numbers, lumber sizing, scaling, centering and triangle theory. Instruction in the interpretation of elevation drawings and floor plans, symbols and notations, dimensions and structural information is included. Students are introduced to material estimation.

CARP 111L—Carpentry Theory/Lab II (12 cr)
(*Prerequisite: CARP 101L or equivalent*) This course is a continuation of CARP 101L with the addition of finish carpentry, basic construction and installation of cabinets and millwork. Maintenance, remodeling, concrete finishing and light commercial construction are emphasized.

CARP 112—Carpentry Mathematics/Blueprint Reading II (3 cr)
(*Prerequisite: CARP 102 or equivalent*) This course includes an introductory study of blueprint applications to residential homes, multiple family dwellings and commercial buildings. Instruction also is provided in the use of rules and formulas for material estimating, volume measure, ratio and proportion.

Commercial Printing

Certificate Program
2 Terms, Montoya Campus

This program teaches entry-level skills for jobs in the offset printing industry or in-plant print/duplication shops.

The lab contains computers, phototypesetters, paste-up and stripping tables, process cameras, plate makers, offset duplicators and presses, paper cutters, folder and bindery machines, and other equipment used in the industry.

Instructional units have specific prerequisites as follows: typesetting—typing skill of 35 words per minute; proofreading—good spelling/grammar; paste-up/layout—visual coordination, color perception and measurement skills; camera—allergy free and night vision; press—allergy free, depth and color perception, mechanical aptitude; bindery—mechanical aptitude, lifting ability.

To earn a certificate, a student must complete successfully a total of 825 instructional hours of which 600 are laboratory work and 225 are related theory.

When students leave the program, they receive a proficiency certificate listing the skills mastered.

Commercial Printing students must pay a personal equipment fee of $30 before entering the first term.

COMMERCIAL PRINTING PROGRAM

			Hrs Wk	Cr Hrs
Term I				
CMPR	101L	Commercial Printing Theory/Lab I..	25	15
Term II				
CMPR	111L	Commercial Printing Theory/Lab II.	30	18
		Totals.....	825	33

COURSE DESCRIPTIONS

CMPR 101L—Commercial Printing Theory/Lab I (15 cr)
This course covers safety of tools, equipment, solvents and chemicals; use of tools and equipment; design; composition, layout and paste-up; proofs and proofreading; basic photo typesetting; papers and inks; basic setup and operation of offset duplicators and presses; bindery processes; and quality control. Instruction also is provided in job analysis, cost control, estimating and production work flow. Basic arithmetic as it applies to the printing trade for measurements, ink and chemical formulas, paper cuts and job pricing is included.

CMPR 111L—Commercial Printing Theory/Lab II (18 cr)
(*Prerequisite: CMPR 101L or equivalent*) Emphasis is on advanced processes in all areas of the lab; computer composition; imposition; duotone and special effect screens; multicolor register and special penalty stock printing; troubleshooting techniques; computer estimating; production control and legal considerations. The course continues special principles and trade math as they relate to individual work stations. The student receives instruction in one of seven specialty areas.

Criminal Justice

Associate Degree/Certificate Program
4 Terms, Main Campus

This program provides basic instruction in the field of criminal justice. Students may earn either a certificate or an associate degree.

To earn a certificate, a student must successfully complete 35 credit hours—26 occupational core curriculum hours, English 101, Math 120 and Sociology 111.

Students who have already received a certificate from an approved New Mexico law enforcement academy with which T-VI has an articulation agreement are given block credit for the 26 credit hours of occupational core curriculum. These students may enter the degree program after meeting T-VI admission requirements. Credit for the occupational core curriculum will be posted at the completion of all courses in the degree program.

To earn an Associate in Applied Science Degree in Criminal Justice, a student must successfully complete 68 credit hours including 26 certificate occupational core requirements and 42 credit hours in required Arts and Sciences courses.

Students must purchase their own textbooks and supplies.

CRIMINAL JUSTICE PROGRAM

			Cr Hrs
Term 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.....	3
CJ	105	Pre-Sent Investigation and Police Reports.....	1
*ENG	101	Writing with Readings in Exposition ..	3
*SOC	111	Criminal Justice System.....	3
Term II			
CJ	111	Traffic Investigation and Enforcement .	3
CJ	112	Criminal Investigation	3
CJ	113	Organized and White Collar Crime ...	3
CJ	114	Contemporary Enforcement Techniques	3
CJ	115	Physical Conditioning.....	1
*MATH	120	Intermediate Algebra.....	3
		Criminal Justice Certificate	
Term III			
*CSCI	101	Computer Literacy.....	3
*ENG	119	Technical Communications.....	3
*PSY		Psychology Elective	3
*SOC	101	Introduction to Sociology	3
*SOC	280	Social Science Research	3
Term IV			
*COMM		Communications Elective	3
*SOC	211	Social Problems.....	3
*SOC	212	Juvenile Delinquency.....	3
*SOC	215	Criminology	3
*SOC	214	Sociology of Corrections.....	3
*SOC	216	Ethnic and Minority Groups.....	3
		Total.....	68

**Arts and Sciences courses. Course descriptions on pages 23–29.*

COURSE DESCRIPTIONS

CJ 101—Criminal Law and Procedure (3 cr)
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 cr)
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 cr)
This course includes a study of history, philosophy and legal basis governing investigation and supervision of judged juvenile offenders and adult violators placed on probation and parole.

CJ 104—Patrol Procedures (3 cr)
This course introduces the basic patrol function and the problems faced by law enforcement officers in the accomplishment of this function.

CJ 105—Police and Presentence Reports (1 cr)
The study and practical application of police reports, affidavits, warrants and presentence investigation reports are covered.

CJ 111—Traffic Investigation and Enforcement (3 cr)
(*Prerequisite: Successful completion of 13 credit hours of core curriculum*) 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 cr)
(*Prerequisite: Successful completion of 13 credit hours of core curriculum*) Basic criminal investigation is studied from the preliminary investigation to final preparation and presentation in court.

CJ 113—Organized and White Collar Crime (3 cr)
(*Prerequisite: Successful completion of 13 credit hours of core curriculum*) 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 cr)
(*Prerequisite: Successful completion of 13 credit hours of core curriculum*) Verbal and manual skills which officers use on a daily basis—ranging from handcuffing and restraint to field notes and testimony—are studied.

CJ 115—Physical Conditioning (1 cr)
(*Prerequisite: Successful completion of 13 credit hours of core curriculum*) This course is designed to prepare the student for entry level law enforcement requirements and better health maintenance.

Culinary Arts

Baking

Certificate Program
2 Terms, Main Campus

This food service specialty prepares persons for jobs as bakers in restaurants, bake shops, bakeries and institutional kitchens such as schools or hospitals. Persons entering this field should be early risers since most baking begins early in the morning.

Baking meets in a lab furnished with commercial equipment and display cases. The program's products are sold in the T-VI food service areas.

To earn a certificate, a student must complete successfully 750 instructional hours of which 525 are laboratory work and 225 are related theory.

Students may leave the program when a training objective is reached and receive a proficiency certificate detailing the skills mastered.

Baking students must pay an equipment fee of $100 before entering Term I and $30 for Term II.

BAKING PROGRAM

			Hrs Wk	Cr Hrs
Term I				
BKNG	101L	Baking Theory/Lab I	20	12
BKNG	102	Food Service Mathematics	5	3
Term II				
BKNG	111L	Baking Theory/Lab II	25	15
		Totals	750	30

Option
Supervised Work Experience

COURSE DESCRIPTIONS

BKNG 101L—Baking Theory/Lab (12 cr)
Students learn fundamentals of mixing and processing the ingredients used in a variety of breads, sweet yeast dough products and specialties. Also included are care and use of equipment, bakery sanitation, proper use and storage of bakery ingredients, experiments with baking formulas, leavening agents and human relation skills.

BKNG 102—Food Service Mathematics (3 cr)
Basic arithmetic for sales, portioning and pricing of food products is covered. Students also learn to use cash registers.

BKNG 111L—Baking Theory/Lab II (15 cr)
(*Prerequisite: BKNG 101L*) This course continues the principles of Baking I with emphasis on baking chemistry and advanced production procedures. More study of international pastries and desserts is provided and cake decorating is covered. Supervisory management principles are included.

Quantity Food Preparation

Certificate Program
2 Terms, Main Campus

Quantity Food Preparation emphasizes nutritional food preparation and prepares students for entry into the rapidly growing food industry—as sauté cooks after the first term or dinner cooks upon completion of the full program.

Classes are held in industrial kitchens. First-term students prepare food for and operate a cafeteria line including cash registers.

Second term students operate the Student Specialties program, a fine dining restaurant open to the public by reservation only. (See page 8.)

To earn a certificate, a student must complete successfully 750 instructional hours of which 525 are laboratory work and 225 are related theory.

A student may leave the program when a training objective has been reached and receive a proficiency certificate detailing the skills mastered.

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.

Quantity Food Preparation students must pay an equipment fee of $100 before entering the first term and another $80 for the second term.

QUANTITY FOOD PREPARATION PROGRAM

			Hrs Wk	Cr Hrs
Term I				
QUFD	101L	Quantity Food Theory/Lab I	20	12
QUFD	102	Food Service Mathematics	5	3
Term II				
QUFD	111L	Quantity Food Theory/Lab II	25	15
		Totals	750	30

COURSE DESCRIPTIONS

QUFD 101L—Quantity Food Theory/Lab I (12 cr)
This course provides instruction in preparing meats, vegetables, soups, sauces, sandwiches, salads and breakfast foods. Emphasis is placed on cost, nutrition, sanitation, safety, tools and equipment, cooking methods and techniques, speed and efficiency, and cafeteria line operation.

QUFD 102—Food Service Mathematics (3 cr)
Basic arithmetic for sales, portioning and costing of food products is covered. Students also learn how to use cash registers.

QUFD 111L—Quantity Food Theory/Lab II (15 cr)
Students learn methods of cooking stews, fricassees, garnishes, sauces and other dinner items. Also covered are herbs and spices, salad preparation, use of recipes, application of costing procedures, pantry work, restaurant service and operation, and customer service.

Diesel Mechanics

Certificate Program
3 Terms, Main Campus

This program prepares students to work on a variety of diesel-powered equipment used in the trucking, heavy equipment and mining industries.

The program meets in working labs where students are introduced to a variety of diesel engines, electrical and hydraulic test equipment, dynamometers, air conditioning equipment, drive train components, fuel injection test and calibration devices, and related equipment.

In the first term, students learn basic engine block design; component parts disassembly, inspection and reassembly; diesel engine accessories; introduction to diagnosis; troubleshooting; and injection system component replacement. The second term covers the transmission, drive train and hydraulic systems. In the third term, students repair electrical components, air conditioning and fuel injection systems.

A student may leave the program when a training objective is reached and receive a proficiency certificate detailing the skills completed.

To satisfy full program requirements, a student must complete successfully 1125 instructional hours of which 675 are laboratory work and 450 are related theory.

Diesel Mechanics students must pay an equipment fee of $100 before entering the first term, $130 for the second term, and $130 for the third term.

DIESEL MECHANICS PROGRAM

			Hrs Wk	Cr Hrs
Term I				
DIME	101L	Diesel Theory/Lab I	20	12
DIME	102	Math/Basic Electricity.....	5	3
Term II				
DIME	111L	Diesel Theory/Lab II.....	20	12
DIME	113	Transportation Electronics.....	5	3
Term III				
DIME	201L	Diesel Theory/Lab III	25	15
		Totals	1125	45

Option
Supervised Work Experience

Support Courses
See pages 84–85.

COURSE DESCRIPTIONS

DIME 101L—Diesel Theory/Lab I (12 cr)
Emphasis is on two- and four-stroke diesel engines including basic engine cylinder block assembly design; component parts disassembly, inspection and reassembly; fits, tolerances and service specifications; use of precision measuring tools; interpreting mechanical drawings; thread repair procedures; lubricating, cooling, air intake and fuel systems; and governor control design. The course introduces the student to diagnosis and repair of engine failures and reduced operational capabilities.

DIME 102—Math/Basic Electricity (3 cr)
The student learns and applies basic math principles as they relate to measuring tools, equipment, graphs and schematics. The theory of mechanical power, basic electricity principles, related terminology and electrical component identification also are covered. An introduction to diagnostic equipment, testing procedures and theory related to heavy equipment, electrical systems, troubleshooting and repair procedures is included.

DIME 111L—Diesel Theory/Lab II (12 cr)
(*Prerequisites: DIME 101L, DIME 102 or equivalent*) Basic theory of the entire drive train and hydraulic systems is studied. The course covers shop safety and the theory related to test equipment, diagnosis, troubleshooting, analysis procedures and an introduction to job seeking and job retention skills. Instruction includes the service and repair of drive train and hydraulic system components.

DIME 113—Transportation Electronics (3 cr)
(*Prerequisites: DIME 101L, DIME 102 or equivalent*) Students learn how multimeters are used in analyzing basic direct and alternating current circuits. The theory of solid-state devices, basic principles of electronics and interpretation of circuit diagrams are covered.

DIME 201L—Diesel Theory/Lab III (15 cr)
(*Prerequisites: DIME 111L, DIME 113 or equivalent*) Students learn safety, diagnosis, troubleshooting and repair procedures of electrical systems, fuel injection components and air conditioning systems.

Electrical Trades

Certificate Program
4 Terms, Main Campus

This program provides students with entry-level skills for employment in the construction industry, electrical maintenance and related electrical trades.

Off-campus projects enable students to gain on-the-job experience in residential construction and electrical installation. On-campus electrical wiring projects are incorporated into the program. These projects enable students to obtain experience with electrical work under the supervision of the instructor and T-VI maintenance personnel.

The program is designed to allow a student to enter the electrical trades industry at three separate levels. Upon completion of Terms I and II, the student may receive a residential wiring proficiency certificate and obtain employment as an apprentice electrician.

Completion of Term III gives the student additional skills in design and installation of industrial control systems and heavy construction work. A student may receive a commercial wiring proficiency certificate at this point.

Term IV upgrades the student's abilities in installation and maintenance of solid-state equipment. Students also have the option to participate in a supervised work experience program.

To earn a certificate, a student must successfully complete a total of 1725 instructional hours of which 900 are laboratory work and 825 are related theory. A student may leave the program when a training objective is reached and receive a proficiency certificate detailing the skills mastered.

Electrical Trades students must pay a personal equipment fee of $100 before entering the first term, another $85 for the second term, $50 for the third term, and $50 for the fourth term. They also must provide their own shop clothing and industrial safety glasses or goggles which conform to ANSI 287.1.

Note: Students are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during Term I or Term III.

ELECTRICAL TRADES PROGRAM

			Hrs Wk	Cr Hrs
Term I				
[1]BA	111	Communications (7½ weeks)	5	2
[1]BA	131	Human Relations (7½ weeks)	5	2
ELTR	101L	Electrical Trades Theory/Lab I	20	12
ELTR	102	Electrical Math I	5	3
Term II				
ELTR	111L	Electrical Trades Theory/Lab II	20	12
ELTR	112	Electrical Trades Math II	5	3
ELTR	113	Electrical Trades Blueprint Reading I	5	3
		Residential Wiring Certificate		
Term III				
ELTR	201L	Electrical Trades Theory/Lab III	25	15
ELTR	202	Electrical Trades Blueprint Reading II	5	3
		Commercial Wiring Certificate		
Term IV				
ELTR	211L	Electrical Trades Theory/Lab IV	20	12
ELTR	213	Occupational Safety	5	3
		Totals	1725	70
		Electrical Trades Certificate		

Option
Supervised Work Experience

Support Courses
See pages 84–85.

[1]*Course descriptions on page 64.*

COURSE DESCRIPTIONS

ELTR 101L—Electrical Trades Theory/Lab I (12 cr)
This course provides instruction in the fundamentals of basic electricity. Subject areas include AC and DC theory, symbol identification, schematic reading, circuit application, magnetism, introduction to basic transformers, single-phase motors, and use of the National Electric Code and utility requirements.

ELTR 102—Electrical Trades Mathematics I (3 cr)
The student reviews basic arithmetic functions and is introduced to electrical formulas which include Ohm's and Kirchhoff's laws. Problem solving includes calculations of material and circuit load requirements; rules for series, parallel and combination circuits; and mechanical work and power.

ELTR 111L—Electrical Trades Theory/Lab II (12 cr)
(*Prerequisite: ELTR 101L*) The fundamentals of electricity learned in Term I are applied to the design and installation of residential and commercial building circuitry. Subject areas include safety; use of tools and equipment; and the design and installation of branch circuits, service entrances, and the necessary hardware such as outlet boxes, electrical cable and low-voltage equipment. Also covered are wiring of temporary services, basic circuit bending, and an in-depth study of the National Electric Code and local codes and regulations.

ELTR 112—Electrical Trades Mathematics II (3 cr)
(*Prerequisite: ELTR 102 or equivalent*) 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.

ELTR 113—Electrical Trades Blueprint Reading I (3 cr)
(*Prerequisite: ELTR 101L*) 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 201L—Electrical Trades Theory/Lab III (15 cr)
(*Prerequisites: ELTR 111L, ELTR 112, ELTR 113*) Areas of instruction include tools and materials for commercial installations, industrial control circuits for motor driven equipment, conduit bending and installation, fire and intrusion alarm systems, and transformers and power distribution systems. Students work outside the lab on campus projects gaining first-hand knowledge of installation.

ELTR 202—Electrical Trades Blueprint Reading II (3 cr)
(*Prerequisite: ELTR 113 or equivalent*) Advanced instruction in reading blueprints and specifications is provided. The blueprints include transformers, feeders, distribution panels, subfeeder panels, lighting circuits, motors and controllers, signal systems and power requirements.

ELTR 211L—Electrical Trades Theory/Lab IV (12 cr)
(*Prerequisites: ELTR 101L, ELTR 111L, ELTR 201L or equivalent*) This course is an advanced study of motor control circuitry. Included are solid-state devices and a comparison between magnetic control circuitry and state-of-the-art equipment.

ELTR 213—Occupational Safety (3 cr)
This course presents training in the Red Cross Multimedia System and cardiopulmonary resuscitation for which Red Cross certification is issued upon successful completion. An introduction to the Occupational Safety and Health Act (OSHA) regulations is included.

Fire Science

Associate Degree/Certificate Program
4 Terms, Main Campus

The Fire Science program provides basic classroom instruction in the field of firefighting. Students may earn either a certificate or an associate degree.

The training and instruction provided in the first and second terms lead to a certificate and prepare the student for entry-level employment with a fire department. To earn a certificate, a student must complete successfully 30 credit hours.

The curriculum covered in the third and fourth terms provides additional coursework designed to train the student for higher level positions in the fire science occupation. To earn an Associate in Applied Science Degree in Fire Science, a student must complete successfully 67 credit hours of which 36 are core requirements and 31 are Arts and Sciences courses.

Students are required to purchase their own textbooks and instructional supplies.

FIRE SCIENCE PROGRAM

			Cr Hrs
Term I			
ELTR	213	Occupational Safety	3
*ENG	101	Writing with Readings in Exposition	3
FS	101	Introduction to Fire Science	3
FS	102	Fire Service Organization	3
*SOC	101	Introduction to Sociology	3
Term II			
*ENG	119	Technical Communications	3
FS	111	Fire Prevention	3
FS	112	Building Construction	3
*PHYS	102	Introduction to Physics	3
*PSY	101	General Psychology I	3
		Fire Science Certificate	
Term III			
*CHEM	111/112L	Introduction to Chemistry/Lab	4
*COMM	221	Communications Elective	3
FS	201	Fire Protection Systems	3
FS	202	Managing Community Fire Protection	3
FS	203	Hazardous Materials	3
*MATH	120	Intermediate Algebra	3
Term IV			
*CSCI	101	Computer Literacy	3
		or	
		*Computer Elective	3
FS	211	Incident Command and Control	3
FS	212	Fire Investigation	3
FS	213	Industrial Fire Protection	3
FS	214	Facilities Inspection	3
*SOC	216	Race and Ethnic Groups	3
		Total	67

Arts and Sciences courses. Course descriptions on pages 23–29.

COURSE DESCRIPTIONS

ELTR 213—Occupational Safety (3 cr)
This course includes training in the Red Cross Multimedia System and cardiopulmonary resuscitation for which Red Cross Certification is issued upon successful completion. An introduction to the Occupational Safety and Health Act (OSHA) regulations is included.

FS 101—Introduction to Fire Science (3 cr)
This course includes history of fire service, careers in fire protection, physical agility and fitness requirements, public and private fire protection organization, behavior and chemistry of fire, and fire protection future trends.

FS 102—Fire Service Organization (3 cr)
Operational definitions, types of organizations, fire department management techniques and governmental impact on fire service delivery are covered.

FS 111—Fire Prevention (3 cr)
This course presents basic principles of fire prevention, public fire safety education, code development and adoption, fire testing of building components and consumer products.

FS 112—Building Construction (3 cr)
The student is introduced to building construction with emphasis on structural fire elements, fire spread in buildings, fire loading, fire suppression and alarm systems.

FS 201—Fire Protection Systems (3 cr)
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 cr)
This course includes risk assessment, resource management, measuring and evaluating productivity, legal aspects of emergency service delivery, and the changing mission and role of fire service in the community.

FS 203—Hazardous Materials (3 cr)
Students learn definition, recognition and legal aspects of fire service response to hazardous material incidents. Basic Haz-Mat scene management and strategies for resolution of incidents are included.

FS 211—Incident Command and Control (3 cr)
Basic principles of firefighting strategies, fire ground operations, general and special emergencies, incident command and communication, and multijurisdictional incidents as they involve fire service are discussed in this course.

FS 212—Fire Investigation (3 cr)
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 cr)
This course covers lifesaving procedures, special firefighting equipment, salvage, and prevention of rekindling. Problems in storage, handling and manufacture of hazardous materials commonly found in industry also are reviewed.

FS 214—Facilities Inspection (3 cr)
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.

Food Service Management

Certificate Program
1 Term, Main Campus

This program is available to persons employed in the hospitality/food service field who want to learn the skills necessary to become entry-level supervisors or managers.

Classroom instruction totals 135 hours of theory in human relations, supervision and business practices. The supervised work experience portion of the program, totaling a minimum of 240 hours, is established with a cooperating employer under the supervision of the instructor.

Students who complete the program receive certificates.

This program does not qualify students for Veterans Administration training benefits or other student financial aid.

FOOD SERVICE MANAGEMENT PROGRAM

Course Requirements			*Hrs Wk*	*Cr Hrs*
FSMG	101	Food Service Management Theory..	9	6
FSMG	198	Supervised Work Experience.....	16	9
		Totals.....	375	15

COURSE DESCRIPTIONS

FSMG 101—Food Service Management Theory (6 cr)
The student learns skills to advance into supervision and management. Students develop human relations skills needed to facilitate cooperation among employees and attract customers; supervision skills related to motivating employees, resolving conflicts, setting goals, rewarding good performance and providing constructive discipline; and the business practices of basic accounting, marketing and cost control.

FSMG 198—Supervised Work Experience (9 cr)
The student is employed at an approved work station that provides relevant learning experiences directly related to career and educational goals. The student is supervised and evaluated jointly by the employer and T-VI personnel.

Machine Tool Technology

Certificate Program
4 Terms, Main Campus

The Machine Tool Technology program qualifies students for job entry as machine tool operators.

Students learn the fundamental operations of various machine tools. Classes meet in two well-equipped labs where students are introduced to micrometers, gauges, drill presses, hand tools, engine lathes, milling machines, numerically controlled turning and machining centers, and other equipment used throughout the metal working industry.

To earn a certificate, a student must complete successfully 1575 instructional hours of which 900 are laboratory work and 675 are related theory.

A student may leave the program when a training objective has been reached and receive a proficiency certificate detailing the skills mastered.

Machine Tool Technology students must pay an equipment fee of $100 before entering the first term, $80 before the second term, and $70 for the third term. Students also must provide their own industrial goggles or safety glasses with side shields which conform to ANSI 287.1.

Note: Students are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during Term II or Term III.

MACHINE TOOL TECHNOLOGY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
[1]BA	111	Communications (7½ weeks)	5	2
[1]BA	131	Human Relations (7½ weeks)	5	2
MATT	101L	Machine Tool Technology Theory/Lab I	20	12
MATT	102	Machine Tool Technology Math/Blueprint Reading I	5	3
Term II				
MATT	111L	Machine Tool Technology Theory/Lab II	20	12
MATT	112	Machine Tool Technology Math/Blueprint Reading II	5	3
Term III				
MATT	201L	Machine Tool Technology Theory/Lab III	20	12
MATT	203	Numerical Control Programming I	5	3
Term IV				
MATT	211	Machine Tool Technology Lab IV	15	9
MATT	212	Geometrical Tolerancing/ Metallurgy	5	3
MATT	213	Numerical Control Programming II	5	3
		Totals	1575	64

Option
Supervised Work Experience

Support Courses
See pages 84–85.

[1]*Course descriptions on page 64.*

COURSE DESCRIPTIONS

MATT 101L—Machine Tool Technology Theory/Lab I (12 cr)
These courses provide experience in the operation of drill presses, pedestal grinders, band saws, engine lathes, surface grinders and milling machines. Instruction also covers shop safety, benchwork, machine construction and nomenclature, speeds and feeds, cutting tool physics and abrasives.

MATT 102—Machine Tool Technology Mathematics/Blueprint Reading I (3 cr)
Review of basic math and introduction of simple formula manipulation, introduction to shop drawings, and sketching of orthographic and isometric views are included.

MATT 111L—Machine Tool Technology Theory/Lab II (12 cr)
(*Prerequisites: MATT 101L, MATT 102 or equivalent*) Instruction covers advanced engine lathe operations, basic surface grinding and an introduction to turret lathes and milling machines. Emphasis in the theory portion of the course is on the technical aspects of tooling.

MATT 112—Machine Tool Technology Mathematics/Blueprint Reading II (3 cr)
Instruction includes a continuation of algebra with emphasis on machine-related problems, geometric theorems, introduction to trigonometry as applied to the trade, and continuation of print reading.

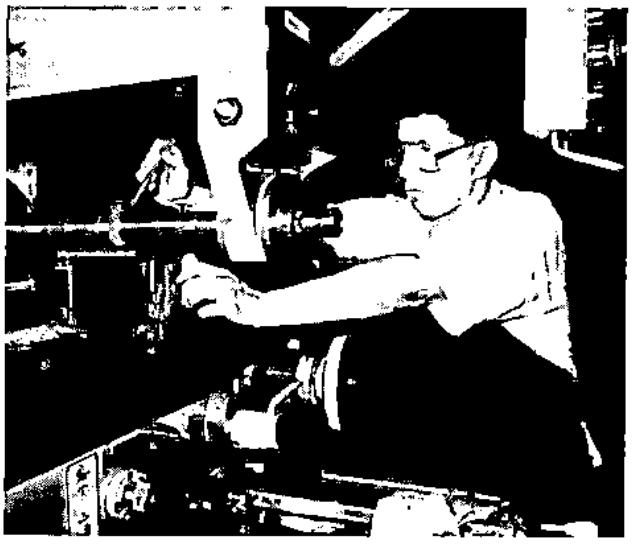
MATT 201L—Machine Tool Technology Theory/Lab III (12 cr)
(*Prerequisites: MATT 111L, MATT 112 or equivalent*) The advanced milling machine operations of hole production, indexing and rotary table work are emphasized. Tracer and advanced turret lathe operations are introduced along with tool, cutter and cylindrical grinding. Numerical control (N/C) and computer numerical control (C/N/C) operations also are covered.

MATT 203—Numerical Control Programming I (3 cr)
(*Prerequisites: All Term II courses or equivalent*) Instruction includes word address formats, the programming and tape preparation necessary for numerical control machining along with practical trigonometry as applied to the N/C programs.

MATT 211—Machine Tool Technology Lab IV (9 cr)
(*Prerequisites: All Term III courses or equivalent*) Major emphasis is on advanced milling and turning setups, advanced N/C, C/N/C setup, and operation of drilling/milling and turning machines.

MATT 212—Geometrical Tolerancing/Metallurgy (3 cr)
This course covers care and application of tooling with emphasis on applications to commonly machined materials with high-speed steels, carbides, coated carbides and ceramics. Instruction covers methods and processes, structure and properties of metal, temperature changes in metal machining, effects of alloying elements, weights and conversion factors. Also included are heat treatment of ferrous alloys and instruction in interpretation and application of the geometrical tolerancing system.

MATT 213—Numerical Control Programming II (3 cr)
(*Prerequisite: MATT 203 or equivalent*) This course offers instruction in computer-assisted interactive graphics and part programming system applications. It provides the basic information necessary for writing milling, drilling and turning programs. The course also covers advanced manual programming techniques and geometric applications to computer assisted drafting/computer assisted manufacturing (CAD/CAM) systems used in distributive numerical control (D/N/C) and C/N/C machining.



Plumbing

Certificate Program
2 Terms, Main Campus

The Plumbing program provides the technical knowledge and occupational skills necessary to enter the plumbing industry.

During the first term, instruction is in the fundamentals of layout, assembly and installation; nomenclature of tools and materials; and practice with the tools of the trade.

Emphasis in the second term is on residential and light commercial work, maintenance and remodeling; installation of fixtures; alteration, planning and coordination of the job; repair of piping systems; installation of water, soil and vent lines; and application of codes.

Most activities take place on campus, but some take place at off-campus building sites and are an integral part of the curriculum.

To earn a certificate, a student must complete successfully 750 instructional hours of which 450 are laboratory work and 300 are related theory.

A student may leave the program when a training objective has been reached and receive a proficiency certificate detailing the skills mastered.

Plumbing students must pay an equipment fee of $100 before entering the first term and another $70 for the second term.

PLUMBING PROGRAM

			Hrs Wk	Cr Hrs
Term I				
PLMB	101L	Plumbing Theory/Lab I	20	12
PLMB	102	Plumbing Math/Blueprint Reading I	5	3
Term II				
PLMB	111L	Plumbing Theory/Lab II	20	12
PLMB	112	Plumbing Math/Blueprint Reading II	5	3
		Totals	750	30

Option
Supervised Work Experience

Support Courses
See pages 84–85.

COURSE DESCRIPTIONS

PLMB 101L—Plumbing Theory/Lab I (12 cr)
This class covers safe and proper use of tools and equipment; identification of plumbing fittings and pipe; basic hydraulics and pneumatics; layout, assembly, installation, alteration and repair of pipe systems; safety practices; general tools and equipment; sources of heat; and operational procedures.

PLMB 102—Plumbing Mathematics/Blueprint Reading I (3 cr)
This course covers basic arithmetic, whole numbers, common and decimal fractions, cubic and weight measures, use of rules and formulas, ratio and proportion, area calculations, volumes, pressure and capacities, hydraulics and pipe length calculations, and surface and direct measurements. Also covered are basic instruction in sketching, and reading workshop drawings, blueprints and specifications for residential and light commercial work.

PLMB 111L—Plumbing Theory/Lab II (12 cr)
(*Prerequisites: PLMB 101L or equivalent, PLMB 102 or equivalent*) This course emphasizes design, layout and installation of water, soil and vent lines; related fixtures and fittings; inspecting and testing systems; soldering; maintenance and repair of plumbing; solar systems; yard irrigation; swimming pool, hot tubs and spa installation and service.

PLMB 112—Plumbing Mathematics/Blueprint Reading II (3 cr)
(*Prerequisite: PLMB 102 or equivalent*) Course content includes a detailed study of piping drawings, isometric pipe layouts, interpreting residential and light commercial blueprints, application of plumbing codes, knowledge of terms, and planning and coordinating the job.

Truck Driving

Certificate Program
1 Term, Main Campus

The Truck Driving program provides basic instruction required to become a professional truck driver.

Students learn how to handle a tractor trailer safely and efficiently. The program is designed for students who are already licensed as automobile drivers in New Mexico. The goal of the program is to provide the basic instruction and skill development required to obtain the commercial driver's license needed to operate tractor trailers.

To earn a certificate, a student must successfully complete 375 hours of which 100 are related theory and 275 are actual driving activities.

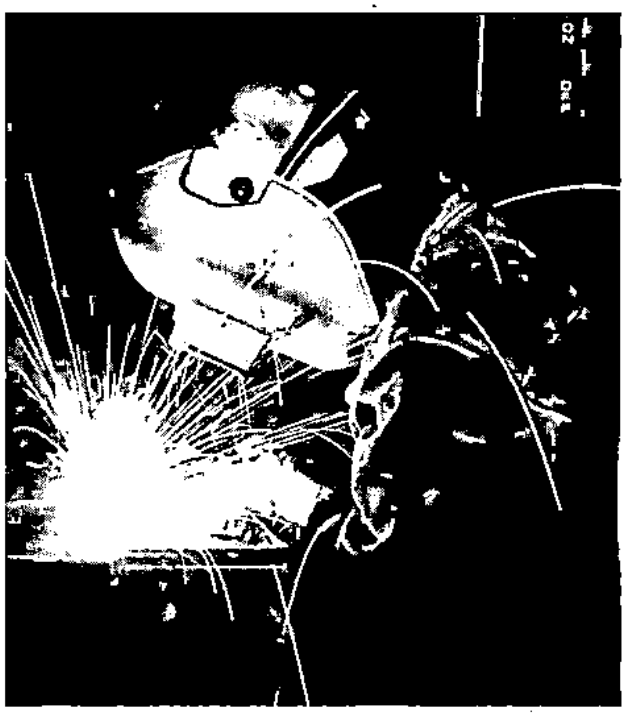
Students must pay a nonrefundable fee of $100 for the course.

TRUCK DRIVING PROGRAM

			Hrs Wk	Cr Hrs
Term I				
TRDR	104L	Truck Driving Theory/Lab	25	15
		Totals	375	15

COURSE DESCRIPTION

TRDR 104L—Truck Driving Theory/Lab (15 cr)
This course provides basic classroom, driving range and over-the-road instruction in the fundamentals of control systems; vehicle inspection; shifting, backing, coupling and uncoupling; speed and space management; hazard perception; emergency maneuvers; cargo handling, protection and documentation; hours-of-service requirements; accident procedures; trip planning; preventive maintenance; minor repairs; reporting equipment malfunctions; public and employer relations; and state and federal regulations governing the professional truck driver.



Welding

Certificate Program
3 Terms, Main Campus

The Welding program qualifies students for entry-level employment in the metals-processing industry. Specific welding qualification is the goal of each term.

This program admits students only once a year for the fall term.

During the first term, students study, practice and qualify in oxyacetylene welding. Instruction also is provided in shielded metal-arc welding.

In the second term, welder qualification tests are given in shielded metal-arc welding and gas metal-arc welding. Students must pass these tests to advance to Term III.

During the third term, tests are given in pipe welding and gas tungsten-arc welding to acquaint the student with standard operating procedures for various qualifications. Students must be making progress on these tests to qualify for supervised work experience. Instruction also is offered on welding fabrication and materials testing.

A student may leave the program when a training objective is reached and receive a proficiency certificate detailing the skills mastered.

A certificate is awarded to students who complete successfully 1200 instructional hours of which 750 are laboratory work and 450 are related theory.

Welding students must pay a personal equipment fee of $100 before entering the first term.

WELDING PROGRAM

			Hrs Wk	Cr Hrs
Term I				
WELD	101L	Welding Metallurgy Theory/ Lab I	20	12
WELD	102	Welding Math/Blueprint Reading I	5	3
Term II				
WELD	111L	Welding Metallurgy Theory/ Lab II	20	12
WELD	112	Welding Math/Blueprint Reading II	5	3
Term III				
WELD	201L	Welding Metallurgy Theory/ Lab III	25	15
WELD	202	Blueprint Reading III	5	3
		Totals	1200	48

Option
Supervised Work Experience

Support Courses
See pages 84–85.

COURSE DESCRIPTIONS

WELD 101L—Welding Metallurgy Theory/Lab I (12 cr)
This class teaches welding safety, general tools and equipment, common gases and their properties, welding materials, welding joints, oxyacetylene welding and brazing, thermal cutting, and shielded metal-arc welding procedures and processes. Instruction is offered in manufacturing processes, structure and properties of metal, temperature changes in welding, effects of alloying elements, variations of fluxes, and slags and gases for shielding.

WELD 102—Welding Mathematics/Blueprint Reading I (3 cr)
This is a course in basic drawing interpretation, welding symbols, terms and detailed fittings applied to the welding area. Instruction also is provided in basic arithmetic. Surface and direct measurements, graphs and charts, and payroll calculations are studied.

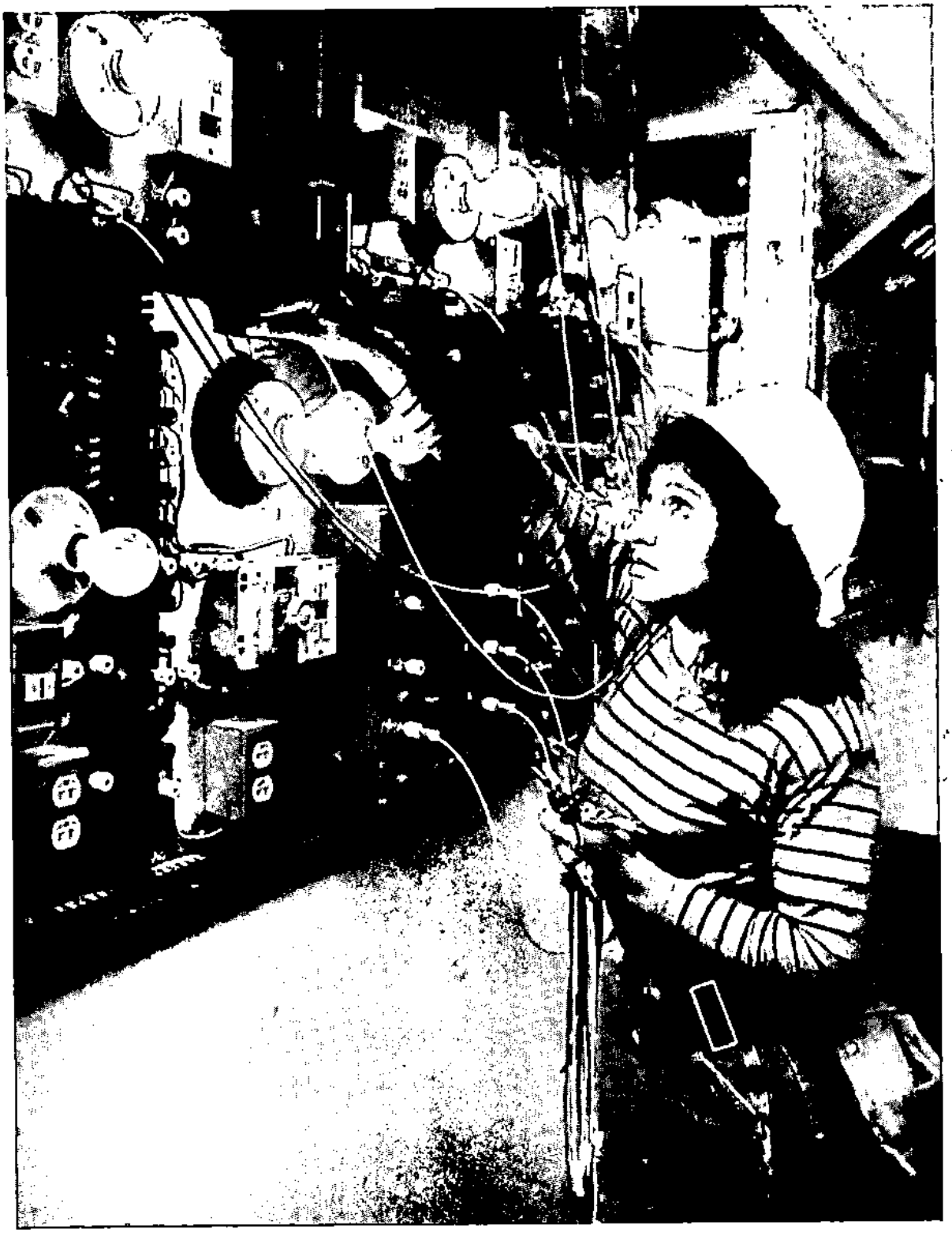
WELD 111L—Welding Metallurgy Theory/Lab II (12 cr)
(*Prerequisite: WELD 101L or equivalent*) This course provides advanced instruction in shielded arc and gas metal-arc welding, and beginning instruction in gas tungsten-arc welding. Students learn about filler metal for joining iron, steel and nonferrous metals, shrinkage and distortion in weldments, preheating and postheating, difficulties and defects in welds, welding carbon and alloy steels, welding tests, conversion factors and symbols, weights and properties.

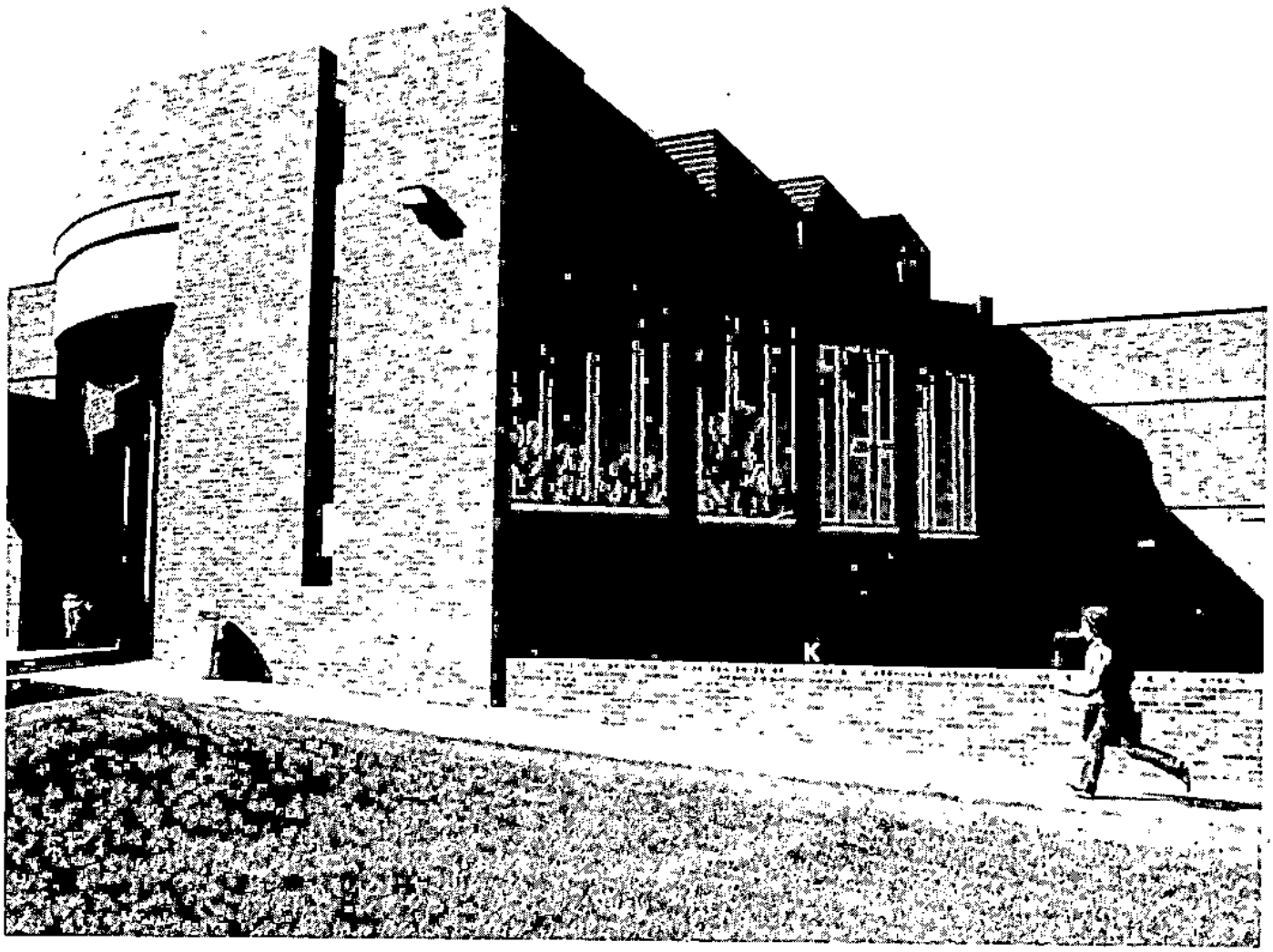
WELD 112—Welding Mathematics/Blueprint Reading II (3 cr)
(*Prerequisite: WELD 102 or equivalent*) This course offers blueprint reading instruction in which the student reads commercial construction and fabrication drawings, complex detail section and assembly drawings related to the welding field. Rules, formulas, ratio, proportion, volume and right-angle calculations also are covered.

WELD 201L—Welding Metallurgy Theory/Lab III (15 cr)
(*Prerequisites: WELD 111L, WELD 112 or equivalent*) 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. The course also deals with welding problems; welding processes used for carbon steels, stainless steels, aluminum and pipe; procedures, layout used in fabrication and AWS inspection standards.

WELD 202—Blueprint Reading III (3 cr)
(*Prerequisite: WELD 112 or equivalent*) This lab course teaches development of templets for various types of pipe and fabrication welding, materials estimating, pipe layout and development, pipe and structural print reading, performance of pipe qualification tests for the basic intersections, transferring of measurements from working drawings and blueprints, design considerations, layout and welding related to fabrication.

CONTINUING EDUCATION DIVISION





Calendar

Continuing Education Division

FALL TERM, 1989

Classes Begin	Sept. 5
Skill Improvement Registration-by-Mail Deadline	Aug. 11
Skill Improvement Late Registration Deadline	Sept. 14
Refund Deadline	Sept. 15
Adult Basic Education Registration	Aug. 14–Sept. 14
Adult Basic Education Midterm Registration	Oct. 23–25
Staff Development (no classes)	Oct. 27
Thanksgiving (no classes after 5 p.m.)	Nov. 22
Thanksgiving (no classes)	Nov. 23–25
Last Evening of Classes	Dec. 21

WINTER TERM, 1990

Classes Begin	Jan. 9
Skill Improvement Registration-by-Mail Deadline	Dec. 15
Skill Improvement Late Registration Deadline	Jan. 18
Refund Deadline	Jan. 19
Adult Basic Education Registration	Dec. 11–Jan. 18
Adult Basic Education Midterm Registration	Feb. 20–22
Presidents' Day (no classes)	Feb. 17, 19
Last Evening of Classes	Apr. 24

SUMMER TERM, 1990

Classes Begin	May 7
Skill Improvement Registration-by-Mail Deadline	Apr. 13
Skill Improvement Late Registration Deadline	May 17
Refund Deadline	May 18
Adult Basic Education Registration	Apr. 16–May 17
Adult Basic Education Midterm Registration	June 19–21
Memorial Day (no classes)	May 26, 28
Independence Day (no classes)	July 4
Last Evening of Classes	Aug. 17

ADULT BASIC EDUCATION

T-VI's Adult Basic Education program, which is offered free, includes classes in written and spoken English, math, General Educational Development (GED) examination subjects for persons seeking a high school equivalency diploma, and a citizenship/amnesty class for aliens who want to become United States citizens.

Registration

Persons wanting to take an Adult Basic Education class should begin by registering in person at either T-VI campus. Registration deadlines are: Fall term—September 14; winter term—January 18; summer term—May 17. Registration is held between 10 a.m. and 8 p.m. Midterm registration also will be held at both campuses. For information, phone 848-1486 (Main Campus) or 298-5461 (Montoya Campus).

A Continuing Education Division counselor will help with class selection to meet individual needs and schedules. During the term, ABE counselors are available at both Main and Montoya campuses Monday through Thursday from noon to 9 p.m., and Friday from 8 a.m. to 5 p.m.

Locations

Adult Basic Education classes are offered at T-VI's Main and Montoya campuses and other locations throughout the Albuquerque area. Current off-campus sites include:

Cañoncito Community School, Cañoncito
Duranes Elementary School, 2436 Zickert NW
East Central Multi-Service Center, 7525 Zuni SE
El Buen Samaritano, 700 Granite NW
Ernie Pyle Middle School, 1820 Valdora SW
Garfield Middle School, 3501 Sixth NW
Holy Family School, 562 Atrisco SW
John Marshall Multi-Service Center, 1500 Walter SE
La Mesa Elementary School, 7500 Copper NE
Nativity School, 9502 Fourth NW
Polk Middle School, 2220 Raymac SW
Reginald Chavez Elementary School, 2700 Mountain Rd. NW
Rio Grande High School, 2300 Arenal SW
San Jose Cursillo Center, 2401 Broadway SE
West Mesa High School, 6701 Fortuna NW

Persons or groups interested in additional ABE classes in the community should contact the Continuing Education Division. It may be possible for T-VI to provide classes at locations not listed here.

Tuition and Fees

There are no tuition charges or fees for Adult Basic Education classes. They are funded with state and federal monies.

Textbooks

Textbooks are loaned to students free.

Standards of Progress

Students must attend at least 80 percent of the class sessions to receive a certificate. No letter grades are given.

Attendance

Teachers take attendance at each class session and turn in monthly absence reports. If a student is absent four class sessions in a row, the teacher tries to contact the student. A student may be dropped from the class after four consecutive absences.

Student Records

The Continuing Education Division maintains permanent records which include the date a student enrolled in a class, date completed or dropped, total number of class hours and hours attended, and whether a certificate was issued to the student. Transcripts are furnished upon student request by the Continuing Education Division Office. The first transcript is free; others cost $1 each. *At least 48 hours must be allowed to process transcript requests.*

ADULT BASIC EDUCATION CLASSES

NOTE: English as a Second Language classes are for persons learning to speak English. Most of the classwork is in speaking and listening although some written work is given. In addition to textbooks, tape recorders and other audiovisual equipment are used.

Most of these classes are approved by the Immigration and Naturalization Service (INS) toward fulfillment of eligibility requirements for permanent residence under Section 245A of the Amnesty Act of 1986. ***Classes not approved for amnesty are marked with an asterisk (*).***

101–B: BEGINNING ENGLISH AS A SECOND LANGUAGE

This class is for students who do not speak English and for those who have not studied English before. The class uses a conversational approach to learning English. Linguistic differences and teacher recommendations will be considered for proper placement of students in the class.

Fall–Winter

MW	4–6 p.m.	La Mesa Elementary School
	6:30–8:30 p.m.	East Central Multi-Service Center
		Rio Grande High School
		Van Buren Middle School
	7–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus
		Ernie Pyle Middle School
		John Marshall Multi-Service Center
		Nativity School—Alameda
		Reginald Chavez Elementary School
		San Jose Cursillo Center
TTh	12:30–3:30 p.m.	T-VI Main Campus
	7–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus
		Duranes Elementary School
		El Buen Samaritano
		Garfield Middle School
		Holy Family School
		Nativity School—Alameda
		Polk Middle School
		Reginald Chavez Elementary School
		West Mesa High School
MWF	8:30–10:30 a.m.	T-VI Main Campus
	10:45–12:45 p.m.	
	1:30–3:30 p.m.	
MTWThF	*8:30–10:30 a.m.	T-VI Main Campus
		T-VI Montoya Campus
	*10:45 a.m.–12:45 p.m.	T-VI Main Campus
		T-VI Montoya Campus
	*1:30–3:30 p.m.	T-VI Main Campus
Sat	*9 a.m.–12 noon	T-VI Montoya Campus

Summer

MW	6:30–8:30 p.m.	East Central Multi-Service Center
		Rio Grande High School
	7–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus
		John Marshall Multi-Service Center
		Nativity School—Alameda
		San Jose Cursillo Center
TTh	12:30–3:30 p.m.	T-VI Main Campus
	7–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus
		Duranes Elementary School
		El Buen Samaritano
		Holy Family School
		Nativity School—Alameda
MWF	8:30–10:30 a.m.	T-VI Main Campus
	10:45 a.m.–12:45 p.m.	
	1:30–3:30 p.m.	
MTWThF	*8:30–10:30 a.m.	T-VI Main Campus
		T-VI Montoya Campus
	*10:45 a.m.–12:45 p.m.	T-VI Main Campus
		T-VI Montoya Campus
	*1:30–3:30 p.m.	T-VI Main Campus
Sat	*9 a.m.–12 noon	T-VI Montoya Campus

101–I: INTERMEDIATE ENGLISH AS A SECOND LANGUAGE

This class is for students who have completed 101-B or persons who speak some English. It is a continuation of the beginning class with emphasis on speaking and writing.

Fall–Winter–Summer

MW	6:30–8:30 p.m.	Rio Grande High School
	7–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus
		Nativity School—Alameda
		San Jose Cursillo Center
TTh	7–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus
		El Buen Samaritano
		John Marshall Multi-Service Center
		Nativity School—Alameda
		San Jose Cursillo Center
MTWThF	*8:30–10:30 a.m.	T-VI Main Campus
	*10:45 a.m.–12:45 p.m.	T-VI Main Campus
		T-VI Montoya Campus
	*1:30–3:30 p.m.	T-VI Main Campus

101–A: ADVANCED ENGLISH AS A SECOND LANGUAGE

Students who have had a previous conversational English class and persons who can speak some English but need additional practice may take this class. Speaking, writing and basic grammar are taught.

Fall–Winter–Summer

MW	6:30–8:30 p.m.	East Central Multi-Service Center Rio Grande High School
	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus Nativity School—Alameda San Jose Cursillo Center
TTh	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus Nativity School—Alameda San Jose Cursillo Center
MTWThF	*8:30–10:30 a.m.	T-VI Main Campus
	*10:45 a.m.–12:45 p.m.	T-VI Main Campus
	*1:30–3:30 p.m.	T-VI Main Campus

101–L: BASIC LITERACY FOR ENGLISH AS A SECOND LANGUAGE

(*Prerequisite: 101-B or equivalent*) This class helps students learn the most basic skills for reading and writing in English. It is especially for those with little formal education or whose language does not use the same written alphabet as English. The class includes letter formation (printing and cursive), relation between English sounds and letters, reading and writing single words and short sentences, and filling out short application forms.

Fall–Winter

MW	6:30–8:30 p.m.	Rio Grande High School
	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus Ernie Pyle Middle School
TTh	7–9 p.m.	T-VI Main Campus Nativity School—Alameda West Mesa High School
T	6–9 p.m.	East Central Multi-Service Center
MTWThF	10:45 a.m.–12:45 p.m.	T-VI Main Campus

Summer

MW	6:30–8:30 p.m.	Rio Grande High School
	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus
TTh	7–9 p.m.	T-VI Main Campus Nativity School—Alameda
T	6–9 p.m.	East Central Multi-Service Center
MTWThF	10:45 a.m.–12:45 p.m.	T-VI Main Campus

102–B: BEGINNING BASIC ENGLISH GRAMMAR/ SPELLING

This class is recommended for students who can function in the English language or have taken at least three terms of conversational English, or students who have difficulty reading and writing the English language. Included are grammar, speech correction, oral expression, writing, spelling and phonetics.

Fall–Winter–Summer

MW	7–9 p.m.	T-VI Montoya Campus
TTh	7–9 p.m.	T-VI Main Campus

102–A: ADVANCED BASIC ENGLISH GRAMMAR/ SPELLING

Persons who need English grammar and spelling review or reinforcement will benefit from this class. This is a structured English grammar class which may be taken by high school graduates for review purposes.

Fall–Winter–Summer

TTh	4:30–6:30 p.m.	Cañoncito School
	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus

103: COMBINATION BASIC MATHEMATICS AND ENGLISH GRAMMAR

This class is for students who want to improve their basic English and mathematics. Mathematics, English and spelling are emphasized. Students are divided according to abilities and individual instruction is given in mathematics.

Fall–Winter–Summer

TTh	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus

104: BASIC MATHEMATICS

This class helps students understand addition, subtraction, multiplication and division of whole numbers, fractions, decimals and word problems. The student learns how to use this math in household budget, borrowing money, insurance, distance/area measurements, and other everyday problems. Percent is covered. Advanced basic math topics are introduced.

Fall–Winter–Summer

TTh	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus

105: CITIZENSHIP FOR ALIENS

This is a class in United States history and government for aliens who want to take the United States Naturalization Test. To become a U.S. citizen, an alien must first pass an oral and written test before an examiner from the Naturalization Department. The test is not given at T-VI nor administered by T-VI personnel. The test also may include information on national, state and municipal government. Free textbooks are given only to students enrolled in the class.

Fall–Winter–Summer

MW	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus San Jose Cursillo Center
TTh	7–9 p.m.	T-VI Main Campus Nativity School—Alameda
MWF	1:30–3:30 p.m.	T-VI Main Campus
Sat	9 a.m.–12 noon	T-VI Montoya Campus

107–B: BEGINNING READING IMPROVEMENT AND SPELLING

This is a beginning literacy class for English speakers who have difficulty reading and recognizing words. It improves the student's reading ability and understanding of what is read. Word recognition, spelling and sight vocabulary are included.

Fall–Winter–Summer

MW	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus

107–I: INTERMEDIATE READING IMPROVEMENT AND SPELLING

This class improves the student's ability to read and understand what is read. Textbooks and audiovisual aids are used to help improve reading, comprehension and spelling.

Fall–Winter–Summer

MW	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus

107–A: ADVANCED READING IMPROVEMENT AND SPELLING

This advanced reading class is for students who can read but want to improve comprehension and reading speed. *This is not a speed reading class.* Audiovisual equipment and other reading materials are used for speed, comprehension, retention and spelling.

Fall–Winter–Summer

MW	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus

108: GED REVIEW IN WRITING SKILLS, MATHEMATICS, SCIENCE, SOCIAL STUDIES AND LITERATURE

This class prepares students for the General Educational Development (GED) examination for a high school equivalency diploma. The five areas covered for the GED exam are writing skills, social studies, science, literature and mathematics. Students are placed in this class according to their pretest scores. Much of the class can be planned for the individual student and may be completed at the student's own pace. Students are encouraged to take the GED examination at the end of the term, but those with high demonstrated ability may take the test earlier. All textbooks are furnished to the student free. The GED test fee is $2.25.

Fall–Winter

MTWThF	8:30–11:30 a.m.	T-VI Main Campus
		T-VI Montoya Campus
	12:30–3:30 p.m.	T-VI Main Campus
		T-VI Montoya Campus
MW	6–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus
		Rio Grande High School
TTh	2–5 p.m.	East Central Multi-Service Center
	3:30–6:30 p.m.	Cañoncito School
	6–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus
		Ernie Pyle Middle School
		Garfield Middle School
		Polk Middle School
		West Mesa High School
Sat	9 a.m.–12 noon	T-VI Montoya Campus

Summer

MTWThF	8:30–11:30 a.m.	T-VI Main Campus
		T-VI Montoya Campus
	12:30–3:30 p.m.	T-VI Main Campus
		T-VI Montoya Campus
MW	6–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus
		Rio Grande High School
TTh	2–5 p.m.	East Central Multi-Service Center
	3:30–6:30 p.m.	Cañoncito School
	6–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus
Sat	9 a.m.–12 noon	T-VI Montoya Campus

This class can be offered at other locations upon request. Please call 247-9579, Ext. 28, for additional information.

Prerequisite: Persons wanting to take the GED exam or GED preparation classes must be AT LEAST 18 YEARS OLD AND MUST NOT BE ENROLLED IN ANY HIGH SCHOOL. A PERSON WHO IS 17 YEARS OLD MAY ENROLL ONLY IF RELEASED FROM THE NEW MEXICO STATE COMPULSORY SCHOOL ATTENDANCE LAW AND IF GRANTED A GED UNDERAGE PERMISSION FORM.

NOTE: Students may register for GED classes at Main Campus between 10 a.m. and 8:30 p.m. Monday through Thursday, 8 a.m. and 4:30 p.m. on Friday; and at Montoya Campus from 12 noon to 8:30 p.m. Monday through Thursday and 8 a.m. to 4:30 p.m. on Friday.

SKILL IMPROVEMENT PROGRAM

The Skill Improvement Program assists adults in improving their job skills for career advancement, preparing for a career change, exploring a new career field or acquiring basic educational skills which they lack.

Admission Policies

Classes are open to adults and high school sophomores, juniors and seniors. Some classes require prerequisites which must be met prior to enrollment.

Registration is taken on a space available basis. Every effort will be made to place all applicants in classes. If fewer than 15 persons have applied for a class, it may be canceled.

Substitute Credit

Continuing Education Division classes that carry the same course numbers as courses offered by the Instructional Division are approved for use in certificate and degree programs. These classes begin the listings under each Skill Improvement heading, and are followed by the SK (Skill Improvement) classes.

Not all classes can be substituted in an Instructional Division program on a one-to-one basis. In some cases, it takes two or more Continuing Education classes to equal one Instructional Division class.

For information, see the instructional department counselors or Continuing Education Division personnel.

Tuition and Fees

TUITION: Skill Improvement classes are tuition free to New Mexico residents. Persons who have not lived in New Mexico for 12 consecutive months prior to the first day of classes must pay nonresident tuition.

Nonresident Tuition	
Substitute Classes	$58 per credit hour
SK Classes	
1–5 weeks	$40 per class
6–15 weeks	$120 per class

REGISTRATION FEE: There is a $15-per-term registration fee for Skill Improvement classes (regardless of the number of classes taken).

LABORATORY FEES: In some classes, there is a laboratory fee to cover the cost of supplies and materials used in class. Laboratory fees listed in this catalog are subject to change.

TEXTBOOKS: Textbooks are required for most Skill Improvement classes. Students must purchase their own textbooks. The cost of textbooks for a specific class may range from $8 to $65. Information about required textbooks and costs is available from the T-VI bookstore.

REFUNDS: *Registration, lab and tuition fees* will be refunded if the applicant cannot be placed in a class. Students who withdraw from class before the refund deadline may apply for a refund of their *lab and tuition fees* but not the registration fee. Refund checks are issued by the Continuing Education Division office at Main Campus. *No refunds are given after the first two weeks of class.*

Textbook refunds are made by the T-VI Bookstore.

Registration

Persons who want to take a Skill Improvement class should register early for the best chance of placement.

To complete the registration process, applicants will:

- **Submit a separate registration form for each class desired.** Forms are available at both T-VI campuses and all branches of the Albuquerque Public Library. Registration is handled on a continuous basis for each term. Deadlines for registering by mail are: Fall term, August 11; winter term, December 15; summer term, April 13. Continuing Education Division office hours at both campuses are 8 a.m. to 9 p.m., Monday through Thursday, and 8 a.m. to 5 p.m. on Friday during the term.
- **Pay required fees.** The $15 registration fee is paid only once per term, regardless of the number of classes taken. Lab fees and nonresident tuition are payable at the time of registration. (Exception: Lab fees for welding classes are due August 11 for fall term, December 15 for winter term, and April 13 for summer term.) Fees may be hand-delivered to either campus or mailed to the Main Campus. Payment may be by check, money order, Mastercard or VISA. Payment must accompany the registration form.

The registration fee is refundable only if T-VI is unable to place the applicant in a requested class. Lab and tuition fees may be refunded upon request until the end of the second week of classes.

- **Receive notification.** Applicants will be notified about placement in classes.

Standards of Progress

To successfully complete a Skill Improvement class and receive a certificate, a student must attend at least 80 percent of the classes and earn a minimum grade of C. Letter grades used are:

A = Excellent
B = Above Average
C = Average
D = Below Average
F = Failing
W = Withdraw

Certificates are granted to students for each class completed successfully.

A grade, but no certificate, may be awarded upon successful completion of all coursework and attendance of at least 70 percent of the class sessions.

Attendance Policies

Continuing Education Division teachers take attendance each class session. If a student is absent four class meetings in a row, the teacher tries to contact the student. A student may be dropped from the class after four consecutive absences.

Student Records

Permanent records kept by the Continuing Education Division include the date a student enrolled in a class, date completed or dropped, total number of class hours, total number of hours the student attended, final grade, credit hours (where applicable), and whether a certificate was awarded to the student. The words per minute attained in a typing or shorthand class also are noted when applicable.

The Continuing Education Division will furnish transcripts whenever requested by a student. The first transcript is free; others cost $1 each. *Please allow 48 hours to process transcript requests.*

Business Education

ACCT 101A: ACCOUNTING PRINCIPLES LAB I (B) (3 cr)

(*Prerequisite or corequisite: ACCT 111*) Principles of the double entry accounting system including recording transactions, adjusting accountings; preparing statements, closing accounts of proprietorship, partnerships and corporations, merchandise and cash accounts, and accounting systems are thoroughly covered. Business forms and terms, accuracy, neatness, orderliness and responsibility are included.

Fall–Winter

MW	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus Cibola High School Highland High School La Cueva High School Rio Grande High School
TTh	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus Del Norte High School West Mesa High School
Sat	8:30 a.m.–12:30 p.m.	T-VI Montoya Campus

Summer

MW or TTh	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus

NOTE: Students may be required to furnish their own calculators.

ACCT 101B: ACCOUNTING PRINCIPLES LAB I (I) (3 cr)

(*Prerequisites: ACCT 101A, ACCT 111*) This is a continuation of ACCT 101A. Units cover accounts receivable, inventories, cost of goods sold, plant and equipment accounts, tangible and intangible assets, current and long-term liabilities, and payroll accounting.

Fall

MW	7–9 p.m.	T-VI Main Campus Highland High School
TTh	7–9 p.m.	T-VI Montoya Campus West Mesa High School

Winter

MW	7–9 p.m.	T-VI Main Campus Cibola High School
TTh	7–9 p.m.	T-VI Montoya Campus Del Norte High School
Sat	8:30 a.m.–12:30 p.m.	T-VI Montoya Campus

Summer

MW	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Montoya Campus

NOTES: Students may be required to furnish their own calculators.

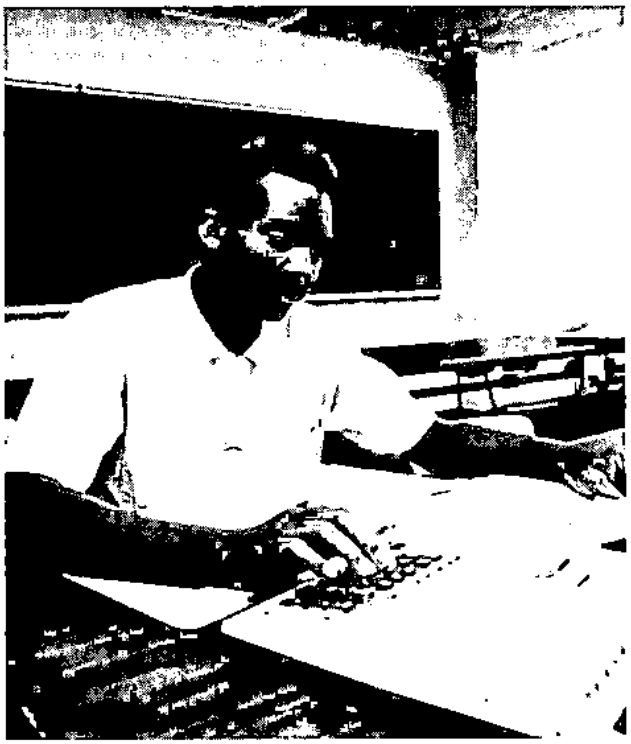
Upon completion of ACCT 101A and ACCT 101B, Instructional Division credit for ACCT 101L may be awarded.

ACCT 102A: ACCOUNTING PRINCIPLES LAB II (B) (3 cr)

(*Prerequisites: ACCT 101B, ACCT 111*) A continuation of ACCT 101B, this course covers various aspects of corporate accounting, notes and bonds, departmental accounting, and accounting for manufacturing.

Fall–Winter

MW	7–9 p.m.	Highland High School
TTh	7–9 p.m.	T-VI Montoya Campus



Summer

TTh	7–9 p.m.	T-VI Main Campus

NOTE: Students may be required to furnish their own calculators.

ACCT 102B: ACCOUNTING PRINCIPLES LAB II (I) (3 cr)

(*Prerequisites: ACCT 102A, ACCT 111*) This course is a continuation of ACCT 102A. It covers cost accounting, job orders, master budgets, profit analysis, standard costs, managerial decisions and tax considerations.

Fall–Summer

TTh	7–9 p.m.	T-VI Montoya Campus

Winter

TTh	7–9 p.m.	T-VI Main Campus

NOTES: Students may be required to furnish their own calculators.

Upon completion of ACCT 102A and ACCT 102B, Instructional Division credit for ACCT 102L may be awarded.

ACCT 111: ACCOUNTING MATH/CALCULATORS (3 cr)

This course covers basic arithmetic operations, familiarizes the student with a wide range of accounting procedures for which mathematics is required, and develops touch method skills using electronic calculators.

Fall–Summer

TTH	6:30–9 p.m.	T-VI Main Campus

Winter

MW	6:30–9 p.m.	T-VI Montoya Campus

ACCT 240: TAX ACCOUNTING I (3 cr)

(Prerequisites: ACCT 101B) This course primarily examines the fundamental characteristics of federal income taxes as applied to individuals.

	Fall	
MW	6:30–9 p.m.	Highland High School
	Summer	
TTh	6:30–9 p.m.	T-VI Montoya Campus

ACCT 241: TAX ACCOUNTING II (3 cr)

(Prerequisite: ACCT 240) This course examines corporations, estate and gift taxes, fiduciaries, tax planning and tax shelters.

	Fall	
MW	6:30–9 p.m.	T-VI Montoya Campus
	Winter	
MW	6:30–9 p.m.	Highland High School

ACCT 252A: COMPUTER LAB I (B) (LOTUS 1-2-3) (1.5 cr)

(Prerequisite: BA 150 or DP 174L) This class covers use of a microcomputer spreadsheet program such as LOTUS 1-2-3. Topics covered include creating and using macros, sorting, lookup tables and database manipulation capabilities.

	Fall	
Sat	8 a.m.–1 p.m.	T-VI Main Campus
	12 noon–5 p.m. (Sept. 9–Oct. 21)	T-VI Montoya Campus
	Winter	
Sat	12 noon–5 p.m.	T-VI Main Campus
	8 a.m.–1 p.m. (Jan. 13–Mar. 3)	T-VI Montoya Campus
	Summer	
Sat	8 a.m.–1 p.m. (May 12–June 30)	T-VI Main Campus T-VI Montoya Campus

LAB FEE: $10

ACCT 252B: COMPUTER LAB I (I) (LOTUS 1-2-3) (1.5 cr)

(Prerequisite: ACCT 252A) This course is a continuation of ACCT 252A. It covers advanced use of macros, importing and exporting spreadsheets, database manipulations and business graphics.

	Fall	
Sat	8 a.m.–1 p.m.	T-VI Main Campus
	12 noon–5 p.m. (Oct. 28–Dec. 16)	T-VI Montoya Campus
	Winter	
Sat	12 noon–5 p.m.	T-VI Main Campus
	8 a.m.–1 p.m. (Mar. 10–Apr. 21)	T-VI Montoya Campus
	Summer	
Sat	8 a.m.–2 p.m. (July 7–Aug. 11)	T-VI Main Campus T-VI Montoya Campus

LAB FEE: $10

NOTE: Upon completion of ACCT 252A and ACCT 252B, Instructional Division credit for ACCT 252 may be awarded.

ACCT 253: COMPUTER LAB II (ACCOUNTING) (3 cr)

(Prerequisites: ACCT 102B and BA 150 or DP 176L) This microcomputer lab includes payroll, inventory control, accounts payable and general ledger. Students use prepared integrated business software on microcomputers.

	Fall–Winter–Summer	
MW or TTh	6:30–9 p.m.	T-VI Main Campus

LAB FEE: $10

ACCT 260: COST ACCOUNTING (3 cr)

(Prerequisite: ACCT 102B) This course emphasizes job order and process costing for construction and manufacturing.

	Winter	
TTh	6:30–9 p.m.	T-VI Montoya Campus

ACCT 270: GOVERNMENTAL ACCOUNTING (3 cr)

(Prerequisite: ACCT 102B) This course provides the student with additional training in accounting for governmental and other nonprofit entities.

	Fall	
MW	6:30–9 p.m.	T-VI Montoya Campus

ACCT 271: AUDITING (3 cr)

(Prerequisite: ACCT 102B) Auditing procedure, reports and working papers are studied and analyzed. Audit practices for verification of assets, liabilities, owner's equity, expense and revenue accounts are stressed. Internal control techniques are studied to develop the student's ability to conserve assets.

	Winter	
TTh	6:30–9 p.m.	T-VI Main Campus

ACCT 280: MANAGERIAL ACCOUNTING (3 cr)

(Prerequisite: ACCT 102B) Students learn how accounting data can be interpreted and used by management in planning and controlling business activities.

	Fall	
TTh	6:30–9 p.m.	T-VI Main Campus

BA 113: INTRODUCTION TO BUSINESS (2 cr)

The structure of business, its activities and problems are surveyed in this course. An understanding of the nature of the business world also is provided.

	Fall–Winter	
MW	7–9 p.m.	T-VI Main Campus

BA 121: BUSINESS COMMUNICATIONS I (3 cr)

The student learns to communicate effectively through the study of writing fundamentals. Students also have the opportunity to develop oral and listening skills.

	Fall	
TTh	6:30–9 p.m.	T-VI Main Campus West Mesa High School
	Winter	
MW	6:30–9 p.m.	Rio Grande High School
TTh	6:30–9 p.m.	T-VI Montoya Campus
	Summer	
MW	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	TVI Montoya Campus

BA 122: BUSINESS COMMUNICATIONS II (3 cr)

(*Prerequisites: BA 121 and 25 words a minute typing skill*) The student learns to write effective business letters, reports and memoranda. Continued use of oral communication and listening skills is stressed.

Fall–Winter

MW	6:30–9 p.m.	T-VI Main Campus

Summer

MW	6:30–9 p.m.	T-VI Montoya Campus

BA 131: HUMAN RELATIONS (2 cr)

This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and the work ethic is stressed.

Fall

MW	7–9 p.m.	T-VI Main Campus
Sat	8:30 a.m.–12:30 p.m.	T-VI Montoya Campus

Winter

TTh	7–9 p.m.	T-VI Main Campus

Summer

MW	7–9 p.m.	T-VI Montoya Campus

BA 133: PRINCIPLES OF MANAGEMENT (3 cr)

This introductory course helps the student understand basic management functions including planning, organizing, staffing, directing and controlling.

Fall

MW	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	T-VI Montoya Campus West Mesa High School

Winter

MW	6:30–9 p.m.	T-VI Main Campus Rio Grande High School
TTh	6:30–9 p.m.	T-VI Montoya Campus

Summer

MW	6:30–9 p.m.	T-VI Main Campus

BA 211: BUSINESS LAW (3 cr)

This course provides a basic knowledge of law as it applies to all business dealings in our society. Particular emphasis is on the Uniform Commercial Code. Practical problems in law are considered.

Fall–Summer

TTh	6:30–9 p.m.	T-VI Main Campus

Winter

MW	6:30–9 p.m.	T-VI Montoya Campus

BA 215: MONEY AND BANKING (3 cr)

(*Prerequisite: ACCT 102B*) This course covers the history, nature and function of money. Methods of institutional control and theories of monetary policy are included.

Fall

MW	6:30–9 p.m.	T-VI Montoya Campus

BA 222: PRINCIPLES OF MARKETING (3 cr)

(*Prerequisite: BA 133*) This course is designed to study total marketing concepts—from the production of goods to delivery to the potential customer—from a management point of view. A computer simulation project is included.

Winter

MW	6:30–9 p.m.	T-VI Main Campus

BA 240: INVESTMENTS (3 cr)

(*Prerequisite: ACCT 102B*) Students study investment analysis, management, objectives, values and risks.

Winter

TTh	6:30–9 p.m.	T-VI Montoya Campus

BA 270: REAL ESTATE LAW (3 cr)

The rights and obligations of the real estate agent with regard to contractual and fiduciary duties owed to the parties being represented are established in this class. Major topics include ownership rights, law of agency and law of contracts.

Fall–Winter

MW	10:30 a.m.–12:30 p.m.	T-VI Main Campus
	7–9 p.m.	T-VI Montoya Campus
TTh	7–9 p.m.	T-VI Main Campus
Sat	12:45–4 p.m.	T-VI Montoya Campus

Summer

MW	10:30 a.m.–12:30 p.m.	T-VI Main Campus
	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Montoya Campus

NOTE: This class meets for 12 weeks except for the Saturday sessions, which meet for 15 weeks.

BA 271: REAL ESTATE PRACTICE (3 cr)

This is a class in general real estate practice for persons needing a review or wanting a basic knowledge of the real estate business.

Fall–Winter

MW	8:30–10:30 a.m.	T-VI Main Campus
	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Montoya Campus
Sat	8:45 a.m.–12 noon	T-VI Montoya Campus

Summer

MW	8:30–10:30 a.m.	T-VI Main Campus
	7–9 p.m.	T-VI Montoya Campus
TTh	7–9 p.m.	T-VI Main Campus

NOTE: This class meets for 12 weeks except for the Saturday sessions, which meet for 15 weeks.

BA 272: REAL ESTATE APPRAISAL (3 cr)

(*Prerequisite: BA 271*) An introduction to accepted methods for estimating the value of real property, this class covers fundamentals of real estate appraisal of both land and improved property and techniques used by professional appraisers.

Fall

MW	7–9 p.m.	T-VI Montoya Campus

Winter

TTh	7–9 p.m.	T-VI Main Campus

NOTE: This class meets for 12 weeks.

BA 273: REAL ESTATE FINANCE (3 cr)

(Prerequisite: BA 271) This is a study of financing real property, the money market, sources and cost determinants of mortgage money, financial leverage, value of existing mortgage in relation to the current market and purchaser qualification.

Fall

MW	7–9 p.m.	T-VI Montoya Campus

Winter

TTh	7–9 p.m.	T-VI Main Campus

NOTE: This class meets for 12 weeks.

BA 274: REAL ESTATE INVESTMENT (3 cr)

(Prerequisites: BA 270, BA 271) This course gives the student a basic understanding of investment principles to ensure sound investment decisions and assessment of property potential. The student gains an awareness of the marketplace and the needs of the public through text, lecture and case study.

Winter

MW	7–9 p.m.	T-VI Montoya Campus

NOTE: This class meets for 12 weeks.

BA 275: PROPERTY MANAGEMENT (3 cr)

This course covers residential and commercial rental property management. Topics include marketing of services, market and prospect analysis, recordkeeping, laws relating to rental properties, legal documents including leases and management contracts, property maintenance, employee relations, insurance, security and administration.

Fall–Winter

TTh	7–9 p.m.	T-VI Main Campus

NOTE: This class meets for 12 weeks.

BA 276: LAND USE PLANNING (3 cr)

(Prerequisites: BA 270, BA 271) This class provides the student with terminology, strategies, planning processes, subdivision plans, development processes, condemnation procedures, liabilities and remedies used in land use planning.

Summer

Sat	8:45 a.m.–12 noon	T-VI Montoya Campus

BA 277: REAL ESTATE COMPREHENSIVE CONTRACTS (3 cr)

(Prerequisites: BA 270, BA 271) Instruction is provided in contract law relating to basis of equipment and premises, buyer-seller-agent relationships, basis of law governing contracts, written contracts, misrepresentations, special relationships and contract remedies.

Summer

TTh	7–9 p.m.	T-VI Montoya Campus

NOTE: This class meets for 12 weeks.

BA 278: REAL ESTATE AND TAXES (3 cr)

(Prerequisites: BA 270, BA 271) This class 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.

Summer

MW	7–9 p.m.	T-VI Montoya Campus

NOTE: This class meets for 12 weeks.

BA 284: SALESMANSHIP (3 cr)

Personal selling skills are accented along with how to promote oneself, goods and services.

Fall

MW	6:30–9 p.m.	T-VI Main Campus

BA 285: FASHION CONCEPTS AND MERCHANDISING (3 cr)

This introductory class covers fashion terminology, elements of design, apparel sizing and styling, basic construction and current trends in the fashion industry.

Fall

TTh	6:30–9 p.m.	T-VI Montoya Campus

BA 286: ADVERTISING (3 cr)

This class gives the student a basic understanding of the many elements of advertising. The advertising plan, media selection and schedule, budget, design and production, and advertising effectiveness are included.

Winter

TTh	6:30–9 p.m.	T-VI Main Campus

SS 101A: TYPING LAB I (B) (3 cr)

Typing by the touch method and basic arrangement of business letters, memos, reports, tables and forms are included. A minimum typing speed of 25 words per minute should be attained in this class.

Fall–Winter

MW	6:30–9 p.m.	T-VI Main Campus T-VI Montoya Campus Cibola High School Highland High School La Cueva High School Rio Grande High School
TTh	6:30–9 p.m.	T-VI Main Campus T-VI Montoya Campus Del Norte High School West Mesa High School
Sat	8:30 a.m.–1:30 p.m.	T-VI Montoya Campus

Summer

MW or TTh	6:30–9 p.m.	T-VI Main Campus T-VI Montoya Campus

SS 101B: TYPING LAB I (I) (3 cr)

(*Prerequisite: SS 101A*) Basic typing skills are reviewed with emphasis on building speed, accuracy and number control. Production emphasis is on business letters, reports and forms. A minimum typing speed of 40 words per minute should be attained in this class.

Fall–Winter

MW	6:30–9 p.m.	T-VI Montoya Campus Cibola High School Highland High School
TTh	6:30–9 p.m.	T-VI Main Campus West Mesa High School

Summer

MW	6:30–9 p.m.	T-VI Montoya Campus
TTh	6:30–9 p.m.	T-VI Main Campus

NOTE: Upon completion of SS 101A and SS 101B, Instructional Division credit for SS 101L may be awarded.

SS 111: BUSINESS MATHEMATICS/ CALCULATORS (3 cr)

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.

Fall–Summer

TTh	6:30–9 p.m.	T-VI Montoya Campus

Winter

MW	6:30–9 p.m.	T-VI Main Campus

SS 112: SECRETARIAL ACCOUNTING (3 cr)

(*Prerequisite or corequisite: ACCT 111 or SS 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. Payroll accounting also is covered. Students complete a computerized payroll package.

Fall–Winter

MW	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	T-VI Montoya Campus

NOTE: Students may be required to furnish their own calculators.

SS 113: CASHIERING (3 cr)

Use of various cash registers, including the ability to solve procedural problems that occur at a register and checkout station, is developed in this course. Instruction also focuses on bank teller applications.

Fall–Winter

MW or TTh	6:30–9 p.m.	T-VI Main Campus

Summer

MW	6:30–9 p.m.	T-VI Main Campus

SS 133A: WORD PROCESSING (B) (1.5 cr)

(*Prerequisites: SS 101B and SS 132 or DP 174L*) This class helps students become more proficient using a microcomputer word processing program. Topics covered include formats, editing documents, printing, merging, block operations, search techniques and the use of a speller.

Fall

Sat	12 noon–5 p.m. 8 a.m.–1 p.m. (Sept. 9–Oct. 21)	T-VI Main Campus T-VI Montoya Campus

Winter

Sat	8 a.m.–1 p.m. 12 noon–5 p.m. (Jan. 13–Mar. 3)	T-VI Main Campus T-VI Montoya Campus

Summer

TTh	6:30–9 p.m. (May 8–June 21)	T-VI Montoya Campus
Sat	12 noon–5 p.m. (May 12–June 30)	T-VI Main Campus

LAB FEE: $10

SS 133B: WORD PROCESSING (I) (1.5 cr)

(*Prerequisite: SS 133A*) This course is a continuation of SS 133A. It covers advanced block processing, super and subscripts, fonts, and importing and exporting files.

Fall

Sat	12 noon–5 p.m. 8 a.m.–1 p.m. (Oct. 28–Dec. 16)	T-VI Main Campus T-VI Montoya Campus

Winter

Sat	8 a.m.–1 p.m. 12 noon–5 p.m. (Mar. 10–Apr. 21)	T-VI Main Campus T-VI Montoya Campus

Summer

TTh	6:30–9 p.m. (June 26–Aug. 9)	T-VI Montoya Campus
Sat	11 a.m.–5 p.m. (July 7–Aug. 11)	T-VI Main Campus

NOTE: Upon completion of SS 133A and SS 133B, Instructional Division credit for SS 133 may be awarded.

SS 134: SHORTHAND I (GREGG) (3 cr)

This introductory class covers the theory and writing of Gregg shorthand. A writing speed of 50 words per minute should be reached upon completion.

Fall–Winter

MW	6:30–9 p.m.	T-VI Main Campus Rio Grande High School
TTh	6:30–9 p.m.	T-VI Montoya Campus Del Norte High School
Sat	8:30 a.m.–1:30 p.m.	T-VI Montoya Campus

Summer

MW	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	T-VI Montoya Campus

SS 135: SHORTHAND I (ALPHABETIC) (3 cr)

Reading and writing of ABC Stenoscript shorthand is learned. A writing speed of 50 words per minute should be reached upon completion.

Fall–Winter

MW	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	T-VI Montoya Campus

Summer

MW	6:30–9 p.m.	T-VI Main Campus

SS 136: SHORTHAND II (3 cr)

(*Prerequisite: SS 134 or SS 135*) The ability to write shorthand at a rate of 70 words per minute is sought with emphasis on speed, accuracy, grammar, punctuation and transcription speed.

Fall–Winter

MW	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	T-VI Montoya Campus

Summer

MW	6:30–9 p.m.	T-VI Main Campus

SS 204: LEGAL TYPING (3 cr)

(*Prerequisite: Ability to type 50 wpm.*) Instruction is in the preparation of mailable legal correspondence and forms from different types of input including machine transcription, copy type and preprinted forms.

Fall

MW	6:30–9 p.m.	T-VI Main Campus

SS 240: LEGAL TERMINOLOGY/ PROCEDURES (3 cr)

(*Prerequisite: Typing proficiency of at least 50 wpm*) Meaning and spelling of legal terminology, familiarization with legal procedures, and client relationships are included in this course.

Fall–Winter

MW	6:30–9 p.m.	T-VI Main Campus

SS 250: MACHINE TRANSCRIPTION (3 cr)

(*Prerequisites: SS 101B, SS 122*) This course builds speed and accuracy in the transcription of mailable copy.

Fall–Winter–Summer

MW	6:30–9 p.m.	T-VI Main Campus

CERTIFIED PROFESSIONAL SECRETARY (CPS) REVIEW

CPS is the recognized rating that measures secretarial proficiency. The review class helps prepare individuals to take the Certified Professional Secretary examination. Secretarial and clerical personnel who have experience will benefit from taking these classes.

The six-part examination is administered each May by the Institute for Certifying Secretaries. Upon successful completion of the CPS exam, T-VI will accept a possible 34 hours credit toward the Associate in Applied Science Degree in Secretarial Studies. For transfer information, contact the Secretarial Studies program advisor at either campus.

SS 270: CERTIFIED PROFESSIONAL SECRETARY REVIEW, PART I (3 cr)

Topics covered are behavioral science in business, business law, and economics and management.

Fall

M	6–9 p.m.	T-VI Main Campus

SS 271: CERTIFIED PROFESSIONAL SECRETARY REVIEW, PART II (3 cr)

Topics covered are accounting, office administration and communications, and office technology.

Winter

M	6–9 p.m.	T-VI Main Campus

ENTR 101L: ENTREPRENEURSHIP (6 cr)

During the first few days of the term, the instructor meets with each student to determine specific goals, problems or needs. Programs are then tailored to the individual. Daily tasks/ activities are accomplished through lecture, group activities and independent work. Special workshop or seminar-type activities are scheduled throughout the term to deal with common areas of concern.

Fall–Winter

TWTh	6:30–9:30 p.m.	T-VI Main Campus La Cueva High School

SK 1101: HUMAN RELATIONS AND SUPERVISION

(*Prerequisite: BA 131*) Human behavior and communication skills and their impact on human relations and success in supervision are explored. Management, case studies, labor union relations, minority employee relations and supervision of the experienced employee are reviewed.

Fall

TTh	6:30–9 p.m.	T-VI Montoya Campus

Winter

MW	6:30–9 p.m.	T-VI Main Campus
Sat	8:30 a.m.–1:30 p.m.	T-VI Montoya Campus

SUPERVISORY SKILLS SERIES

The six classes in this series are designed for persons who want to improve their supervisory and management skills. The classes may be taken individually or in any sequence. There are no prerequisites.

SK 1103: WHAT SUPERVISORS NEED TO KNOW

In this class, students gain knowledge of how perceptions differ; how attitudes, self concept and disclosure affect work relations; what motivates employees; the effect of group dynamics; and how employees are affected by the work environment.

Fall

MW	6:30–9 p.m. (Sept. 6–Oct. 9)	T-VI Main Campus

Winter

MW	6:30–9 p.m. (Jan. 10–Feb. 12)	T-VI Main Campus

Summer

MW	6:30–9 p.m. (May 7–June 11)	T-VI Main Campus

SK 1104: SUPERVISING OTHERS

This class covers selecting, orienting and training employees; leadership styles; motivating employees; performance reviews; and health and safety.

Fall

MW	6:30–9 p.m. (Oct. 11–Nov. 13)	T-VI Main Campus

Winter

MW	6:30–9 p.m. (Feb. 14–Mar. 21)	T-VI Main Campus

Summer

MW	6:30–9 p.m. (June 13–July 16)	T-VI Main Campus

SK 1105: MANAGING YOURSELF

Managing your time, coping with stress, managing your career, values and ethics, and putting your best foot forward are among the topics included in this class.

Fall

MW	6:30–9 p.m. (Nov. 15–Dec. 20)	T-VI Main Campus

Winter

MW	6:30–9 p.m. (Mar. 26–Apr. 23)	T-VI Main Campus

Summer

MW	6:30–9 p.m. (July 18–Aug. 15)	T-VI Main Campus

SK 1106: COMMUNICATING PROCESS

Students learn about communication barriers and verbal/nonverbal communication in this class. Listening, writing, speaking and negotiating skills also are covered.

Fall

TTh	6:30–9 p.m. (Sept. 5–Oct. 5)	T-VI Main Campus

Winter

TTh	6:30–9 p.m. (Jan. 9–Feb. 8)	T-VI Main Campus

Summer

TTh	6:30–9 p.m. (May 8–June 7)	T-VI Main Campus

SK 1107: SPECIAL CHALLENGES

This class addresses the special challenges which face the supervisor: solving problems, making decisions, dealing with problem employees and employee problems, hiring and firing employees, dealing with discrimination and special needs of employees, and managing conflict.

Fall

TTh	6:30–9 p.m. (Oct. 10–Nov. 9)	T-VI Main Campus

Winter

TTh	6:30–9 p.m. (Feb. 13–Mar. 15)	T-VI Main Campus

Summer

TTh	6:30–9 p.m. (June 12–July 12)	T-VI Main Campus

SK 1108: PLANNING, ORGANIZING, AND CONTROLS

This class covers planning and the management process, managing change, human resource planning, the importance of organizing, organizing the work of others, and the importance of controls.

Fall

TTh	6:30–9 p.m. (Nov. 14–Dec. 19)	T-VI Main Campus

Winter

TTh	6:30–9 p.m. (Mar. 20– Apr. 19)	T-VI Main Campus

Summer

TTh	6:30–9 p.m. (July 17–Aug. 16)	T-VI Main Campus

SK 1115: FINANCIAL INSTITUTION TELLER

Organization, human relations, personal appearance, interrelationships and banking ethics are included in this introductory class.

Fall–Winter–Summer

MW	7–9 p.m.	T-VI Montoya Campus
TTh	7–9 p.m.	T-VI Main Campus

SK 1131: SMALL BUSINESS ACCOUNTING

This class provides basic accounting principles and practices. The accounting cycle for service and merchandising businesses is covered including journalizing, posting, preparation of the work sheet, financial statements, adjusting and closing entries, post-closing trial balance and preparation of government report forms.

Fall–Winter

MW	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	La Cueva High School

Summer

MW	7–9 p.m.	T-VI Main Campus

SK 1134: SMALL BUSINESS COMPUTER INFORMATION SYSTEMS

This course provides the small business person with a general understanding of the functions of various modules within an integrated accounting computer package. Topics include accounting systems overview, flow charting and use of accounting modules.

Fall–Winter–Summer

TTh	6:30–9:30 p.m.	T-VI Montoya Campus

SK 1140: CHANGING CAREERS

This class is designed for adults who wish or need to change professions, obtain employment or retrain for new jobs. Class topics include self assessment, career planning, self esteem, skills assessment, research and information sources, marketing yourself, goal setting, career alternatives, dressing and communicating for success, employment/interviewing laws and survival skills.

Fall

MW	7–9 p.m.	T-VI Main Campus Rio Grande High School
MWF	9:30–11:30 a.m. (Sept. 6–Nov. 3)	T-VI Montoya Campus

Winter

MW	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	West Mesa High School
MWF	9:30–11:30 a.m. (Jan. 10–Mar. 21)	T-VI Montoya Campus

Summer

MW	7–9 p.m.	T-VI Montoya Campus
MWF	9:30–11:30 a.m. (May 7–July 18)	T-VI Montoya Campus

LAB FEE: $10

SK 1191: INTRODUCTION TO INSURANCE

This course provides a general introduction to insurance, how it is sold, premiums, policies, underwriting, commercial and personal insurance, and insurance in the marketplace.

Fall

M	7–9 p.m.	T-VI Montoya Campus

SK 1192: PRINCIPLES OF LIFE AND HEALTH INSURANCE

This class introduces principles, uses of contracts, coverages, ratings, and evaluation of life and health insurance practices.

Winter

M	7–9 p.m.	T-VI Montoya Campus

Business Occupations Learning Centers

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

The BOLCs serve members of the public and T-VI students who want to review or learn a particular subject or skill individually.

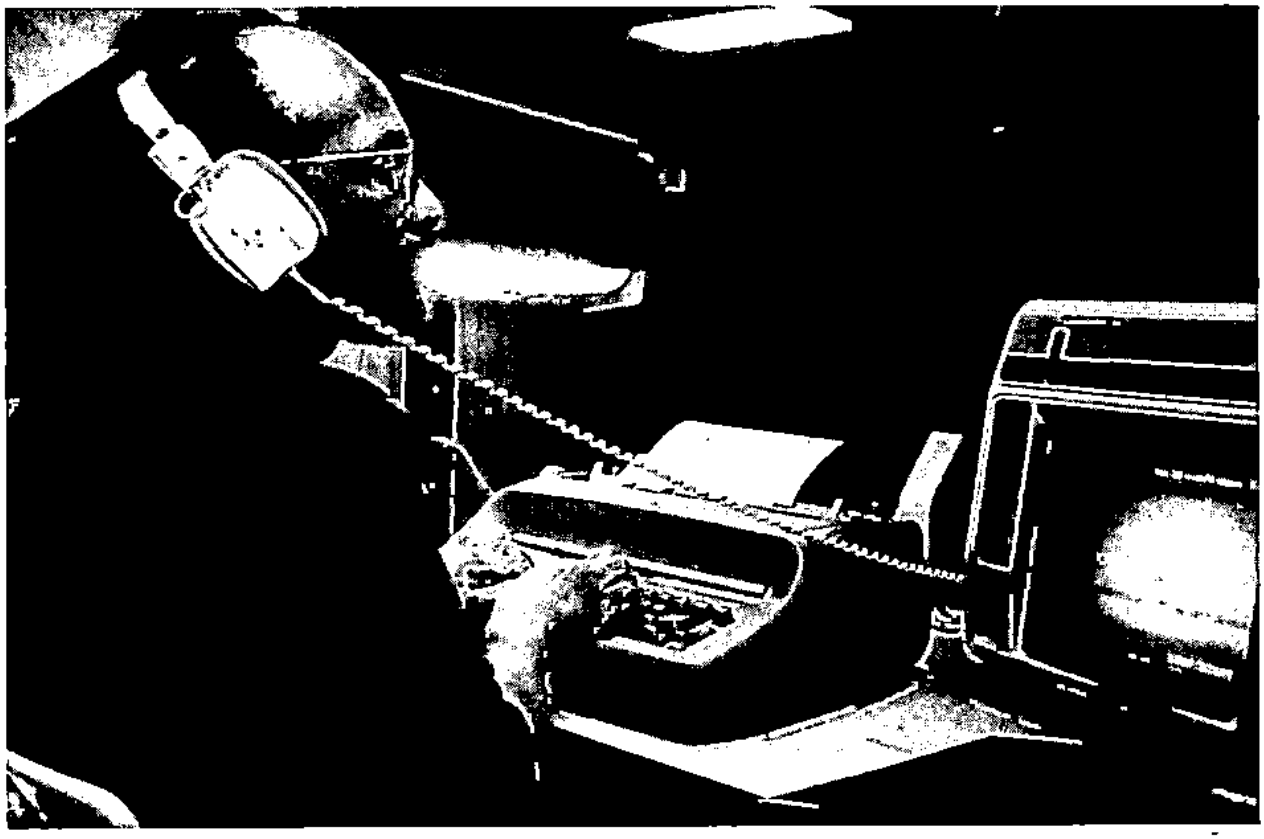
Individuals may begin using these centers at any time during a term and stop when requirements have been met. Instruction is offered on new equipment including electronic typewriters, electronic calculators, transcribing machines, microcomputers and audiovisual training aids. Hours are arranged to suit individual needs and as equipment is available.

The Main Campus center is located in Room B-210. 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, 7:30 a.m. to 5 p.m. on Friday, and 9 a.m. to 1 p.m. on Saturday. The fee is $20 per course. For further information, phone 842-6219 at Main Campus, 298-5461 at Montoya Campus.

BOLC SUBJECT/SKILL AREAS

Typing I
Typing II
Typing III, Montoya Campus
Typewriting Skillbuilding
Alphabetic Shorthand I
Century 21 Shorthand I, Main Campus
Forkner Shorthand I
Gregg Shorthand I
Gregg Shorthand II
Machine Shorthand
Shorthand Review
Shorthand Speedbuilding
Telephone Techniques
Communications Review
Proofreading
Business Mathematics Fundamentals
Business Mathematics II
Business Mathematics III, Main Campus
Electronic Calculating
Accounting Fundamentals
Records Management
Machine Transcription
Legal Transcription
Medical Transcription
Medical Terminology
Microcomputer Courses

NOTE: Course descriptions on pages 34–35.



Health Education

SK 1210: MEDICAL OFFICE ASSISTANT, ADMINISTRATIVE

(*Prerequisites: Filing skills and 40 wpm typing speed*) This class provides a person with clerical skills for employment as a medical office aide. Instruction concentrates on medical terms, greeting the patient, office management, public relations, health and hospitalization insurance, basic medical law and ethics, and credit and collection records.

Fall–Winter

TTh	7–9 p.m.	T-VI Main Campus

SK 1212: MEDICAL OFFICE ASSISTANT, CLINICAL

(*Prerequisite: 40 wpm typing speed*) This class prepares persons with clinical skills for employment as aides in doctors' offices. Instruction concentrates on medical terms, basic medical laws and ethics, preparing the patient, assisting the doctor, selecting and sterilizing instruments, selecting materials and supplies for the doctor and preparing medications.

Fall–Winter

TTh	7–9 p.m.	T-VI Main Campus

SK 1215: HOSPITAL WARD CLERK

This class includes an introduction to medical terminology, communications, the working environment, patient centered activities and the understanding of medication orders. Personal hygiene is emphasized.

Fall–Winter

MW	7–9 p.m.	T-VI Montoya Campus

SK 1220: MEDICAL TERMINOLOGY

This class is designed for persons with little or no medical background. It is also useful as a medical terminology refresher course. Included are word parts, building medical terms, basic anatomy and common medical abbreviations.

Fall

MW	7–9 p.m.	Highland High School

Winter

TTh	7–9 p.m.	Del Norte High School

Summer

MW	7–9 p.m.	T-VI Montoya Campus

NOTE: This class meets for 10 weeks.

SK 1230: EMERGENCY MEDICAL TECHNICIAN

Emergency medical techniques currently used to provide emergency care with rescue squads or ambulances are covered. The lessons include 105 hours of classroom didactics and practice sessions. This class helps students prepare for state and/or national EMT and cardiopulmonary resuscitation (CPR) certification.

Fall–Winter–Summer

MW or TTh	6–9:30 p.m.	T-VI Main Campus

LAB FEE: $50

NOTE: Students must be at least 17½ years old to take state and/or national certification examinations.

SK 1240: FIRST AID FOR HEALTH EMERGENCIES

This class covers procedures for handling injury and illness in an emergency. Basic first aid, cardiopulmonary resuscitation (CPR), injury and disease prevention, and disaster fundamentals are covered.

Fall–Winter–Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

Technical Education

ARDR 101A: RESIDENTIAL DRAFTING (4 cr)

(*Prerequisites or corequisites: ARDR 103, ARDR 104L*) General drafting theory and techniques needed to produce construction drawings and related documents for residential structures are covered.

Fall–Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

NOTE: Students must provide their own instruments and supplies.

ARDR 101B: RESIDENTIAL DRAFTING (4 cr)

(*Prerequisite: ARDR 101A*) Graphic skills related to residential construction drawings are emphasized. The use of manufacturers' technical data and standard reference works is covered.

Winter–Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

NOTES: Students must provide their own supplies.

Upon completion of ARDR 101A and ARDR 101B, Instructional Division credit for ARDR 101L may be awarded.

ARDR 103: RESIDENTIAL MATERIALS AND METHODS (3 cr)

Properties of building materials are related to building design and construction methods. Blueprint reading, zoning, building codes, material estimates, energy conservation, and alternative building technologies are covered. The student learns the City of Albuquerque's requirements for obtaining a building permit.

Fall–Winter

TTh	6:30–9:30 p.m.	T-VI Main Campus

ARDR 104L: INTRODUCTION TO CAD (1 cr)

(*Prerequisite or corequisite: ARDR 101L*) This course includes an introduction to the microcomputer and its operating system and basic concepts in computer assisted drafting (CAD).

Fall

MW	6:30–9:30 p.m.	T-VI Main Campus Eldorado High School Manzano High School
TTh	6:30–9:30 p.m.	La Cueva High School

Winter

MW	6:30–9:30 p.m.	T-VI Main Campus Eldorado High School Manzano High School
TTh	6:30–9:30 p.m.	Del Norte High School La Cueva High School

Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

ARDR 114L: ARCHITECTURAL COMPUTER ASSISTED DRAFTING (CAD) (1 cr)

(*Prerequisite: ARDR 104L*) The student builds on CAD skills developed in ARDR 104L. Intermediate drawing and editing commands are learned and electronic spreadsheets are introduced.

Fall

TTh	6:30–9:30 p.m.	Del Norte High School

Winter

MW	6:30–9:30 p.m.	Rio Grande High School

LAB FEE: $10

ARDR 172: ARCHITECTURAL RENDERING (3 cr)

Techniques in architectural rendering and illustration are explored. Students work with axonometric and perspective drawings in a variety of media such as pencil sketching, inking and color.

Winter

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

NOTE: Students must provide their own supplies.

DDET 101L: INTRODUCTION TO TECHNICAL DRAFTING (2 cr)

This course is an introduction to fundamental drafting techniques including proper care and use of drafting equipment, lettering, sketching, linework, scaling, geometric construction, orthographic projection, sections and conventions.

Fall–Winter

MW or TTh	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	T-VI Montoya Campus

Summer

MW or TTh	6:30–9 p.m.	T-VI Main Campus

LAB FEE: $15

NOTE: Students must provide their own instruments and supplies.

DDET 111L: MECHANICAL DETAILING (3 cr)

(*Prerequisite: DDET 101L*) 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.

Winter

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

NOTE: Students must provide their own supplies.

DP 101A: ANSI COBOL (B) (3 cr)

(*Prerequisite or corequisite: DP 102*) Elementary structured programming projects directly related to business and accounting applications are designed, coded, debugged and executed.

Fall–Winter

MW	6:30–9:30 p.m.	T-VI Main Campus
TTh	6:30–9:30 p.m.	T-VI Montoya Campus
Sat	9 a.m.–4 p.m.	T-VI Montoya Campus

Summer

MW	6:30–9:30 p.m.	T-VI Main Campus
TTh	6:30–9:30 p.m.	T-VI Montoya Campus

DP 101B: ANSI COBOL (I) (3 cr)

(*Prerequisite: DP 101A*) This class is a continuation of DP 101A. More advanced, structured programming projects are designed, coded, debugged and executed.

Fall–Winter

MW	6:30–9:30 p.m.	T-VI Main Campus
TTh	6:30–9:30 p.m.	T-VI Montoya Campus
Sat	9 a.m.–4 p.m.	T-VI Montoya Campus

NOTE: Upon completion of DP 101A and DP 101B, Instructional Division credit for DP 101L may be awarded.

DP 102: INTRODUCTION TO COMPUTERS/JOB CONTROL LANGUAGE (3 cr)

Instruction is provided in computer vocabulary, logic and control, and structured programming techniques including hierarchy charts and topdown planning. Also included are utilities, sorts and JCL for mainframe and microcomputer systems.

Fall–Winter

MW or TTh	6:30–9 p.m.	T-VI Main Campus T-VI Montoya Campus
Sat	8:30 a.m.–1:30 p.m.	T-VI Montoya Campus

Summer

MW or TTh	6:30–9 p.m.	T-VI Main Campus T-VI Montoya Campus

DP 103: COMPUTER MATHEMATICS I (3 cr)

Algebra fundamentals are covered in this course along with selected business and management math applications. Microcomputers are used to assist in the instructional process.

Fall–Winter–Summer

MW	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	T-VI Montoya Campus

DP 111A: ADVANCED ANSI COBOL (B) (3 cr)

(*Prerequisite: DP 101B*) This class continues the development of structured programming skills developed in DP 101A and DP 101B with emphasis on indexed file processing.

Fall–Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

DP 111B: ADVANCED ANSI COBOL (I) (3 cr)

(*Prerequisite: DP 111A*) This class continues the development of structured programming skills developed in DP 111A with emphasis on file update and subprogram concepts.

Winter–Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

NOTE: Upon completion of DP 111A and DP 111B, Instructional Division credit for DP 111L may be awarded.

DP 112A: VSE JCL/VSAM/UTILITIES (B) (3 cr)

(*Prerequisites: DP 101B, DP 102*) Emphasis is placed on the IBM system software including VSESP, JECL, VSE/JCL, VSE/ICCF, library functions, IBM utilities, and spooler, sort/merg, DASD access methods including VSAM, CICS configuration, tables used with COBOL and command level coding.

Fall–Winter

TTh	6:30–9:30 p.m.	T-VI Main Campus

DP 112B: VSE JCL/VSAM/UTILITIES (I) (3 cr)

(*Prerequisite: DP 112A*) This class covers advanced VSE functions for release 2.1 with emphasis on advanced data management and label processing concepts, system operation and facilities, and system management techniques. System utilities such as librarian, clear disk and fastcopy are covered. Data protection facilities and VSE interface between POWER, VTAM and CICS are discussed.

Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

NOTE: Upon completion of DP 112A and DP 112B, Instructional Division credit for DP 112L may be awarded.

DP 113: COMPUTER MATHEMATICS II (3 cr)

(*Prerequisite: DP 103*) This course continues the development of algebra, business math skills and introductory statistics. Elementary BASIC programs are used to teach formulas on microcomputers.

Fall–Winter–Summer

MW	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	T-VI Montoya Campus

DP 172L: FORTRAN PROGRAMMING (3 cr)

This is an introductory course in FORTRAN IV computer programming.

Fall–Winter

MW	6:30–9:30 p.m.	T-VI Montoya Campus

DP 173L: PASCAL PROGRAMMING (3 cr)

This class uses microcomputers and covers the Pascal language for personal or mainframe computers.

Fall

MW	6:30–9:30 p.m.	T-VI Main Campus

Winter

MW	6:30–9:30 p.m.	T-VI Main Campus
TTh	6:30–9:30 p.m.	T-VI Montoya Campus

LAB FEE: $10

DP 174L: BASIC LANGUAGE PROGRAMMING (3 cr)

This introduction to BASIC includes use of input and output statements, arithmetic operations, comparison and branching commands, use of subroutines and the library functions. Algorithms associated with technological computations are developed.

Fall–Winter–Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus TVI Montoya Campus

DP 175L: C LANGUAGE PROGRAMMING (3 cr)

(*Prerequisite: A programming language*) This course is an introduction to C programming language using microcomputers.

Fall–Winter–Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

DP 176L: INTRODUCTION TO MICROCOMPUTERS (3 cr)

Instruction is provided in computer vocabulary. Students learn how to use personal computers to perform tasks related to their studies.

Fall–Winter

MW or TTh	6:30–9:30 p.m.	T-VI Main Campus T-VI Montoya Campus Highland High School La Cueva High School
MW	6:30–9:30 p.m.	Cibola High School Eldorado High School Manzano High School Rio Grande High School
TTh	6:30–9:30 p.m.	Del Norte High School West Mesa High School

Summer

MW or TTh	6:30–9:30 p.m.	T-VI Main Campus T-VI Montoya Campus

LAB FEE: $10

DP 205A: ASSEMBLY LANGUAGE PROGRAMMING (B) (3 cr)

(*Prerequisites: DP 111B, DP 112B*) Students learn fundamental programming techniques necessary for writing and refining efficient programs in IBM mainframe assembly language.

Fall

MW	6:30–9:30 p.m.	T-VI Montoya Campus

Winter

TTh	6:30–9:30 p.m.	T-VI Main Campus

DP 205B: ASSEMBLY LANGUAGE PROGRAMMING I (3 cr)

(*Prerequisite: DP 205A*) This class is a continuation of DP 205A. Students learn more complex techniques of writing and refining programs in IBM mainframe assembly language.

Winter–Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

NOTE: Upon completion of DP 205A and DP 205B, Instructional Division credit for DP 205L may be awarded.

DP 206L: BASIC LANGUAGE PROGRAMMING (3 cr)

(*Prerequisite: DP 102*) This course uses the BASIC language to further the student's knowledge of interactive programming, routines using menu selection, and search and retrieval routines. Also covered are file structures, database techniques, statistics, management methods and string manipulations. Mainframe and/or microcomputers are used.

Fall–Winter–Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

DP 207: BUSINESS SYSTEMS ANALYSIS AND DESIGN (3 cr)

(*Prerequisites: DP 111B, DP 114*) This course teaches structured techniques of systems analysis and design. The systems life cycle is presented, and several methods of analyzing existing systems are covered. Microcomputers are used to write system documentation and run project management software.

Winter

MW	6:30–9:30 p.m.	T-VI Montoya Campus

DP 208L: REPORT PROGRAM GENERATOR II (3 cr)

(*Prerequisite: DP 112B*) Students are introduced to the RPG II programming language used in business organizations.

Summer

MW	6:30–9:30 p.m.	T-VI Montoya Campus

DP 215L: COMPUTER SYSTEM SOFTWARE (3 cr)

(*Prerequisite: DP 205B*) This course covers topics designed to increase understanding of the use of microcomputers. This includes the study of operating systems, macro assembler programming, and microcomputer software packages.

Fall–Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

DP 217: OPERATING SYSTEMS DESIGN AND IMPLEMENTATION (3 cr)

(*Prerequisite: DP 112B*) This course covers the theory of computer operating systems and introduces the student to the concepts of the Unix system.

Fall–Winter

TTh	6:30–9:30 p.m.	T-VI Montoya Campus

Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

DP 218: DATABASE CONCEPTS (3 cr)

(*Prerequisite: DP 176L*) General concepts and organization of database systems are included along with practical application of Database Management Systems through the use of networks, telecommunication lines and hardware. Mainframe and/or microcomputers are used.

Fall–Winter–Summer

MW	6:30–9:30 p.m.	T-VI Montoya Campus
TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

DP 220: ADA LANGUAGE PROGRAMMING (3 cr)

This is an introductory course in ADA language programming.

Fall–Winter

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

ELEC 103A: ELECTRONICS FUNDAMENTALS (B) (4.5 cr)

(*Prerequisite: Knowledge of beginning algebra*) This is a study of DC electricity applied to electronics. Instruction includes basic conductor and semiconductor concepts, basic circuits, meters, time constants, relays, and DC properties of inductance and capacity. The laboratory acquaints students with components, circuits, wiring and measurements.

Fall–Winter

MW or TTh	6–9:30 p.m.	T-VI Main Campus
MW	6–9:30 p.m.	T-VI Montoya Campus
Sat	8:30 a.m.–4 p.m.	T-VI Montoya Campus

Summer

MW or TTh	6–9:30 p.m.	T-VI Main Campus
MW	6–9:30 p.m.	T-VI Montoya Campus

LAB FEE: $15

ELEC 103B: ELECTRONICS FUNDAMENTALS (I) (4.5 cr)

(*Prerequisite: ELEC 103A*) This class covers the principles of component reaction when alternating voltages are applied. The course includes a study of AC analysis in reference to impedance, reactance, vectors, circuit analysis, tuned circuits, transformers and filters. The laboratory includes the use of the oscilloscope as a tool in electronics.

Fall–Winter–Summer

MW	6–9:30 p.m.	T-VI Main Campus
TTh	6–9:30 p.m.	T-VI Montoya Campus

LAB FEE: $15

NOTE: Upon completion of ELEC 103A and ELEC 103B, Instructional Divison credit for ELEC 103L may be awarded.

ELEC 105L: DIGITAL CIRCUITS (3 cr)

(*Corequisite: ELEC 104 or strong mathematics background*) The fundamental concepts and applications of digital logic circuits are covered. Number systems and arithmetic operations are studied. Boolean algebra is applied to combinational logic. The basic logic gates and MSI and LSI circuits are used to develop operational digital circuits.

Fall–Winter–Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

ELEC 115A: SEMICONDUCTOR DEVICES (B) (3 cr)

(*Prerequisite: ELEC 103B*) The basic concepts of semiconductor fundamentals are explored and developed to achieve a thorough understanding of the diode and transistor. Emphasis is placed on approximating transistor amplifying circuits from a practical standpoint. These techniques are verified in the laboratory for both normal and abnormal circuit conditions.

Fall

MW	6:30–9:30 p.m.	T-VI Main Campus

Winter

TTh	6:30–9:30 p.m.	T-VI Montoya Campus

LAB FEE: $10

ELEC 115B: SEMICONDUCTOR DEVICES (3 cr)

(*Prerequisite: ELEC 103B*) Further study of op amps and JFETS and their application in simple power supplies and amplifiers is covered.

Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

Summer

TTh	6:30–9:30 p.m.	T-VI Montoya Campus

LAB FEE: $10

NOTE: Upon completion of ELEC 115A and ELEC 115B, Instructional Division credit for ELEC 115L may be awarded.

ELEC 203A: INTRODUCTION TO MICROPROCESSORS (B) (3 cr)

(*Prerequisite: ELEC 105L*) The microcomputer is explained using a block diagram consisting of the 8088 CPU, memory and I/O devices. Interconnections, address bus, data bus and control signals are emphasized. Assembly language programs are written to interface wired circuit boards to the microcomputer. An EPROM is included.

Fall–Winter

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

ELEC 203B: INTRODUCTION TO MICROPROCESSORS (I) (3 cr)

(*Prerequisite: ELEC 203A*) Computer hardware including clock circuitry, bus drivers, input and output ports, and memory is covered. Troubleshooting different computer components is emphasized.

Winter–Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

NOTE: Upon completion of ELEC 203A and ELEC 203B, Instructional Division credit for ELEC 203L may be awarded.

SK 1410: GENERAL MATHEMATICS

This class reviews basic arithmetic functions and introduces algebra.

Fall–Winter

MW	7–9 p.m.	Highland High School Rio Grande High School

Summer

MW	7–9 p.m.	T-VI Main Campus

SK 1425: ELECTRONICS DRAFTING

(*Prerequisite: Basic knowledge of good drafting practices including orthographic views, sections, dimensioning and auxiliary views*) This class develops techniques for the documentation of electronics systems. Students learn to design electronics systems drawings using both traditional manual tools and CAD.

Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

NOTE: Students must purchase their own instruments.

SK 1428: TELEVISION SERVICING

(*Prerequisite: ELEC 115L*) The television and cathode ray tube serve as an introduction followed by a circuit analysis which includes deflection circuit, high voltage section, sync system, video and pix I.F., sound section, power supply (low voltage) and tuners. Operation of equipment includes the sweep generator, calibration of the market generator, operation of crosshatch generator, field strength and flyback tester. Practical servicing, alignment of television, installation of antenna and the color television introduction with purity and convergence adjustments are included.

Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

SK 1429: INTRODUCTION TO LASERS

(*Prerequisite: Knowledge of algebra and trigonometry*) This is the study of the elements and operation of a laser and optical power meter, laser safety, properties of light, lasing action, optical cavaties and modes of oscillation, temporal and spatial characteristics of lasers, helium-neon gas laser operations and laser classifications and characteristics.

Fall–Winter

TTh	6:30–9:30 p.m.	T-VI Montoya Campus

LAB FEE: $10

NOTE: Students must pass both the theory and laboratory portions of the course to receive a passing grade.

SK 1431: ADVANCED DIGITAL APPLICATIONS

(*Prerequisites: ELEC 105L, ELEC 203B or equivalent*) The use of digital and linear chips and techniques in the digital and analog world is investigated.

Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

SK 1440: COMPUTER NETWORKING AND DATA COMMUNICATIONS

(*Prerequisite: DP 102 or DP 174L*) This class is designed for business and personal computer users considering local area networks, other communications and related technology, and the people who advise these decision makers. The course covers data communications, networks and their cousins, the multitasking and multiuser operating systems, and multiplexors. Local area networks are emphasized. Also covered are public packet networks, voice technology, teletext, videotext and security issues.

Fall

MW	6:30–9:30 p.m.	T-VI Montoya Campus

Winter

TTh	6:30–9:30 p.m.	T-VI Montoya Campus

LAB FEE: $10

SK 1450: MS-DOS

(*Prerequisite: DP 176L*) This class introduces the use of the MS-DOS operating system for IBM microcomputers and compatibles. Topics covered include both fundamental and advanced commands, floppy and hard disk management, the use of directories, backup and restore procedures, and the use of batch files.

Fall

TTh	6:30–9:30 p.m. (Sept. 5–28) (Oct. 3–26)	T-VI Montoya Campus
Sat	8 a.m.–12 noon (Sept. 9–Oct. 7) (Oct. 14–Nov. 11)	T-VI Main Campus

Winter

Sat	8 a.m.–12 noon (Jan. 13–Feb. 10) (Feb. 24–Mar. 24)	T-VI Main Campus

Summer

Sat	8 a.m.–12 noon 1–5 p.m. (May 12–June 16)	T-VI Main Campus T-VI Montoya Campus
	8 a.m.–1 p.m. 12 noon–5 p.m. (June 23–July 14)	T-VI Main Campus T-VI Montoya Campus

LAB FEE: $10

SK 1451: ADVANCED MS-DOS

This class is a continuation of SK 1450. It covers advanced hard disk management, directories and batch files.

Fall

TTh	6:30–9 p.m. (Nov. 7–Dec. 5)	T-VI Montoya Campus
Sat	8 a.m.–12 noon (Nov. 18–Dec. 16)	T-VI Main Campus

Winter

Sat	8 a.m.–1 p.m. (Mar. 31–Apr. 21)	T-VI Main Campus

Summer

Sat	8 a.m.–1 p.m. 12 noon–5 p.m. (July 21–Aug. 11)	T-VI Main Campus T-VI Montoya Campus

LAB FEE: $10

SK 1455: DATA ENTRY

(*Prerequisite: 30 wpm typing speed*) This class prepares students for an entry-level data entry position. Extensive training is given in data entry on microcomputers.

Fall–Winter–Summer

MTWTh	4–6 p.m.	T-VI Montoya Campus

LAB FEE: $15

SK 1461: ADVANCED C LANGUAGE PROGRAMMING

(*Prerequisite: DP 175L*) A continuation of DP 175L, this class assumes considerable programming experience. It stresses modular programming using functions and external source code files. Topics include advanced and structured data types, parameter passing, scope of variables, recursion and external file operations.

Fall–Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

SK 1463: ADVANCED TURBO PASCAL PROGRAMMING

(*Prerequisite: DP 173L*) This class stresses modular programming and structured programming techniques using functions and procedures. Topics covered include structured and other advanced data types, parameter passing, the scope of variables, pointers, recursion and advanced file manipulation.

Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

Trades and Industrial Education

ACHR 101A: AIR CONDITIONING, HEATING AND REFRIGERATION THEORY/LAB I (B) (4 cr)

Students learn shop safety, basic tools and equipment, mechanical components and basic refrigeration cycle. Maintenance and servicing, including soldering and brazing, also are covered. Electrical circuits are analyzed, and correct methods for wiring basic circuits are covered.

Fall–Winter–Summer

TTh 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

ACHR 101B: AIR CONDITIONING, HEATING AND REFRIGERATION THEORY/LAB I (I) (4 cr)

(*Prerequisite: ACHR 101A*) More complex systems are introduced. Lab work in diagnosing and servicing small systems is emphasized.

Winter–Summer

MW 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

ACHR 101C: AIR CONDITIONING, HEATING AND REFRIGERATION THEORY/LAB I (A) (4 cr)

(*Prerequisite: ACHR 101B*) This class covers circuitry and controls commonly used in commercial and industrial applications. Emphasis is on understanding wiring diagrams for installation and troubleshooting purposes.

Fall–Summer

MW 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

NOTE: Upon completion of ACHR 101A, ACHR 101B and ACHR 101C, Instructional Division credit for ACHR 101L may be awarded.

ACHR 102: CONTROL CIRCUITRY/MATH I (3 cr)

This course is designed to lay the groundwork required for diagnosis and service of refrigeration and electrical equipment with emphasis on DC circuits as applied to Ohm's Law. Students are taught algebra as applied to electricity.

Fall–Winter

TTh 6:30–9 p.m. T-VI Main Campus

ACHR 202A: SHEET METAL THEORY/LAB (B) (4.5 cr)

In this introductory class, students learn pattern layout on paper for heating, air conditioning and general sheet metal and carry it through in the lab to the finished sheet metal fittings. Lessons are custom designed for the needs of students already working in the field and wanting to upgrade their skills.

Fall–Winter

TTh 6–9:30 p.m. T-VI Main Campus

LAB FEE: $20

NOTE: Students must purchase some supplies.

ACHR 202B: SHEET METAL THEORY/LAB (A) (4.5 cr)

(*Prerequisite: ACHR 202A*) This continuation of ACHR 202A provides advanced instruction in the use of tools, safety, pattern

development and fabrication. Design, layout and application of air distribution duct systems are covered. Lab projects are oriented toward typical heating and ventilation applications.

Summer

TTh 6–9:30 p.m. T-VI Main Campus

LAB FEE: $20

NOTES: Students must purchase some supplies.

Upon completion of ACHR 202A and ACHR 202B, Instructional Division credit for ACHR 202L may be awarded.

AUBO 101A: AUTOMOTIVE BODY REPAIR I (4 cr)

Instruction covers theory and practice of preparing vehicles for repainting including dent removal, welding, filing, priming, painting, panel straightening with power tools, replacement of panels and glass service.

Fall–Winter–Summer

TTh 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $50

AUBO 101B: AUTOMOTIVE BODY WELDING (4 cr)

(*Prerequisite: AUBO 101A*) Students learn how to set up and operate oxyacetylene, shielded metal-arc and gas metal-arc welding equipment. Procedures for cutting, welding and brazing automotive sheet metal are covered.

Winter–Summer

TTh 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $40

AUBO 101C: AUTOMOTIVE BODY REFINISHING (4 cr)

(*Prerequisite: AUBO 101B*) Minor body repair is covered with emphasis on cleaning, sanding, masking, surface and metal treatment, undercoats and comprehensive refinishing systems.

Fall–Summer

TTh 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $40

NOTES: Upon completion of AUBO 101A, AUBO 101B and AUBO 101C, Instructional Division credit for AUBO 101L may be awarded. Upon receiving Instructional Division credit for AUBO 101L and AUTC 102, an automotive body repair detailing certificate may be awarded.

AUBO 102/AUTC 102/DIME 102: MATH/BASIC ELECTRICITY (3 cr)

This course teaches the student basic math principles as they relate to measuring tools, equipment, graphs and schematics. The theory of mechanical power, basic electricity principles, related terminology, and electrical component identification also are covered. The students are introduced to diagnosis equipment testing procedures and theory related to automotive electrical systems troubleshooting and repair procedures.

Fall–Winter

MW 6:30–9:30 p.m. T-VI Main Campus

NOTE: Upon completion of AUTC 101A, AUTC 101B, AUTC 101C and AUTC 102, the Instructional Division certificate for Basic Auto Servicing may be awarded.

AUTC 101A: AUTOMOTIVE BRAKES (4 cr)

This class offers basic theory and practice in brake system construction, operation and repair. Students overhaul hydraulic brake components, machine drums and rotors on the brake drum lathe. The students also rebuild disc and standard brakes.

Fall–Winter

TTh 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

AUTC 101B: AUTOMOTIVE SUSPENSION AND ALIGNMENT (4 cr)

This class offers basic theory and practice in front-end rebuilding and alignment principles of front-end geometry, steering and front suspension systems. Ball-joints, "A" frames, rebuilding McPhearson struts and wheel balancing also are covered.

Winter–Summer

TTh 6:30–9:30 p.m. TVI Main Campus

LAB FEE: $20

AUTC 101C: AUTOMOTIVE BASIC ENGINE OVERHAUL (4 cr)

Students learn basic internal combustion engine theory, complete engine service and repair procedures, and the use of precision measuring tools.

Winter

MW 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

NOTE: Upon completion of AUTC 101A, AUTC 101B and AUTC 101C, Instructional Division credit for AUTC 101L may be awarded.

AUTC 111A: AUTOMOTIVE AUTOMATIC TRANSMISSION (4 cr)

Students receive instruction in diagnostic and repair procedures involving automatic transmissions and transaxles.

Fall–Winter

MW 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

AUTC 111B: AUTOMOTIVE MANUAL TRANSMISSION (4 cr)

Students receive instruction on diagnostic and repair procedures involving clutches, manually shifted transmissions, transaxles and differential units.

Winter–Summer

MW 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

AUTC 111C: AUTOMOTIVE DRIVE TRAIN (4 cr)

(*Prerequisites: AUTC 111A, AUTC 111B*) This course covers in-depth diagnostic and repair procedures for manual drive train and axles, and automatic tmasmission/transaxles. Instruction is provided in diagnostic and repair procedures for clutches and differential units.

Fall–Summer

MW 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

AUTC 111D: AUTOMOTIVE AIR CONDITIONING (4 cr)

Basic principles of the automotive cooling system and its relation to the heating and air conditioning systems in refrigeration and heat exchange are studied. System diagnosis, components analysis and testing, and servicing procedures are demonstrated with the use of air conditioning equipment.

Fall–Winter

TTh 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

NOTE: Upon completion of AUTC 111A, AUTC 111B, AUTC 111C and AUTC 111D, Instructional Division credit for AUTC 111L may be awarded.

AUTC 113/DIME 113: TRANSPORTATION ELECTRONICS (3 cr)

(*Prerequisite: AUBO 102/AUTC 102/DIME 102*) This course provides the information required to test and replace malfunctioning electronic components. The theory of solid-state devices, basic principles of electronics, and interpretation of circuit diagrams are included. Signal tracing characteristics, and the operation of semi-conduction diodes and rectifier circuits are covered. Lab experiments are conducted on full wave rectifiers, voltage rectifiers, transistors, thyristors, integrated circuits, operational amplifiers, digital gates and timing circuits.

Fall–Winter

MW 6:30–9:30 p.m. T-VI Main Campus

NOTE: Upon receipt of Instructional Division credit for AUTC 101L, AUTC 102, AUTC 111L and AUTC 113, the student may be awarded a basic auto repair certificate.

AUTC 201A: AUTOMOTIVE ELECTRICITY (4 cr)

This class emphasizes the principles of basic electricity and automotive electrical circuits used in the operation, testing and servicing of storage batteries, cranking motors, alternators, generators and regulators. Instruction includes motor wiring diagrams and lighting systems as well as appropriate test equipment such as volt meters, ampmeters and ohmeters.

Fall–Winter–Summer

TTh 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

AUTC 201B: AUTOMOTIVE FUEL SYSTEMS (4 cr)

(*Prerequisite: AUTC 201A*) Fundamentals of carburetor operations and circuits, fuel system and carburetion trouble-shooting, servicing and overhaul procedures are covered.

Fall–Winter–Summer

MW 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

AUTC 201C: AUTOMOTIVE TUNE-UP AND EMISSIONS I (4 cr)

(*Prerequisite: AUTC 201B*) The basic principles of automotive tune-up and its relationship to automobile exhaust emissions, basic emissions system diagnosis, component analysis, testing and servicing procedures meeting current standards are stressed with the use of infrared and electronic testing equipment.

Fall–Winter

MW 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

AUTC 201D: AUTOMOTIVE TUNE-UP AND EMISSIONS II (4 cr)

(*Prerequisite: AUTC 201C*) This class covers basic principles of computers, feedback sensors, computer-controlled carburetors, throttle body fuel injection, rail injection, and how computers work and control emissions. Testing and servicing of components meeting current standards are stressed with the use of infrared and electronic test equipment.

Winter–Summer

TTh 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

NOTES: Upon completion of AUTC 201A, AUTC 201B, AUTC 201C and AUTC 201D, Instructional Division credit for AUTC 201L may be awarded.

Upon receipt of Instructional Division credit for AUTC 101L, AUTC 102, AUTC 111L, AUTC 113 and AUTC 201L, the student may be awarded an automotive technology certificate.

DIME 101A: DIESEL I THEORY/LAB (B) (4 cr)

This class covers the operating principles of the two- and four-cycle engine, air induction and exhaust systems, fuel systems, cooling systems, governors and basic engine adjustments.

Fall–Winter

MW 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

DIME 101B: DIESEL I THEORY/LAB (I) (4 cr)

(*Prerequisite: DIME 101A*) This class continues material learned in DIME 101A. Precision measuring tools, interpretation of mechanical drawings and thread repair procedures are covered.

Winter–Summer

MW 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

DIME 101C: DIESEL I THEORY/LAB (A) (4 cr)

(*Prerequisite: DIME 101B*) Emphasis is on the use of the test equipment, repair practices, corrective actions, tune-up procedures on two- and four-stroke engines and engine support systems. Operating principles of major brands of fuel systems also are covered.

Fall–Summer

MW 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

NOTE: Upon completion of DIME 101A, DIME 101B and DIME 101C, Instructional Division credit for DIME 101L may be awarded.

DIME 111A: DIESEL II THEORY/LAB (B) (4 cr)

(*Prerequisite: DIME 101A, DIME 101B, DIME 101C*) This class on the diesel drive train introduces the theory related to test equipment, diagnosis, troubleshooting and analysis procedure. Shop safety is also covered.

Fall

TTh 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

DIME 111B: DIESEL II THEORY/LAB (I) (4 cr)

(*Prerequisite: DIME 111A*) This class is a continuation of DIME 111A. Basic theory of troubleshooting is continued. Drive line repairs and hydraulic systems are introduced.

Winter

TTh 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

DIME 111C: DIESEL II THEORY/LAB (A) (4 cr)

(*Prerequisite: DIME 111B*) An in-depth study of the drive train and hydraulic system is presented with emphasis on service and repair.

Summer

TTh 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $20

NOTE: Upon completion of DIME 111A, DIME 111B and DIME 111C, Instructional Division credit for DIME 111L may be awarded.

ELTR 101A: ELECTRICAL TRADES THEORY/LAB I (B) (4 cr)

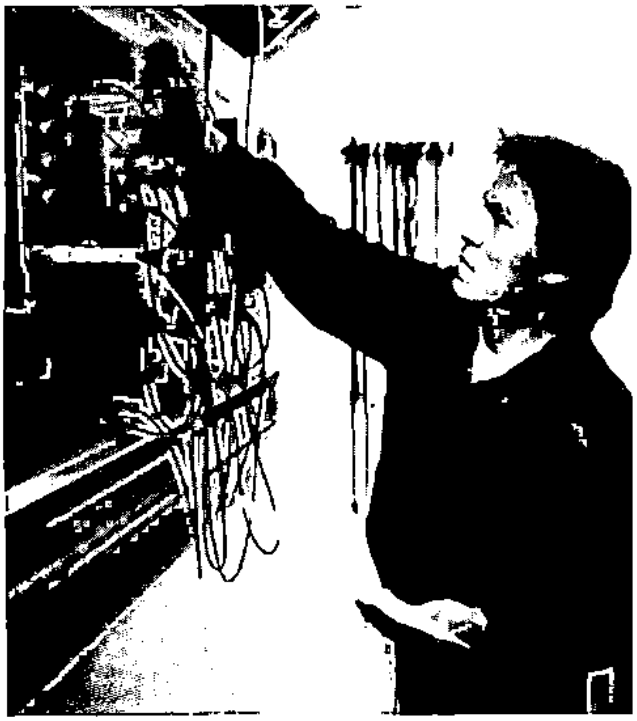
This class covers the fundamentals of basic electricity. Topics include history and development of electrical trades, job opportunities, safety, electrical drawing, electrical circuitry, electrical meters, power sources, conductors, insulators, semiconductors and electrical devices.

Fall–Winter

MW 6:30–9:30 p.m. T-VI Main Campus

LAB FEE: $15

NOTE: Students are required to furnish tools.



ELTR 101B: ELECTRICAL TRADES THEORY/LAB I (I) (4 cr)

(*Prerequisite: ELTR 101A*) Advanced instruction is provided in the fundamentals of basic electricity. Subjects include combination and series/parallel circuitry, magnetism, electromagnetism, transformers, inductance, capacitance and RLC circuits.

Winter–Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

NOTE: Students are required to furnish tools.

ELTR 101C: ELECTRICAL TRADES THEORY/LAB I (A) (4 cr)

(*Prerequisite: ELTR 101B*) The student studies DC and AC generators; DC and AC motors; solid state components; wiring methods for single pole, three- and four-way switches; receptacles; and GFCI protected circuits.

Fall–Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

NOTES: Students are required to furnish tools.

Upon completion of ELTR 101A, ELTR 101B and ELTR 101C, Instructional Division credit for ELTR 101L may be awarded.

ELTR 102: ELECTRICAL TRADES MATHEMATICS I (3 cr)

The student reviews basic arithmetic functions and is introduced to electrical formulas which include Ohm's and Kirchhoff's laws. Problem solving includes calculations of material and circuit load requirements; rules for series, parallel and combination circuits; and mechanical work and power.

Fall–Winter

TTh	6:30–9 p.m.	T-VI Main Campus

ELTR 111A: ELECTRICAL TRADES THEORY/LAB II (B) (4 cr)

(*Prerequisite: ELTR 101C*) Fundamentals of electricity are applied to the design and installation of residential circuitry. Safety, tools, materials, devices, single-pole switches and receptacle projects are covered. The National Electric Code is studied in detail.

Fall–Winter

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

NOTE: Students are required to furnish tools.

ELTR 111B: ELECTRICAL TRADES THEORY/LAB II (I) (4 cr)

(*Prerequisite: ELTR 111A*) Three- and four-way switching circuits, pilot switches, baseboard heaters, door chimes, electrical times and swamp cooler connections are covered.

Winter–Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

NOTE: Students are required to furnish tools.

ELTR 111C: ELECTRICAL TRADES THEORY/LAB II (A) (4 cr)

(*Prerequisite: ELTR 111B*) Zone boiler heating systems, low-voltage lighting, overhead and underground services, conduit bending and pipe threading are covered. The National Electric code is studied in depth.

Fall–Summer

TTh	7–9 p.m.	T-VI Main Campus

LAB FEE: $15

NOTES: Students are required to furnish tools.

Upon completion of ELTR 111A, ELTR 111B and ELTR 111C, Instructional Division credit for ELTR 111L may be awarded.

ELTR 112: ELECTRICAL TRADES MATHEMATICS II (3 cr)

(*Prerequisite: ELTR 102*) 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.

Fall–Winter

TTh	6:30–9 p.m.	T-VI Main Campus

ELTR 113: ELECTRICAL TRADES BLUEPRINT READING I (3 cr)

(*Prerequisite: ELTR 101C*) 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.

Winter–Summer

MW	6:30–9 p.m.	T-VI Main Campus

NOTE: Upon receiving credit for ELTR 101L, ELTR 102, ELTR 111L, ELTR 112 and ELTR 113, the Instructional Division certificate for residential wiring may be awarded.

WELD 101A: ARC WELDING (4 cr)

This is a basic class in arc electric welding. Instruction is in welding safety, the welding circuit, welding symbols, types of welding machines, beading, buildups and various types of joints.

Fall–Winter–Summer

MW or TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $70

NOTE: Student must furnish welding gloves.

WELD 101B: OXYACETYLENE WELDING (4 cr)

Welding safety, identification of metals, types of joints, cutting procedures, tubing welding, welding alloys, brazing and fusion welding are stressed.

Fall–Winter–Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $75

NOTE: Student must furnish welding gloves.

WELD 101C: INERT GAS WELDING (4 cr)

(*Prerequisites: WELD 101A, WELD 101B*) Instruction is provided in basic tungsten inert gas (TIG) and metallic inert gas (MIG) welding. Inert gases, inert gas welding equipment, welding safety, basic welding procedures and practices are covered.

Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $85

NOTES: Student must furnish welding gloves.

Upon completion of WELD 101A, WELD 101B and WELD 101C, Instructional Division Credit for WELD 101L may be awarded.

WELD 102: WELDING MATHEMATICS/BLUEPRINT READING I (3 cr)

This is a course in basic drawing interpretation, welding symbols, terms and detailed fittings applied to the welding area. Instruction also is provided in basic arithmetic. Surface and direct measurements, graphs and charts, and payroll calculations are studied.

Fall–Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

SK 1310: AUTOMOTIVE SERVICING

Instruction covers the basic theory of automotive service, maintenance and performance. Included are chassis lubrication, tire service, wheel balancing, brake inspection, cooling system, battery maintenance and an introduction to engine identification and minor tune-up.

Fall–Winter

MW or TTh	6:30–9:30 p.m.	T-VI Main Campus
MW	6:30–9:30 p.m.	Rio Grande High School

Summer

MW or TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $20

SK 1312: AUTOMOTIVE BODY REPAIR

This class is designed for the student who wants to learn basic auto body repair skills for personal use. Instruction covers theory and practice of preparing vehicles for repainting including dent removal, welding, filing, priming, painting, panel straightening with power tools, replacement of panels and glass service.

Fall–Winter–Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $50

NOTES: Students may not work on their own cars. Students must purchase painting supplies.

SK 1315: SMALL ENGINE MECHANICS

Instruction is provided in the proper use of hand tools, two- and four-cycle engines, ignition and starting systems, engine tune-up procedures and small engine trouble-shooting.

Fall–Winter–Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $20

SK 1317: MOTORCYCLE MAINTENANCE AND OPERATION

Safety, principles of operation, and maintenance of two- and four-cycle motors are covered.

Fall–Winter–Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $20

SK 1320: PIPE WELDING

(*Prerequisite: WELD 101A or equivalent*) Commonly used types of pipe welding are emphasized. Instruction includes welding safety, position butt welds on horizontal and vertical pipe, 90° branch connection pipe and forged fittings for welding and lateral pipe connections.

Fall

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $75

NOTE: Student must furnish welding gloves.

SK 1321: ADVANCED WELDING AND FABRICATION TECHNIQUES

(*Prerequisite: WELD 101A or equivalent*) This class covers blueprint reading, fabrication techniques, welding processes and their limitations and advantages.

Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $75

NOTE: Students must furnish welding gloves.

SK 1325: MACHINE TOOL

This beginning class introduces students to tools, materials, processes and machines used in the machine tool industry. Students acquire experience on such machines as the drill press, lathe, milling machine and grinder.

Fall–Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $20

SK 1326: MACHINE TOOL NUMERICAL CONTROL

(*Prerequisite: SK 1325*) The history of numerical control, TAB sequential, fixed block and word address formats, and the programming and tape preparation necessary for numerical control machining are included.

Winter

TTh	7–9 p.m.	T-VI Main Campus

LAB FEE: $20

SK 1330: ELECTRICAL MOTORS AND CONTROLS

(*Prerequisite: Thorough knowledge of AC and DC electricity concepts and the use of a volt-ohm milliammeter*) This class covers basic concepts of magnetism as applied to motor operation. It continues with the theory of operation, parts identification, application and troubleshooting of single and three-phase AC motors. Basic motor controls also are covered including installation and basic programming of a typical programmable controller.

Winter

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

SK 1331: INTRODUCTION TO ELECTRICAL DESIGN

(*Prerequisites: ELTR 101A, SK 1350, SK 1410*) Some of the basic problems confronting a designer in commercial and industrial applications are covered. Selection of electrical conductors and raceways for various applications are discussed, as well as different voltages available to the designer. Emphasis is on calculation of feeder and branch circuits for general appliances, lighting and motor circuits in accordance with the National Electric Code.

Fall

TTh	7–9 p.m.	T-VI Main Campus

SK 1332: ELECTRICAL DESIGN II

(*Prerequisite: SK 1331 or equivalent*) A continuation of SK 1331, this class focuses on short-circuit analysis and overcurrent coordination. A study of an in-depth lighting analysis also is included.

Winter

TTh	7–9 p.m.	T-VI Main Campus

SK 1340: CABINETMAKING

Proper use of basic hand tools and power woodworking machines is taught for persons employed in the construction industry. Students may complete a project using hand tools and a project using woodworking machines.

Fall–Winter–Summer

MW or TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $20

NOTE: Students must provide their own project materials.

SK 1345: PLUMBING THEORY

This class covers proper use of tools and equipment; elements of plumbing; identification of plumbing fittings and pipes; basic hydraulics and pneumatics; and layout, assembly, installation, alteration and repair of piping systems.

Fall–Winter

TTh	7–9 p.m.	T-VI Main Campus
Sat	8:30 a.m.–12:30 a.m.	T-VI Montoya Campus

SK 1350: BLUEPRINT READING FOR CONSTRUCTION TRADES

This theory class teaches basic construction techniques and blueprint reading for residential and light commercial construction. Emphasis is on terminology, construction theory, symbols and notations used on floor plans, scaling and dimensioning practice, structural information, drawings, plot plans, codes, blueprint reading and simple detail sketching.

Fall

MW	7–9 p.m.	T-VI Main Campus La Cueva High School

Winter

MW	7–9 p.m.	T-VI Montoya Campus
TTh	7–9 p.m.	La Cueva High School

Summer

TTh	7–9 p.m.	T-VI Montoya Campus

SK 1351: CONSTRUCTION ESTIMATING

(*Prerequisite: SK 1350 or equivalent*) Determination of probable costs of a construction project is emphasized. Job scheduling, subcontracts, insurance, bonds and bidding procedures are discussed.

Fall–Summer

TTh	7–9 p.m.	T-VI Montoya Campus

Winter

TTh	7–9 p.m.	T-VI Main Campus

SK 1355: GENERAL CONTRACTOR PREPARATION

(*Prerequisite: Completion of a minimum of two years of verifiable work experience in the construction industry*) This class is designed for persons 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.

Fall–Winter

MW	7–9 p.m.	T-VI Main Campus
Sat	8:30 a.m.–12:30 p.m.	T-VI Montoya Campus

Summer

MW	7–9 p.m.	T-VI Main Campus

SK 1360: SECURITY OFFICER TRAINING

Report writing, first aid, mob control, civil legal liabilities, criminal law, patrol procedures, industrial safety, loss prevention, rules of evidence and emergency procedures are covered in this class.

Fall–Winter

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $25

SK 1370: FUNDAMENTALS OF PRINTING

Students are introduced to the printing industry and its processes. Topics covered include principles of design, layout and paste-up, camera and darkroom, stripping and platemaking, and bindery.

Fall

TTh	6:30–9:30 p.m.	T-VI Montoya Campus

LAB FEE: $25

NOTES: Students must purchase some equipment. Supplies are furnished by T-VI.

SK 1371: FREEHAND ILLUSTRATION

The basic fundamentals of freehand drawing, perspective drawing and their application to the graphic arts are covered.

Fall

MW	6:30–9:30 p.m.	T-VI Montoya Campus

Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

NOTE: Students must provide their own supplies.

SK 1372: LAYOUT AND PASTE-UP

This class includes typesetting, dummy layouts, paste-up, art, use of stripping tools, explanation of stripping terms and actual stripping for various jobs.

Fall–Winter

M	6:30–9:30 p.m.	T-VI Montoya Campus
Sat	9 a.m.–12 noon	T-VI Montoya Campus

NOTE: Students must provide their own supplies.

SK 1373: ILLUSTRATION PROJECTS AND TECHNIQUES

(*Prerequisite: Previous drawing experience*) Producing camera-ready art for commercial printing is the goal of this class. Techniques for both line and half-tone reproduction are used. Imaginative solutions—well-drawn and technically well-executed—to problems in illustration and graphics are stressed. Projects include illustrations for ads and books and design of trademarks and posters.

Fall

T	6:30–9:30 p.m.	T-VI Main Campus

Winter

T	6:30–9:30 p.m.	T-VI Montoya Campus

NOTE: Students must provide their own supplies.

SK 1374: OFFSET DUPLICATOR OPERATION AND MAINTENANCE

This class introduces the basic operation of the offset duplicator and gives the student a basic proficiency with operations and maintenance. The class also allows the student to advance in press operation techniques and log additional hours in make-ready, run and wash-up.

Winter

Th	6:30–9:30 p.m.	T-VI Montoya Campus

LAB FEE: $25

Index