## CATALOG

# Day and Evening Divisions, 1984–85 Albuquerque Technical-Vocational Institute

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

Health Occupations Department 1215 Hazeldine SE, Albuquerque, NM 87106 Telephone: (505) 243-2844

#### ADMINISTRATION

Louis E. Saavedra
President

Marvin F. Burianek
Director, Support Services Division

Harold W. Jackson Director, Evening Division Administrator, Montoya Campus

> Dale E. Kerby Director, Day Division

Richard S. Rounds Director, Student Services Division

David E. Smoker
Director, Institutional Planning

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## **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, handicap, age or sex in any of its policies, practices or procedures. The provision includes, but is not limited to, admissions, 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, Tony Galaz, room A-25. The Title IX coordinator for the Day Division is Dolores Rozzi, room M-102; for the Evening Division it is Cleto Duran, room A-25. All are located at the Main Campus.

## 1984

## **SEPTEMBER**

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Classes begin, Sept. 4

## **DECEMBER**

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Trimester break, Dec. 21-Jan. 2

## **MARCH**

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Midterm, June 21

## Day Division Calendar

## **OCTOBER**

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Midterm, Oct. 25 gracher in-service, Oct. 26

## 1985

## **JANUARY**

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Classes begin, Jan. 3

## **APRIL**

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Snow day, Apr. 5 Trimester break, Apr. 20-30

## **JULY**

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Holiday, July 4-7

#### **NOVEMBER**

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Thanksgiving, Nov. 22-25

#### **FEBRUARY**

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Midterm, Feb. 21 Teacher in-service, Feb. 22

#### MAY

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Classes begin, May 1 Memorial Day, May 27

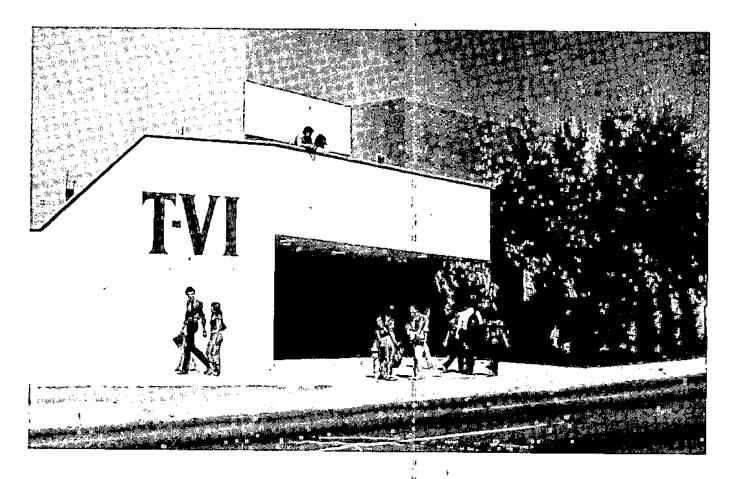
## **AUGUST**

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Trimester break, Aug. 17-31 (tentative)

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## **About the Institute**

The Albuquerque Technical-Vocational Institute (T-VI) is a public postsecondary school whose primary goal is to provide adults with entry-level job skills and the related education needed to succeed in an occupation. The Institute opened in 1965.

Funding for T-VI programs and most construction and equipment comes from a local property tax and an annual appropriation by the New Mexico State Legislature. A small amount of money, usually for special programs, is from federal funds.

T-VI's first classes were held in an elementary school, which had been closed, and in surplus army barracks and cottages. Since then, more than \$20 million worth of construction has taken place.

The Main Campus occupies 52 acres of land on both sides of Coal Avenue SE with most of the Trades and the Department of Developmental Studies located on the south part of the campus, Technologies on the north and east, and the Business Occupations west of University Boulevard.

Many of the business and technology programs, commercial printing, welding, and a large number of evening classes are offered at

the 40-acre Joseph M. Montoya Campus, 4700 Morris NE.

Classes and clinical experiences for the Health Occupations Department are held at 1215 Hazeldine SE and at local hospitals.

Evening Division classes are held at both the Main and Montoya campuses and Cibola High, 1510 Ellison NW; Del Norte High, 5323 Montgomery NE; Highland High, 4700 Coal SE; and Valley High, 1505 Candelaria NW.

ACCREDITATION: The Institute is fully accredited as a certificate-granting institute by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools. This indicates that the institution is offering its students the educational opportunities implied in its objectives on a satisfactory level.

In addition to T-VI's North Central Association accreditation, two health occupations programs have been accredited by special medical accrediting 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 Council on Education.

## **Instructional Programs**

#### DAY DIVISION

The T-VI Day Division includes 39 full-time programs in the areas of business, health, technology, and trades occupations. Not all programs are offered at both campuses or every trimester.

A Preparatory program is available for persons who need to improve math and/or communication skills before entering one of the vocational programs.

It is also possible to study for the high school equivalency examinations in a General Educational Development program offered during the day but enrolled through the Evening Division.

Full-time Day Division students attend classes four to six hours a day. They may also enroll in additional courses on a space-available basis. Persons not working toward a diploma or certificate may enroll on a part-time basis as special students in specific courses if space is available.

In the Day Division, if less than 12 persons have applied to begin a program in a certain trmester, the program may be cancelled that trmester. Those applicants will be given first
priority the next trimester the program is scheduled.

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

college transfer: Graduates of several T-VI programs may transfer to the University of Albuquerque or the University of New Mexico and receive credit toward various degrees.

Programs accepted by the University of Albiquerque for credits toward an Associate of Arts degree are Practical Nurse and Respiratory Therapy Technician.

The University of New Mexico and its Gallub, Los Alamos and Valencia branch colleges will grant credit toward certain degrees to T-VI graduates of Office Occupations and several Technology programs.

Information about these transfer agreements is available from T-VI counselors and from the universities accepting the transfer credit.



#### **EVENING DIVISION**

The Evening Division offers more than 100 Skill Improvement classes to part-time students in business, trade and industrial, health and technical occupations.

The Adult Basic Education section includes classes for improvement of written and spoken English, math and GED examination subjects. A citizenship program for aliens is available also:

An Evening Division class will be offered if 15 or more persons are enrolled. Classes may be terminated if less than 10 persons are attending the class regularly. In cases where applicants exceed capacity, the students will be selected by a lottery.

A Vocational Enrichment program, providing vocational classes for high school students at their schools after regular school hours, is also sponsored by T-VI's Evening Division.

DAY CREDIT TRANSFER: A number of Evening Division Skill Improvement classes may be applied toward diploma or certificate credit by Day Division students.

Evening Division classes which may be transferred to day programs are marked with this symbol:

A student who wants to transfer an Evening Division class to the Day Division must notify the Evening Division instructor at the beginning of the trimester.

## **Consumer Information**

As a person thinks about attending T-VI, or any other school, questions may arise about the quality of the school. Information that can help you decide about a school includes its accreditation (see "About the Institute" on page 1), its graduate job placement record, and the student drop-out rate.

Here is the latest information about T-VI's full-time vocational programs:

RETENTION RATES: For various reasons, some students who start a program are not able to finish the entire program. The number of students who leave is different for each program and from trimester to trimester.

Overall, the rate of full-time vocational program students at T-VI who stayed in school each

trimester during 1983 was more than 80 percent.

Putting it the other way, less than 20 percent of the students who started each trimester dropped out before the end of the trimester. The 1983 termination rates were: Winter Trimester—18.2 percent; Summer Trimester—22.0 percent; and Fall Trimester—17.2 percent.

GRADUATE PLACEMENT: The purpose of T-VI's full-time programs is to prepare students to get a job, so the graduate placement record is an important measure of how good the programs are.

The 1983 job placement information, next page, covers full-time Day Division graduates of April, September and December, 1983, and their situations 60 days after graduating.



## Graduate Job Placement, 1983

Total Graduates Available for Work	Employed: Training- Related Work	Employed: Jobs Closely Related to Training	Employed: Non-Training Related Jobs	Unemployed: 90 Days After Graduation	AVERAGE MONTHLY BEGINNING SALARIES (Training-Related Jobs Only)
BUSINESS OCCUPATIONS					
Accounting         56           Bookkeeping         20           Business Administration         20           Legal Office Worker         24           Medical Records/Receptionist         34           Merchandising         36           Office Occupations—Clerical         63           Office Occupations—Secretarial         27           Office Occupations—Refresher         7           Receptionist         33           Word Processing Operator         62	42 75% 8 40% 7 35% 15 62% 18 53% 36 100% 42 66% 23 86% 6 86% 15 45% 33 53%	1 1% 6 30% 5 20% 3 9% 4 6% 2 7% 1 3% 9 15%	6 30% 2 10% 3 12% 6 18% 1 1% 2 7% 4 12% 5 8%	13 23% 6 30% 5 25% 1 4% 7 20% — — 16 25% — — 1 14% 13 39% 15 24%	\$ 842 \$ 723 \$ 847 \$ 824 \$ 706 \$ 738 \$ 747 \$ 770 \$ 810 \$ 660 \$ 879
HEALTH OCCUPATIONS         Health Unit Clerk       32         LPN Refresher       3         Nursing Assistant       49         Phlebotomist       11         Practical Nurse       87         Respiratory Therapy Technician       24	18 56% 2 67% 39 79% 7 63% 67 77% 21 87%		5 15% 4 4 8% 3 27% 7 8% 1 4%	9 28% 1 33% 6 12% 1 9% 11 12% 2 8%	\$ 866 \$ 975 \$ 724 \$ 917 \$ 960 \$1,097
TECHNOLOGIES  Civil & Surveying Technology	23 82% 37 82% 72 55% 15 79% 151 75% 29 94% 23 77%	1 2% 1 1%  	1 4% 2 4% ,10 7% — — 17 8% — — 3 10%	4 14% 5 11% 48 37% 4 21% 34 17% 2 6% 4 13%	\$1,144 \$ 858 \$1,070 \$1,020 \$1,207 \$1,357 \$1,357
TRADES & INDUSTRIAL         Air Conditioning/Htg./Refrigeration       .39         Automotive Collision Repair       .24         Automotive Tune-up Mechanic       .12         Baking       .13         Carpentry       .12         Commercial Printing       .22         Diesel Mechanics       .68         Electrical Trades       .10         Industrial Electricity       .27         Machine Trades       .43         Plumbing       .16         Quantity Foods Preparation       .21         Welding       .55         TOTALS       .1,436	26 66% 13, 54% 9 75% 13 100% 7 58% 20 90% 39 57% 9 90% 21 78% 21 78% 31 72% 9 56% 20 95% 30 55%	1 2% 1 8% 1 4% 1 4% 38 3%	5 12% 5 20% 2 16% 3 25% 12 17% 3 11% 5 11% 5 11% 2 12% 1 5% 8 14%	7 17% 6 25% 1 8% - 1 8% 2 10% 17 25% 1 10% 2 7% 7 16% 5 31% 17 31%	\$ 863 \$ 675 \$ 667 \$ 671 \$ 806 \$ 756 \$ 1,018 \$ 783 \$ 990 \$ 820 \$ 754 \$ 673 \$ 1,135

## **School Year**

T-VI meets year-around with the year divided into three trimesters—Fall, Winter and Summer.

Each Day Division trimester has 75 days of classes, usually with 10 days to two weeks as a "break" between trimesters. Most day students go to school year-around until they finish their program. In most programs, it is possible to take a trimester off if necessary. However, persons who interrupt their programs may not be able to get back in at the time they want, because the classes they need may not be available every trimester.

Evening Division classes usually start a week after the day classes and meet for 14 weeks.

## **Evening Division Calendar**

**FALL TRIMESTER, 1984** 

Aug. 10
8 p.m.
and 22
Aug. 30
8 p.m.
and 20
Sept. 10
ept. 21
and 23
Dec. 20
֡

#### WINTER TRIMESTER, 1985

Skill Improvement Application Deadline 5 p.	m. Dec. 7
Adult Basic Education Registration 10 a.m.	to,8 p.m.
Dec.	27 and 28
Fees/Books Payment Deadline	Jan. 3
Late Application Period 12 noon	to 8 p.m.
Jan. 9, 10, 14, 15,	16 and 17
Evening Classes Begin	Jan. 7
Fees/Books Refund Deadline.	. Jan. 18
Last Evening of Classes	. Apr. 18
,	

#### SUMMER TRIMESTER, 1985

Skill Improvement Application Deadline 5 p.m. Apr. 12 Adult Basic Education Registration 10 a.m. to 8 p.m.
Fees/Books Payment Deadline
May 2, 8, 9, 13, 14, 15 and 16 Evening Classes Begin
Fees/Books Refund Deadline
Holiday (no classes) July 4  Last Evening of Classes Aug. 15

SNOW DAY: During the 1985 Winter Trimester, April 5 is designated if it is needed to make up a day lost because of snow conditions earlier in the winter. If it is not needed as a makeup day, it becomes a day off for students and instructional staff. T-VI seldom closes because of weather.

ABBREVIATED DAY: If there are bad snow conditions, T-VI sometimes operates an "abbreviated day" and cancels periods 0-1-2, so that classes begin at 10 a.m. at the Montoya Campus and at 10:20 a.m. on the Main Campus. Listen to your radio on days with bad snow conditions, and come to school as soon as you can (your teachers must mark you absent anytime classes are in session and you are not there) unless you hear that T-VI is on an abbreviated day or has cancelled completely.

## **Day Division Calendar**

FALL TRIMESTER, 1984
Day Classes BeginSept. 4Day Late Registration DeadlineSept. 17Mid-Trimester GradesOct. 25Teacher Inservice (no classes)Oct. 26HolidayNov. 22-23Withdrawal DeadlineDec. 7Last Day of ClassesDec. 20Trimester BreakDec. 21-Jan. 2
WINTER TRIMESTER, 1985
Day Classes Begin Jan. 3
Day Late Registration Deadline Jan. 16
Mid-Trimester Grades Feb. 21 Teacher Inservice (no classes) Feb. 22 Snow Day (no classes if not used
as a make-up day)
Withdrawal Deadline
Last Day of Classes
SUMMER TRIMESTER, 1985
Day Classes Begin
Day Late Registration Deadline

Holiday May 27
Mid-Trimesfer Grades June 21
Holiday July 4-7
Withdrawal Deadline Aug. 2
Last Day of Classes Aug, 16
Trimester Break Aug. 17-?



## **Admission Policies—Day Division**

T-VI's Day Division programs are for adults who want to obtain a saleable job skill, and who can attend classes 20 to 30 hours a week. If you are not a high school graduate, you need to be 18 years or older. Persons under 18 who are not high school graduates can be admitted only if they are excused from attending a secondary school according to New Mexico's compulsory attendance law.

Except for Health Occupations, admission to Day Division programs is done on a first-come, first-served basis for qualified applicants. You should apply as soon as you know you want to go to T-VI. There are special application times for some Health Occupations (see program descriptions in this catalog).

Admission to T-VI is done in a way to help you find a career program where you have a good chance to succeed. You need math and reading skills to succeed in any vocational program. If you do not have these skills, T-VI's Preparatory program can help you get them be fore you start the vocational program you want.

Some programs have health and physical condition requirements. You can read about these in the program descriptions in this catalog when you are trying to decide which program is best for you.

An applicant will be discouraged from entering a program where chances to succeed are poor because of a health or physical condition. You can be denied admission to a particular program if your health or physical condition could be dangerous to you or other people in that program. If this happens, the admission counselor will help you choose another program.

Because the Day Division programs are for people who do not have a saleable job skill, a T-VI graduate must wait one year before taking space in another program. However, if there is room in the second program wanted after all new applicants are admitted, the extra space can be taken by a graduate at any time.

People who can attend full-time are given space before applicants who want to attend only part-time. If you want to attend part-time, please look at the Evening Division courses in this catalog.

INTERRUPTED TRAINING: Students who stop out for one or more trimesters and then wish to return should make contact with the Admissions Office early in the trimester before the one in which they wish to return, to be sure that instructional space can be provided.

## Admission Policies—Evening Division

Each Evening Division class is numbered and those numbered up to 499 are of a general nature and open to any interested adult or high school sophomore, junior or senior.

Classes numbered 500 and above are more specialized trade classes, designed for persons working in the trade or persons who need the training to keep their job or advance in it. Therefore, such persons will be given preference during the application period.

However, if a specialized class numbered 500 and above is not filled with persons working in the trade, other applicants who are interested in the subject will be admitted provided they meet the prerequisites. The curriculum will be designed for those enrolled for vocational reasons.

All prerequisites are listed in the Evening Division class schedule section of this catalog.

## How to Enroll—Day Division

You need to do five things to enroll for a fulltime Day Division program. The first four can be done in one day at T-VI. You need to do the first four as soon as you can, because enrollments are handled first-come, first-served from among qualified applicants. Some programs fill up fast, and if you wait too long to do the first four steps you may not be able to get in the program you want at the time you want it.

Here is how you enroll in the Day Division:

1. Fill out a Day Division application form. You can get this form in the lobby of either T-VI campus, at most high school counseling offices in the state, and at Albuquerque Public Library branches.

Bring or mail your application form to the T-VI Admissions Office at either the Main or Montoya Campus any weekday—Monday through Thursday between 8 a.m. and 7 p.m., Friday 8 a.m. to 5 p.m. Except for Health Occupations which have special application times (see "Health Occupations" in this catalog), you can apply for any Day Division program as far ahead of time as you want to. The sooner you apply, the better chance you have to start your program at the time you want to begin. If you are not sure about the program you want, ask to see an admission counselor at either the Main or Montoya campus.

2. Take the admissions tests. When you turn in your application, you will take math and reading tests needed to help advise you about the program you want. The tests take about 90 minutes. If you want to take the tests the same day you turn in your application, you need to be at the Main Campus Admissions Office before 4:30 p.m., Montoya Campus before 2:30 p.m.

You cannot do steps 3 or 4 until you have a taken the tests.

- 3. Visit an admission counselor. You will meet with a counselor right after you take the tests. The counselor will explain the test results and the programs you are eligible to enter. When you have agreed on the program you want, the counselor will admit you to T-VI. Counselors are available until 7 p.m. Monday through Thursday, 5 p.m. Friday.
- 4. Pay your fees. As soon as the counselor has admitted you, you can pay the admissions fees for your program. If the program you want is full for the next trimester, you will be put on a "standby" list for that trimester and given a guaranteed reservation for the next trimester when there is a space open.

You are not admitted until you have paid the fees. The fees include a \$10 preregistration fee, any personal equipment and supplies fees charged for the program you want, and a \$10 book deposit which you will get back when you leave T-VI and turn in all textbooks. The \$10 preregistration fee is for the work done to handle your application, and will not be refunded even if you do not attend. The book deposit, personal equipment, and supplies fees will be refunded if you decide not to attend.

If your fees are going to be paid by another agency, you must bring a written form from the agency to finish your admission steps.

The nonresident tuition of \$500 per trimester does not have to be paid at admission, but it must be paid before class registration.

When you have done the first four steps, you will be told when to come back to register for your class schedule.

5. Register for your classes. Come to registration on the day you were told to, and pick up your class schedule. When you have done the registration, you are enrolled and ready to attend the first day of classes. If you miss your registration date, your place in classes may be given to somebody else.

Late registration, on a space-available basis, is held only through the tenth day of classes.

If you miss the first two days of class, you will be withdrawn automatically as a "no show" and will be readmitted only if there is still space available in the classes you want.

### Class Schedules

Daily class schedules for all of the weekly attendance combinations possible under diploma requirements detailed in this catalog are:

Total Hours	Dai	ly Clas	s Schee	dule H	ours
Per Week	M	T	W	Th	F
30	. 6	<sup>′</sup> 6	6	6	6
28	. 6	5	6	5.	6
27	. 5	6	. 5	6	5
26	. 6	4	6 .	4	6
26	. 4	- 7	4	7	4
25	. 5	5	5	5	5
23	. 5	4	5	4.	5
22	. 4	5	4	5	4
20	. 4	4	4	4	· 4

## **Day Division Class Periods**

The class schedule you are given at registration shows the period of the school day and room location of each class. The times for each of the Day Division class periods are as follows:

#### **MAIN CAMPUS**

Morning	Afternoon
Period 0- 7:20 to 8:15	Period 5—12:20 to 1:15
Period 1- 8:20 to 9:15	Period 6- 1:20 to 2:15
Period 2- 9:20 to 10:15	Period 7— 2:20 to 3:15
Period 3-10:20 to 11:15	Period 8— 3:20 to 4:15
Period 4-11:20 to 12:15	Period 9- 4:20 to 5:15
	Period 10— 5:20 to 6:15
	LI LI

#### **MONTOYA CAMPUS**

Morning	Afternoon
Period 0— 7:00 to 7:55	Period 5—12:00 to 12:55
Period 1- 8:00 to 8:55	Period 6— 1:00 to 1:55
Period 2— 9:00 to 9:55	Period 7— 2:00 to 2:55
Period 3—10:00 to 10:55	Period 8— 3:00 to 3:55
Period 4-11:00 to 11:55	Period 9— 4:00 to 4:55
	Period 10— 5:00 to 5:55

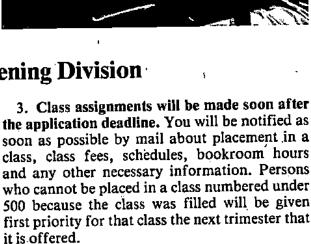
## How to Apply—Evening Division

Persons who want to take an Evening Division Skill Improvement class should submit an application form by the application deadline for the best chance of getting in a class. The names of applicants will then be placed in classes, or—in the case of popular classes for which there are more applicants than space—a drawing will be held to decide who will be in the class. Every effort will be made to add classes so that all applicants can be placed.

To enter the Evening Division, you must:

1. Return one application form for each class you want to take by the application deadline (Fall, Aug. 10; Winter, Dec. 7; Summer, Apr. 12). Forms may be mailed or delivered to either T-VI campus. More forms are available at both campuses and at all branches of the Albuquer-que Public Library.

2. Include the \$5 application fee. This is paid only once each trimester, regardless of the number of classes you want to take. It is refunded if T-VI cannot place you in a class that trimester, and you will be told why you could not be placed. Payment by mail may be by check of money order payable to T-VI, or by VISA or MasterCard. If you pay with cash, you must pay in person.



4. Buy textbooks and pay any required fees by the deadline noted in your acceptance letter. Those dates are Fall Trimester, Aug. 30; Winter Trimester, Jan. 3; and Summer Trimester, Apr. 30. If you do not pay your fees, purchase textbooks and return your book/fee card by that deadline, the Evening Division may give your space to someone on the standby list. You will then lose your space in the class and forfeit your \$5 application fee.

5. If you did not apply during the application period, you may apply during days set as the late application period, provided the class you want still has vacancies. The late application period is conducted on a first-come, first-served basis, and you may have to wait in line to apply

during these periods.

## Fees and Tuition

#### **EVENING DIVISION FEES**

APPLICATION FEE: There is a \$5 per trimester application fee (regardless of the number of classes) payable with the application for Skill Improvement classes. If the applicant cannot be placed in a class, this fee will be refunded.

TUITION: Evening Division classes are tui- tion-free.

BOOKS AND SUPPLIES: All Evening Division students must purchase their own books, except those taking Adult Basic Education classes. Textbook prices are listed in this catalog but they may change during the year.

LABORATORY FEE: In some classes, there is also a laboratory fee which covers the cost of supplies used by the student during the class. This might include things such as welding gases and cash register tapes.

ALL LABORATORY AND BOOK FEES MUST BE PAID BEFORE THE STUDENT IS ADMITTED TO CLASS.

REFUNDS: Students who withdraw from class during the first two weeks may receive a refund of their textbook and lab fees, but not the application fee. Refunds will not be given for textbooks that have been damaged or in which the student has written. No refunds are given after the first two weeks of class.

Refunds are not made in cash. A check is mailed to the student.

#### DAY DIVISION FEES

PREREGISTRATION FEE: There is a \$10 preregistration fee for each trimester, which must be paid before the applicant is admitted. Payment of the preregistration fee and other required fees reserves the applicant a place in classes only through the close of the final registration day set for new students. Unless the applicant has requested a reservation extension in writing, his or her place in classes may be filled by another applicant during the late registration process.

The preregistration fee is a charge for processing the applicant's admission and is not refunded once it has been paid. A refund will be made only if T-VI cancels a program to which applicants have been admitted.

TUITION: There is no tuition for New Mex-

All divisions of T-VI accept the following in payment of fees or book purchases: cash, money orders, personal checks (in the amount of fees and purchases only), and VISA and MasterCard credit cards. They do not accept checks in amounts larger than the fees/book purchases.

ico residents. Members of the armed forces stationed on active duty in New Mexico (and their dependents), and members of the Navajo Tribe who live on the Navajo Reservation, are considered legal residents.

For nonresidents—persons who have not lived in the state for 12 months before the first day of class—tuition for a full-time student is \$500 per trimester. For schedules of less than 23 hours per week, tuition is \$22 per hour.

Tuition charges must be paid in full in order to register and receive a class schedule.

Students who have paid tuition and withdraw before the end of a trimester will be refunded the unused part of the tuition.

Payments in lieu of tuition are requested from agencies authorized to pay the training expenses of nonresident students referred to T-VI.

BOOKS AND SUPPLIES: Textbooks are loaned free to Day students, but they must be paid for if the student loses or damages them. For this reason, students must make a \$10 textbook deposit when they are admitted. The deposit will be refunded when the student returns all textbooks in good condition when leaving T-VI, or if an applicant withdraws before receiving any textbooks. Cost of lost or damaged books or materials is deducted from the deposit, and the student is required to redeposit the \$10 before registering for another trimester.

Students must buy their own routine school supplies, such as paper, notebooks and pencils.

PERSONAL EQUIPMENT AND SUP-PLIES 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, purchased by T-VI at the best possible prices, is issued early in the program and becomes the student's personal property.

Personal equipment fees must be paid in full before the student is admitted. Refunds of the personal equipment fee are made if the applicant withdraws before the equipment is issued. Once it is issued, no refund is made.

In some programs, this fee is paid at the beginning of the program only. In other programs, equipment fees are required each trimester as the students need to add to their equipment at the advanced levels.

In several Business Occupations programs, a supplies fee is charged to cover the cost of expendable items provided by T-VI, such as machine tapes and ribbons, workbooks and practice sets. This supplies fee must be paid before the student is admitted. It will be refunded if the student withdraws before attending any classes. Once the student has attended any classes, no refund is made.

Personal equipment and supplies fees for 1984-85 (in addition to the \$10 preregistration fee and \$10 book deposit) are as follows:

Trimester II III IV I **BUSINESS OCCUPATIONS** \$10 \$10 \$1b \$10 \$10 Distributive Education . . . . . . . \$10 Legal.Office Worker .....\$10 Medical Records/Receptionist . . . . \$10 Merchandising . . . . . . . . . . . \$10 Office Occupations .....\$10 \$10 \$10 Receptionist.....\$10 Refresher Course for Office Workers......\$10 Small Business Operation. . . . . . . \$10 Word Processing Operator.....\$10 HEARTH OCCUPATIONS Health Unit Clerk .....\$30 Nursing Assistant.....\$30 Phlebotomist . . . . . . . . . . . . . . . \$45 Practical Nurse ......\$75 Respiratory Therapy Technician ...\$75 TECHNOLOGIES Civil and Surveying Technology...\$35 Construction Drafting . . . . . . . . \$50 Electromechanical Drafting . . . . . \$50 Electronics Technology . . . . . . . \$15 Instrumentation and Control Technology .....\$15 Laser Electro-Optic Technology. . . \$15 TRADES Air Conditioning, Heating and \$70 \$70 Refrigeration . . . . . . . . . . . \$90 Auto Collision Repair ......\$90 \$75 Automotive Tune-up Technology, \$100 \$80 Carpentry ......\$100 \$70 Commercial Printing . . . . . . . . . \$30 Culinary Arts \$30 Baking . . . . . . . . . . . . . . \$100 Quantity Food Preparation ...\$100 \$80 Diesel Mechanics ...........\$100 \$100 \$80 \$80 Electrical Trades ......\$90 \$70 \$85 \$75 Industrial Electricity ......\$100 \$80 \$70 Machine Trades . . . . . . . . . . \$100 \$70 Plumbing......\$100 \$50 \$25 Welding . . . . . . . . . . . . . . . . \$100

## **Student Records**

#### DAY DIVISION

Permanent records are kept for each day student who attends T-VI. The transcript shows the amount of instruction each student has received, whether class credits are by full completion or waiver, whether the program of studies is partial or complete, all final grades and proficiency ratings earned, and attendance records. The student's original application is also a permanent record.

At admission, most students authorize T-VI to provide confidential copies of transcripts to employers and to other educational institutions. A student who does not want the transcript sent to prospective employers or other schools may indicate this at any time on the transcript by visiting the Main Campus Student Records Center or the Student Services Center at the Montoya Campus.

A student may examine any documents in his or her cumulative records during the hours the Student Records Center is open. Free copies of attendance records or transcripts are provided to students and former students on request.

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 T-VI's procedures for meeting the requirements of this act are posted in the Main Campus Student Lounge and in the Student Services Center at the Montoya Campus.

#### **EVENING DIVISION**

Permanent records kept by the Evening Division include the date a student enrolled in a class, the date completed or dropped, the total number of hours the class was held, the total number of hours the student completed during the class, the final grade received and whether a certificate was awarded to the student.

The words per minute attained in a typing or shorthand class are also noted on a student's permanent record when applicable.

The Evening Division will furnish transcripts at any time a student requests one. The first transcript is free and all others cost \$1 per transcript. Please allow 48 hours to process transcript requests.

## Financial Aid

Financial help to attend programs in the Day Division is available through several federal and state programs. Some financial aid is through agencies and some through the T-VI Financial Aid Office. Each financial aid program has its own purpose and system of determining need and eligibility.

Those aid programs for which application is made directly to the agency, rather than the T-VI Financial Aid Office, include:

WETERANS ADMINISTRATION (VA): Most full-time 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.

However, no person may be approved for VA benefits for refresher training in any course for which he or she already has required skills, regardless of where those skills were learned, without specific VA permission.

Written records of previous education and training are maintained to show that appropriate credit has been given for previous education. The training program at T-VI is then shortened proportionately.

Information about eligibility for VA education benefits is available at any Veterans Administration office.

NEW MEXICO DIVISION OF VOCA-TIONAL REHABILITATION (DVR): Persons with disabilities may be eligible for education and training assistance from DVR. The Albuquerque offices include: (NE and SE) 5600 Domingo Rd. NE, 842-3985; (SW) 2720 Isleta SW, 842-3243; and (NW) 2221 Rio Grande NW, 842-3184.

EMPLOYMENT DEVELOPMENT OF-FICE (EDO): Education and training assistance is provided for unemployed or underemployed, economically-disadvantaged persons by this federal agency, which has offices throughout New Mexico. Information is available from the nearest service center of the New Mexico Employment Security Division. The EDO Training Control Center in Albuquerque is at 1500 Walter St. SE.

BUREAU OF INDIAN AFFAIRS (BIA): Indian students taking 25 or more hours per week may be eligible for education benefits through BIA. Applicants should talk with their home tribal agency for BIA funding before applying to T-VI.

Training assistance is provided for unemployed, underemployed or economically-disad-

vantaged Indians by a community-based organization, NIYC. Applicants should contact their tribal office for procedures.

Applications for financial aid are available in the T-VI Student Financial Aid Office at the Main Campus, A-119, or in the Student Services Center at the Montoya Campus. Both are open weekdays from 8 a.m. to 5 p.m. Most aids require the processing of federal forms 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.

PELL GRANT: Students interested in applying only for the Pell Grant with no processing fee must use the Application for Federal Student Aid (AFSA). U.S. citizens and permanent resident aliens (immigrants, refugees and persons granted asylum) who plan to attend T-VI at least half-time may apply and be eligible to receive this federal grant, which is intended to provide up to half of the student's estimated instructional costs. During 1984-85 the maximum Pell Grant award for T-VI students for the entire year will be \$775 (\$1525 for nonresidents paying tuition).

To be eligible for full awards, students must be enrolled in a program consisting of 900 or more hours of instruction and which is two or more trimesters in length. A student attending the full number of hours specified in this catalog for his or her program receives the full entitlement. If attending less than full-time (at least 600 hours), the student receives a partial grant. Persons who already have a Bachelor or higher degree are not eligible for a Pell Grant.

Within 10 weeks after mailing the application, you will receive a "Student Aid Report" (SAR) which contains a Student Aid Index (SAI). Using this index, T-VI can determine the Pell Grant to which you are entitled, based on your enrollment status. Equal monthly installments are paid about the twentieth (20th) of each month so long as you continue to attend and remain in good standing.

Students wanting to apply for both Pell'Grant and other aids must use the "Financial Aid Form" published by The College Scholarship Service or the "Family Financial Statement" published by The American College Testing Agency. A processing fee is charged for either of these forms.

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SUPPLEMENTAL EDUCATIONAL OP-PORTUNITY GRANT (SEOG): A limited amount of SEOG federal funding is available to aid students with the highest level of need as determined on the "Financial Analysis Statement" received by the school for each student who applies and submits the processing fee. To receive an SEOG, eligible students must maintain satisfactory progress as indicated by previous trimester final grades; and must be in good standing as defined on page 15 under atendance policies for Day Division.

NEW MEXICO STUDENT INCENTIVE GRANTS (NMSIG or SSIG): This program, funded by 50% federal and 50% state funds, provides aid to needy, full-time students who are legal residents of New Mexico and who have established need via the "Financial Analysis Statement." Amount of an SSIG is between \$200 and \$800 per year. A roster of eligible students is submitted each trimester for approval by the State Board of Educational Finance in Santa Fe. Approval is usually received about the middle of the trimester, and eligibility is based on academic and attendance records (including previous trimester final grades, and good standing as defined on page 15 under Day Division attendance policies). Palyments are made after mid-term, retroactive to the beginning of the term.

COLLEGE WORK-STUDY (CW-S): This program, funded by 80% federal and 20% T-VI funds, aids needy, eligible students by providing employment at the Institute. The student employee may work during available hours up to 20 hours per week. CW-S students are paid every two weeks at the federal minimum wage rate, currently \$3.35 per hour.

NEW MEXICO WORK-STUDY (NMW-\$): This program, funded by 80% state and 20% T-VI funds, aids needy, full-time students who are legal residents of the state by providing employment positions at the Institute. The student employee may work during available hours up to 20 hours per week. NMW-S students are paid every two weeks at the federal minimum wage rate, currently \$3.35 per hour.

NEW MEXICO STUDENT LOAN (NMSL): New Mexico residents who are U.S. citizens, who are enrolled in full-time programs which are two or more trimesters in length, and who are attending 25 or more hours per week, can apply for a loan. Maximum loans are \$830 per trimester or \$2500 in any twelve-month period.

In addition to the Financial Aid Form, persons wanting a NMSL must complete applications given out at loan workshops held at TVI or the New Mexico Educational Assistance

Foundation. Information about the workshops and loan program is available from T-V1's Student Financial Aid offices at both the Main and Montoya Campuses.

Two disbursements per trimester are, made, so long as the student remains in good standing at T-VI. If the student is placed on Conditional Enrollment or withdraws, the rest of the loan is cancelled. The student leaving school must complete an Exit Interview Form with the Financial Aid Officer and must begin to repay the loan within six months. The interest rate is 9% and minimum payments are \$50 a month.

There is a 1% insurance premium and an "origination fee" (now 5%, may rise to 10%) taken out of the loan amount to help pay the interest while the student is in school. The federal government pays the rest of the interest while the person is in school and during the six-month grace period after leaving school.

TERMINATION OF FINANCIAL AID: Campus-based 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 has been placed on Conditional Enrollment status because of poor attendance

(see Page 15).

—The student's total T-VI transcript has final grades averaging less than "C" (2.0 grade point average). In the case of repeated classes, only the final grade of the most recent class will be counted.

—The student's last two trimesters of enrollment at T-VI have resulted in transcript credit for less than 50% of the full-time program requirements for those two trimesters.

—The student has not completed his or her occupational major within a reasonable number of trimesters of enrollment in that major (no more than two extra trimesters in a four-trimester major or one extra trimester in any other major).

—The student is making a second change of majors at T-VI (no financial aid will be approved to enroll in the third program).

REINSTATEMENT: A student who believes that termination of financial aid was based on inaccurate or incomplete information may appeal the termination, in writing, to the Student Financial Aids Administrator.

A student terminated from financial aid can re-establish eligibility for financial aid by successfully completing all required classes listed under one trimester of a full-time program at T-VI, or by removing the condition which caused the termination.

## **Estimated Budget**

An important matter to look at when planning to attend T-VI full-time is what it will cost.

This estimated budget—including food, housing, personal and transportation expenses as well as school charges for a full-time student—is used by the Student Financial Aid Office to estimate financial aid needs for 1984-85:

Student's Status	' 1 Trimester	in the second	
		'' 2 Trimesters	3 Trimesters
DEPENDENT LIVING WITH I	HEAD OF HOUSEHOL	D	•
Tuition and Fees* Room and Board Books and Supplies Personal Expenses Transportation	25	. 1860 . 50	2790 75
TOTAL*	\$1480 to \$1580	¦¦ \$2950 to <sub>j</sub> \$3150	\$4420 to \$4700
	•	•	•
DEPENDENT LIVING WITH F	A INTENIORO		
Tuition and Fees* Room and Board Books and Supplies Personal Expenses Transportation	\$ 20 to \$ 120	890 50 630 380	1335 75 945 570
TOTAL*	2 AAS to 210A2	\$1980.to \$2180	\$2965 to \$3245
INDEPENDENT SINGLE Tuition and Fees* Room and Board Books and Supplies Personal Expenses Transportation TOTAL*	25	2096. 50. 630. 380.	3144 75 .945 570
,	\$1598 to \$1698	122182 to 23386	\$4774 to \$5054
•	1		•
MARRIED, HEAD OF HOUSE	I∩I n**	•	
Tuition and Fees* Room and Board Books and Supplies Personal Expenses Transportation TOTAL*	\$ 20 to \$ 120	3560	5340
Additional amounts allowed for	each child	•	r
Room and Board	\$ 295	\$ 590 \$ 392	\$ 885 \$ 588 ,

<sup>\*</sup>If student is paying nonresident tuition, add \$500 per trimester.

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<sup>\*\*</sup>If student is divorced or separated and has dependent children, count the first child instead of spouse and then use the "Married, Head of Household" figures.

## **Attendance Policies**

#### DAY DIVISION

To be considered a full-time student, you must enroll for the number of hours listed in this catalog under each trimester of your program.

You are expected to attend all sessions of every course (you agreed to do this when you were admitted). Attendance is taken every class hour and all absences are recorded in your permanent record at T-VI.

T-VI does not have "excused" or "unexcused" absences; each teacher must mark you either present or absent each hour. If you must miss because you are sick or have an emergency, you must contact your teacher for makeup work. The teacher will record all makeup work completed.

TARDIES: If you miss up to 10 minutes of a class hour because you came late or left early, you are marked tardy for that hour. If you miss more than 10 minutes of a class hour, you are marked absent. However, the teacher must let you stay in class even if you come late and have been marked absent.

Five tardies are counted as one hour of absence and turned in to the Attendance Office. If you continue to be tardy, each five tardies will count as one hour of absence.

NOTE: The Health Occupations have very strict attendance requirements. The next three sections do not apply to Health Occupations students. See the Health Occupations Student Handbook for attendance regulations of that department.



EXCESSIVE ABSENCE: If your absences reach 7% of your total available class hours in any trimester, you will be sent a warning letter telling you that you are in danger of losing financial aids and/or being suspended.

conditional Enrollment: If your absences reach 15% of the total instructional hours for which you enrolled during a trimester,

you are placed on conditional enrollment and are no longer in good standing. All financial aids are cut off at this point, and you must appear before a review committee to keep from being suspended from school.

STUDENT REVIEW COMMITTEE: If you are put on conditional enrollment, or are suspended for disruptive behavior, you may appeal your suspension to a Student Review Committee (SRC) made up of other students. If you do not appear before the SRC, the suspension is final.

The SRC hears the student's reasons why he or she should not be suspended, and recommends to the Administration either (1) that the suspension be carried out, or (2) that the student be allowed to continue to attend on probation. Terms of the probation are recommended to the Administration.

A student allowed to continue attending on probation can be suspended if terms of the probation are broken. There is no further appeal of the suspension if this happens.

READMISSION: A suspended student (except Academic Suspension) can apply to re-enter T-VI the following trimester, on the same first-come, first-served basis as all other applicants.

WITHDRAWAL DEADLINE: A student cannot withdraw from any class during the final two weeks of the class, unless the withdrawal is for credit by waiver (see page 16).



#### **EVENING DIVISION**

Evening Division teachers take attendance each class session, and turn in absence reports to the division office each month. 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.

A student must attend 80% of the time available in an Evening Division class in order to be eligible for a certificate, as well as making a grade of "C" or better.

## **Standards of Progress**

#### DAY DIVISION

Requirements for graduation in each full-time program are detailed in the catalog for the academic year when the student entered the program. It is important that you keep a copy of that year's catalog to be able to check whether all of the graduation requirements are being met.

GRADE REPORTS: Progress reports are given at midterm and at the end of each trimester or unit of study. Final progress reports become part of the student's permanent record at T-VI.

Most classes at T-VI use letter grades in the progress reports: "S" (Satisfactory), "A" (Excellent), "B" (Above Average), "C" (Average), "I" (Incomplete) and "U" (Unsatisfactory). Minimum grades for which credit is granted are "C" or "S."

Some programs use proficiency ratings. In these classes, performance objectives are defined clearly. The student then receives progress reports detailing the skills mastered based on those objectives. The rating sheets are the progress reports for these classes, and those showing sufficient achievement also result in a final grade on the transcript.

A student who receives either an "I" or "U" final grade for a class may not enroll for any other class for which the former is a prerequisite. An "I" grade may be converted to a credit grade by completion of the missing work the following trimester. Each department has different deadlines for making up an "I."

A "U" grade can be made up only by repeating the entire class.

UNSATISFACTORY GRADE APPEAL: A student who believes that an unsatisfactory final grade does not represent fairly the quality of work done may appeal the grade to the teacher within one week of the class completion. If the student-teacher appeal does not resolve the problem, the student may appeal to the department chairman. Such an appeal must be made within five days of the teacher appeal conference. When an appeal is made to a department chairman, he/she will appoint a board to hear the appeal within one week's time. The written decision of the appeal board (made up of two faculty members and one student) is final.

ACADEMIC PROBATION: A student who receives an "I" or "U" final grade in any class, or who withdraws from a class after midterm with an unsatisfactory midterm grade, is placed on academic probation during the next trimester attended. Any time that less-than-satisfactory work is being done during the probationary trimester, the student may be terminated. At the end of the probationary trimester, if the student again receives an "I" or "U" grade, or has withdrawn from required classes, he or she will not be allowed to continue in the same T-VI program and must select a new major.

ACADEMIC SUSPENSION: A student who fails to make satisfactory progress toward a certification goal during the last three trimesters attended, either because of withdrawal from required courses or unsatisfactory final grades, will be placed on academic suspension for a period of one year and may not enroll in the Day Division at T-VI during the year of suspension.

credit by waiver: Credit toward graduation usually is earned by taking a class and receiving a satisfactory final grade or proficiency rating. However, an applicant or student can be given waiver credit for any class in which he or she can demonstrate the knowledge or skills required.

Two types of credit by waiver are available, and application forms are available in all department offices.

The first is by examination, and a person who already has the knowledge and skills to pass the final proficiency examinations for a class may be given credit for that class by examination. A student who has a final grade of "U" in a course, or who has withdrawn from the course after an unsatisfactory midterm grade, cannot be given a waiver credit for that course.

The second kind of waiver credit may be given in the final trimester of most programs to an outstanding student who has earned all required proficiencies and who gets a full-time, training-related job after midterm grades have been issued. This waiver will not be given to any student who has unsatisfactory grades, who is on academic probation, or who is on conditional enrollment status because of absences. The academic advisor or counselor can tell you whether or not you are eligible to apply for this kind of waiver.

Both types of waiver credit require approval of the class instructor, academic advisor, a department administrator, and the authorized program counselor. Until all approvals are obtained you must continue to attend class.

Credit by waiver is considered full and successful completion of the class, meets diploma and certificate requirements, meets prerequisite requirements, and is entered on the student's transcript as a completed class.

#### **EVENING DIVISION**

To complete successfully an Evening Division class a student must attend at least 80 percent of the classes and earn a grade of at least a "C." Letter grades used are "A" (Excellent), "B" (Above Average), "C" (Average) and "U" (Unsatisfactory).

Certificates are granted to evening students for each class completed successfully.

## **Services for Students**

The Student Services Division at T-VI helps applicants, students and graduates with admissions, testing, counseling and career guidance, attendance accounting, student records and transcripts, and student financial aid.

counseling: Professional counselors at all campuses will help applicants choose a career field and instructional program to meet their needs.

They also help students with problems which they may be having which keep them from doing their best in T-VI's classes.

You should feel free to see a counselor at any time you need advice or help. They are located in every instructional department and at all campuses every weekday between 8 a.m. and 5 p.m., and in the Main and Montoya campus student services areas until 7 p.m. except Fridays.

HEALTH ADVISEMENT: The student health advisement center is in Room A-127 on the Main Campus, and is open weekdays from 8 a.m. to 5 p.m.

Services offered are first aid for minor injuries and illnesses, free blood pressure, vision and hearing tests, and information about such health problems as venereal disease and drug addiction. There are cots for people who become ill while on campus.

JOB PLACEMENT: Each graduate is sponsible for finding his or her own job after completing a program at T-VI. However, the Institute's Industrial Relations office and the structional staff can provide a lot of help to full-time students and graduates in getting a job.

The Industrial Relations office is at 616 Buena Vista SE, across the street from the Main Campus visitor parking lot. There is a liaison office at the Montoya Campus to serve students

there, with an electronic mail link to the Main Campus.

Full-time Day Division students can look for full- and part-time jobs listed by employers with Industrial Relations; get a referral card to take to employer interviews; use out-of-state telephone books and industry files; or call the Industrial Relations office HOT LINE (843-9696) for a recorded list of daily job openings. If you hear of a job that interests you on the HOT LINE recording, you can get details about the job and a referral card to the employer by visiting the Industrial Relations office or Montoya Campus Technologies office.

Day Division students in their final trimester may register for graduate placement services, get a kit which helps them prepare a résumé, have the résumé edited and typed free of charge, sign up for on-campus interviews with job recruiters after mid-term, and use nationwide directories, phone books, newspapers and other resources in Industrial Relations. However, a final trimester student with a mid-term grade of "I" or "U" will not be scheduled for interviews or have résumés sent to employers until the non-passing grade is made up and the student is considered a tentative graduate.

Full-time program graduates receive the full services of Industrial Relations while seeking their first training-related job. After working in their fields, graduates may register for placement as "experienced graduates".

## Housing

T-VI has no dormitories and students must make their own arrangements for housing. The Student Activities Office on the Main Campus in Room S-12 keeps a list of property owners who have contacted T-VI with rentals available to students.

## **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 entrees on school days between 11:15 a.m. and 12:30 p.m.; and a snack bar serving short-order meals and snacks, open between 7:45 a.m. and 3:30 p.m. on school days and from 6 p.m. to 8:30 p.m. Mondays through Thursdays when the Evening Division is in session.

The Business Occupations Building facility has a *snack bar* serving short-order meals and snacks on the same schedule as the A-35 snack bar.

Vending machines are available at all times in several locations at all campuses.

## **Testing Services**

T-VI's Testing Center on the Main Campus provides several services free of charge.

Applicants for full-time programs are tested on basic math and communication skills, to help applicants and counselors determine which T-VI programs may best match their abilities and interests, at both Main and Montoya Campuses.

G.E.D. EXAMS: The General Educational Development (GED) examinations for a high school equivalency diploma are given free of charge at the T-VI Center.

Anyone 18 years of age, who is not enrolled in high school, may take the GED exams. A 17-year-old may take the exams if released from the state compulsory school attendance law and given a GED Underage Permission Form. No currently-enrolled high school student of any age, and nobody 16 years old or younger, may take the exams.

Information about the GED test schedule can be obtained by calling the Testing Center at 848-1550.

Interested persons are pretested to see if they are ready for the five-part examinations. Those who want or need more study before taking the GED exams may take free classes to help get ready for the exams. The classes are offered day and evening at both campuses.



## G.E.D. (General Educational Development)

In this program, persons without a high school diploma can prepare for the GED tests, also known as the high school equivalency exam.

Upon successful completion of the five-part exam, the New Mexico State Department of Education issues an official high school diploma which is recognized by colleges and universities, labor unions, state and federal agencies and the armed forces.

There are no registration, book, equipment or testing fees required for the GED preparatory course and the exams are free.

Interested persons should contact the T-VI Evening Division office to enroll in the program. Office hours are noon to 8:30 p.m. Monday through Thursday and 8 a.m. to 4:30 p.m. Friday. Pretests are given to determine which classes are needed to help the student prepare for the GED exams.

Day and evening schedules are available at both Main and Montoya campuses.

#### DAY SCHEDULE

MTWThF	8:00-11:00 a.m	Montova Camrus
MTWThF	8:20-11:15 a.m	Main Campus
MTWThF	12:00 noon-3:15 p.m.	Main Campus
MTWThF	12 noon-3 p.m.	Montova Campus

#### EVENING SCHEDULE

MTW 7-9 p.m. . . . . . Main and Montoya Campuses

## **Instructional Materials Centers**

The Instructional Materials Centers (IMC) include four service areas for use by T-VI students, staff—and in some cases—the entire community. They are the Library, Adult Learning Center, Drop-in Math Lab, and Audiovisual Services.

The Main Campus IMC is located at the north end of the Administration Building. It is open from 7 a.m. until 8:30 p.m. weekdays except Friday, when it closes at 5 p.m. When school is in session, it is open Saturdays from 8 a.m. to 5 p.m.

The Montoya Campus IMC is in J-Building. It is open weekdays when T-VI classes are in session from 7:30 a.m. until 8:30 p.m. except Fridays, when it closes at 5 p.m.; and Saturdays from 9:30 a.m. to 12 noon and 1 to 4:30 p.m.

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

#### LIBRARY SERVICES

#### Main Campus

Library materials may be checked out Monday through Thursday between 7 a.m. and 8:30 p.m.; and 7 a.m. to 5 p.m. on Friday. Available are books, pamphlets, maps, newspapers, magazines, encyclopedias and dictionaries which contain information, recreation, new ideas, stories of the past, issues of the day and views to the future. There are special collections of learning materials on all T-VI vocational subjects.

Services include help in locating materials, instructions in how to use a library, study facilities, interlibrary loans, magazine back issues, and other aid to provide the information you want when you need it. Student typewriters and a coin-operated copying machine are available.

#### Montoya Campus

While the collection of books, magazines, pamphlets and newspapers concentrates on materials which support the Montoya Campus vocational subjects, there are also general interest materials and a variety of books and magazines for leisure reading.

All community residents are welcome to use the Montoya Campus materials and services on campus; but only full-time T-VI Day Division students may check books out. There is a coinoperated copying machine.

#### ADULT LEARNING CENTERS

ALC services are offered free of charge to any adult in the community who wants to develop basic education skills, vocationally related knowledge, microcomputer literacy, or self-improvement. Students may drop into the ALC once, or use it over a period of months.

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. Highly skilled tutors are available weekdays from 8 a.m. to 5 p.m. to assist with the math courses of all the majors at the Institute.

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

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

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

#### DROP-IN MATH LAB

The Drop-In Math Lab is in the Main Campus ALC, and is open weekdays from 8 a.m. to 5 p.m. Tutoring and individual study programs are available in basic arithmetic, fractions, decimals, percent, math applications, precision measurement, algebra, plane geometry and trigonometry.

#### AUDIOVISUAL SERVICES

AV Services maintains T-VI's 16mm film collection and all AV equipment. Films are available for classroom and individual viewing. Additional films are made available through purchase, rental, and loan arrangements.

AV equipment for Institute use is housed and maintained in the AV Services office. Equipment is loaned to instructors and departments on request. Instruction in the operation of AV equipment is available to students and staff members.

Services include educational film location and preview arrangements and assistance in the design, preparation, and application of audiovisual materials.



## **Parking and Transportation**

#### DAY DIVISION

PARKING: Student parking lots are provided free of charge at all T-VI campuses. The lots are unsecured, and T-VI is not liable for theft, vandalism or other losses which occur while vehicles are parked on campus. You should lock your vehicle and hide valuables where they cannot be seen.

Students may use T-VI parking lots by obtaining a parking permit decal. Decals are available at registration, in room M-105 at Main Campus or in the Student Services Center at the Montoya Campus. The decal should be put on the rear bumper of vehicles (rear fender of motorcycles).

Each decal is for a particular parking lot, and you should park in the lot shown on your decal. Student parking at Main Campus is all south of Coal Ave.—all lots north of Coal are for staff, visitor and handicapped parking only.

You are urged to park in the T-VI lots. Some businesses near Main Campus tow away any student cars parked on their property, and many streets in the area require city parking permits available only to residents of those streets.

Violations of parking regulations result in citations by 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. Most common violations are parking in T-VI lots without the proper decal, student parking in a staff or visitor zone, blocking a driveway or another vehicle, and parking in a "no parking" zone.

CITY BUS PASSES: Economical passes for full-time postsecondary students are available for Suntran city buses. A pass good for unlimited rides during one calendar month can be purchased for \$19 at the Business Office (Room M-101) on the Main Campus or the Student Services Center (Room H-128) at the Montoya Campus.

To encourage students to use the city buses, T-VI pays a rebate of one-half of the price of a pass purchased at a T-VI sales location by a full-time student. Bus passes which were bought at either of the two T-VI sales locations can be turned in at those offices for a \$9.50 rebate at the end of the month.

Bus passes and rebates may also be issued to eligible Evening Division students on a demonstrated need basis. Information can be obtained from the Adult Basic Education administrator at the Main Campus (Room A-29).

The speed limit in all parking lots is eight miles per hour because of the large number of pedestrians.

#### EVENING DIVISION

Evening Division students with a T-VI parking decal on the rear bumper may park in any T-VI parking spaces except those marked for faculty or the handicapped. There are special parking areas for motorcycles and bicycles and they should not be parked on sidewalks.

## **Campus Conduct**

Unsafe or disruptive behavior anywhere or either campus, including the parking areas, is grounds for dismissal from T-VI. This also applies to any field trip taken under the supervision of a T-VI employee.

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

USE OF TOBACCO (smoking or nonsmoking products) is not permitted in any classroom lab, hallway, enclosed corridor or restroom area, or in designated nonsmoking areas of student lounges. It is allowed outdoors on campus and in the smoking area of the various student lounges. Please use ash trays and other containers provided. Students are also reminded that smoking is hazardous to their health.

STUDENT DRESS: Students are asked to come to class dressed appropriately for the job for which they are training. Students or visitors not wearing a shirt or shoes are not permitted in any T-VI buildings.

CHILDREN: Students are not permitted to bring their children to classroom and laboratory sessions.

ANIMALS: Dogs, except seeing eye dogs, and other pets are not allowed in T-VI buildings.

LAW VIOLATIONS by anyone on campus will be handled by appropriate law enforcement agencies, just as they would be anywhere else.

COMPUTER CRIME: Under the state Computer Crimes Act, a person who intentionally and without authorization accesses, alters, damages or destroys any computer system or data stored in it, is subject to criminal prosecution on charges ranging from misdemeanor to third degree felony.

ALCOHOLIC BEVERAGES: Because T-VI is a public school, it is against the law to have or to drink alcoholic beverages anywhere on the campus—including parking lots. Possession or use of alcoholic beverages or illegal drug substances, or attending classes under the influence of alcohol or illegal drugs, are grounds for dismissal from T-VI.

WEAPONS: The carrying, possession or storage on campus of weapons, dangerous substances or materials is prohibited.

## **Personal Property**

LOCKERS: Lockers are available on both the Main and Montoya campuses and a day or evening student may use any empty locker by simply providing a lock for it. However, the lock must be taken off and belongings removed by the last day of each trimester or when a student is no longer enrolled.

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

LOST AND FOUND: For both day and evening students, the Main Campus lost and found is at the Administration Building lobby reception desk. On the Montoya Campus it is in the Student Services Center.

INSURANCE: T-VI is not responsible for property loss or 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 telephone calls or visitors.

Office phones are for staff use only. Pay phones are located at various places on all campuses for student and visitor use.

## Fire Alarms

Because of the many shop areas, the possibility of fires is greater at T-VI than in other schools. Students are urged to be careful in this regard.

T-VI does not hold fire drills. If you hear the fire alarm, move out of and well away from your building immediately. Stay away from the building until an "all clear" has sounded.

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

Each classroom and lab has posted a fire evacuation plan for that room. Be sure to study the plan at the beginning of the trimester for each room in which you have classes,

## **Student Government and Activities**

Student Government for T-VI's Day Division is made up of Representatives elected by each section of Main and Montoya Campus programs at the beginning of each trimester. Their job is to carry the ideas of their fellow students' to the weekly Student Government meetings and to report back after each meeting on what is taking place. Service as a Representative is entered on the student's permanent transcript.

The Student Government works in any way possible to make T-VI a better place for both students and staff. It is the official channel for expressing student concerns about campus conditions, the instructional program, for helping develop school policies and procedures, and for sponsoring a variety of student activities.

Leadership is provided by a student body president and vice president at each campus who are elected by Day Division students for twotrimester terms.

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

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

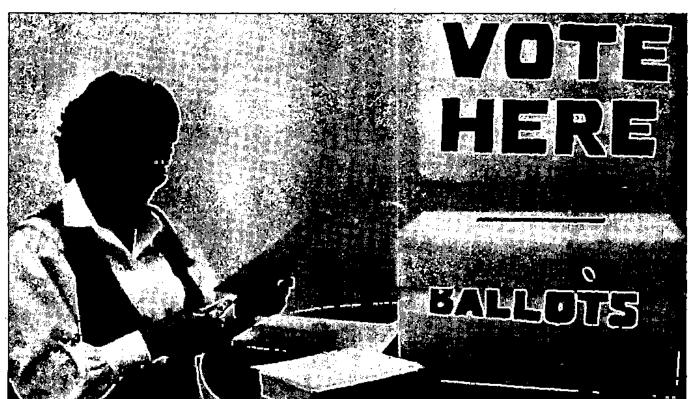
HEALTH OCCUPATIONS STUDENT COUNCIL: Each year, representatives are chosen by each Practical Nurse and Respiratory

Therapy Technician primary group. From those representatives, a president and vice president are elected for one-year terms. Meetings of the Student Council are at the Health Education Center, 1215 Hazeldine SE.

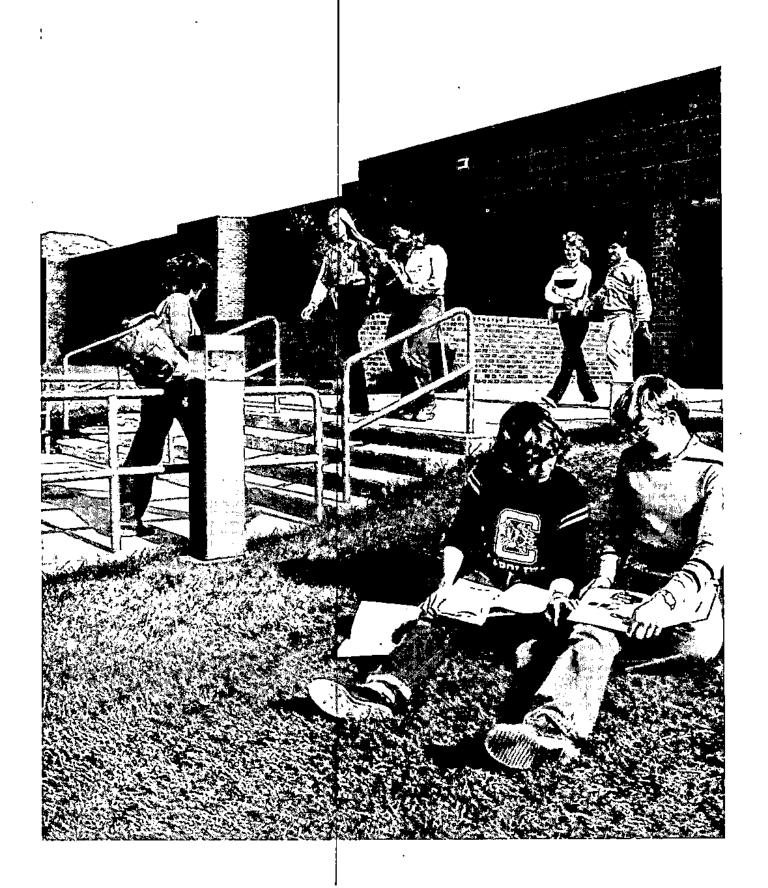
STUDENT ACTIVITIES: A limited student activities program is available. Student Government sponsors some activities such as dances and picnics for all students. Other clubs and activities are supported by T-VI's activities budget: various city league athletic teams such as basketball, baseball and softball, and clubs which relate to instructional programs or out-of-school interests.

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 the sponsor and if needed facilities can be located at reasonable costs. Persons interested in forming a club should contact the Student Activities Secretary in S-12 on the Main Campus.

Facilities at T-VI may be used for student clubs and activities at any time they are not in use for instructional programs, generally after 3:15 p.m., on the condition that they are left as they were with regard to furniture, equipment placement and cleanliness.



# DAY DIVISION



## DEVELOPMENTAL STUDIES DEPARTMENT

## **Preparatory Program**

#### 1 or 2 Trimesters

All T-VI vocational programs require certain math and English communication skills for success. Many applicants find that they need to improve these skills before entering a vocational program. The Preparatory program helps students improve these skills so that they can meet entry requirements for the vocational program selected.

Supporting courses also help students learn about different job fields, or teach skills to help a person be more successful in vocational training and on the job.

Through individual instruction and counseling, Preparatory students usually are able to enter a vocational program after one trimester, or 15 weeks. However, a student may continue in a second trimester of the Preparatory program if more help is needed.

Preparatory program classes do not meet vocational major graduation requirements. However, Preparatory students' grades and attendance are recorded in their permanent records.

To be a full-time student, and to qualify for financial aids, you must enroll for at least 20 hours a week in the Preparatory program. You may sign up for as many hours as you need.

Also, students in a vocational major may take any of the courses offered in the Preparatory program. Reading Improvement, Introduction to Typing, Practical Physics, Spanish for Beginners, Thinking Strategies, and General Science have been popular supporting courses.

A short Preparatory Mathematics program is also scheduled at night. More information is available from counselors at either the Main or Montoya Campus.

#### PREPARATORY PROGRAM

Recommended Schedule	Hours/Week
Mathematics	10
Communications	<b>.</b> 5
Exploratory	
Students with low reading test	
also take:	
Language Development	10
Supporting Courses	
Reading Improvement	5
Introduction to Typing	
Practical Physics	5
Spanish for Beginners	5
Thinking Strategies	5
Writing Lab	<b></b> 5
General Science	5

#### COURSE DESCRIPTIONS

#### 00 series-Mathematics

Each Preparatory student is placed in the math course that best meets his or her needs, interests and abilities. Each student starts at the beginning of the program and progresses at his or her own rate with the objective of meeting—or exceeding—entry-level mathematics skills for the vocational field selected. The program begins with basic arithmetic and includes whatever special or advanced topics are needed in the student's chosen subject.

Math classes in the Preparatory program include Foundations (basic arithmetic) and mathematics for Business Occupations, Culinary Arts, Health Occupations, Technologies and Trades.

#### COMMUNICATIONS

Communications courses are offered on two levels. At the foundations level, Language Development is an individualized course including the four basic communications skills: speaking, listening, reading and writing—with emphasis on spelling, writing and good English usage. On a higher level, stress is on vocational applications of all four skills, with special emphasis on the student's intended program. Technical vocabulary for each T-VI program is taught at this level.

#### 0004471—Language Development

This class helps students improve basic communications skills—speaking, listening, reading and writing—on an individual basis. It helps them to follow oral and written instructions accurately, write correct sentences, spell correctly and use good English.

#### 00 series—Communications for Health Occupations, Business Occupations, Culinary Arts, Technologies or Trades

In this class, students improve speaking, listening, reading and writing skills as related to their chosen field. They also learn reference and study skills and the technical vocabulary for their chosen program. Class activities include lectures, demonstrations, group activities, guest speakers, and student projects and presentations. Occasional field trips to local companies and laboratories let students explore the communications skills needed on the job in their chosen field.

#### 00 series-Exploratory

In this class, students can learn more about the field they have chosen at T-VI—the job expectations, job availability, methods, materials and operations of each field. Activities in the class include presentations by guest speakers, demonstrations, discussions, films, field trips, class projects and hands-on experiences whenever possible. All vocational subjects offered at T-VI are included.

#### 0091490-Reading Improvement

This course is to help students understand what they read. All T-VI students with special reading problems are encouraged to take this course. Performance objectives are mastered in each of the following areas: word study, comprehension, applied skills, and vocabulary building. Weekly vocabulary assignments and some book reports are used to improve writing skills.

#### 0093808-Introduction to Typing

This course is for students who want or need to learn the skill of typewriting. Students in Business Occupations who have unique difficulties in learning typewriting may also enroll. This course is not eligible for Veterans Administration benefits.

#### 0094501-Practical Physics

This is a survey course of physics designed for students who plan to enter a Trades or Technologies major. Introduced are basic concepts of work and energy, matter, forces, friction, heat, light, electricity, sound and motion. Basic math and measurement rules are applied to practical applications. The course creates an understanding of physics and its place in modern technology.

#### 0091492-Spanish for Beginners

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 appreciation of its customs and traditions are included.

#### 0096809—Thinking Strategies

This is a course for those who want to improve their general thinking abilities. Several kinds of thought processes are explored and applied to general problem-solving situations, math word problems and group processes.

#### 0091491—Writing Lab

Students learn writing skills in individualized lessons. Work is evaluated daily and particular skills needing improvement—spelling, punctuation and form—are emphasized. The lab is for students in any T-VI program, except foundations level.

#### 0094502—General Science

This course is designed especially for Health Occupations majors. The goal of the course is to survey basic physics, chemistry and biology with minimal use of mathematics.

## Special Vocational Services

#### (Main Campus)

Special Vocational Services (SVS) are designed to meet the needs of handicapped students enrolled at T-VI. Services are provided to prepare the handicapped student for fuller participation in the world of work. At the Developmental Studies level, career counseling, individual program planning, vocational assessment, coordination with community support agencies, and individualized instruction are provided. As students are mainstreamed into vocational majors, limited curriculum adjustments are made to accommodate handicapping conditions and follow-up services are provided including counseling, tutorial help, and job-seeking coordination.

While many handicapped students begin their training in the Department of Developmental Studies, SVS assistance is available to all handicapped students enrolled in the Institute. Services available to students in the vocational majors include vocational assessment and career counseling, coordination with and referral to outside support agencies, and job-seeking coordination at graduation. Referral to SVS can be arranged through the student's program counselor or directly by the interested student

Handicapped students entering T-VI through Developmental Studies take regular Preparatory courses and may take a selection of speciallydesigned supporting courses.

# Supporting CoursesHours/WeekIndependent Living Skills5Career Preparation15Employability Skills5Targeted Instruction5Pretraining for Trades5

#### 0008786-Independent Living Skills

This is a series of individualized instructional units emphasizing prevocational and independent living skills. Included are such topics as money management, first aid and safety, community resources, hygiene and grooming, nutrition, telephone usage, transportation and interpersonal relations. Vocational preparedness is stressed.

#### 0008784—Career Preparation

This course provides small group instruction in remedial reading, math and writing, as well as focusing on career selection, vocational preparedness and job-seeking skills. Course content may be modified to meet needs of individual students. Vocational opportunities are explored, and students who make sufficient progress are moved into regular Preparatory classes. For students unable to move into the regular Preparatory program, attempts are made to find direct placement in appropriate vocational settings in the community. If this is not possible, alternative plans are discussed with students and referrals are made to appropriate outside agencies.

#### 0008785-Employability Skills

This course is designed to make the student job-conscious, well-prepared for employment and self-assured. Units in 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 are included.

#### 0008795—Targeted Instruction

This course provides intensive, individualized instruction to students who have potential for participation in vocational majors but who need concentrated help to complete the Preparatory program for those majors. Students receive daily, individualized tutoring in a classroom setting. The course is taken along with other Preparatory courses pertinent to the vocational major or goal.

#### 0096741--Pretraining for Trades

This course provides preliminary exposure to industrial safety concepts, tool identification and use, and other Trades-related skills. It is designed for students who have potential for and have selected a Trades major, and is taken along with remedial reading and math.

## **BUSINESS OCCUPATIONS DEPARTMENT**



## Workshops<sup>i</sup>

T-VI's Business Occupations Department offers one-day workshops designed to update business skills. They are open to any interested person in the community.

Registration fee for each is \$20 and includes handout materials. The following schedule is tentative; however, it is necessary to sign up in advance for each workshop.

For more information, or to add your name to the mailing list, please call the Business Occupations Department at the Main Campus.

Sept. 8, 1984 Hiring and Firing Employees Sept. 15 Telephone Etiquette and Techniques Sept. 15
Sept. 15 Microcomputer Accounting
Sept. 19 Small Business Planning
(Co-sponsored with SBA)
Sept. 22 Word Processing
Sept. 28-29 The Basics of Small Business
Computer Systems
(Co-sponsored with SBA)
Sept. 29 Effective Oral Presentations
Oct. 6 Managing Cash Flow
(Co-sponsored with SBA)
Oct. 13 Developing Interpersonal Skills in
Office Settings
Oct. 17 Creative Salesmanship—Managing
Your Sales People
(Co-sponsored with SBA)
Oct. 20 Shortcut Typing Tips
Oct. 20 Microcomputer Word Processing
The state of the s

Oct. 27 Apartment House Management
Nov. 3 Typing of Legal Forms and Citations
Nov. 3 Time Management
Nov. 10 Your Business and Federal
Income Tax
Nov. 14 Where Do You Get Your
Customers?
(Co-sponsored with SBA)
Noy. 17 Effective Business Letter Writing
Nov. 17, Microcomputer Electronic Spread
Sheet
Dec. 1 Assertive Office Communication
Dec. 5 Fundamentals of Financial
Management
(Co-sponsored with SBA)
Jan. 12, 1985 Office Supervision
Jan. 16 Management Skills for Women
(Co-sponsored with SBA)
Jan. 19 Improving Your Memory
Jan. 19 Microcomputer Data Based
• =
Jan. 26 Are Your Meetings Meeting
Your Needs?
Jan. 26 Developing Listening Skills
Feb 2 Mativating Employees
Feb. 2 Motivating Employees
Feb. 9 Personal Income Tax
Feb. 9 Developing a Business Plan
Feb. 16 Stress Management
Feb. 20 Promotion and Advertising of the
Small Business
(f. O-enoncored with CD A)

- 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2
Feb. 23 Developing Negotiating Skills
March 2 Job Discrimination: What Is I!?
March 2 Word Processing
March 9 Guarding Against Retail Theft
March 9 What Your Home Computer Can
Do For Ydu
March 20 Selling to the Government
(Co-sponsored with SBA)
March 22 Grammar Pavidy
March 23 Grammar Review
March 30 Over-the-Counter Salesmanship
Apr. 13 Telephone Etiquette and Techniques
Apr. 13 Selecting Professional Business
Services
Apr. 17 What It Takes To Be a
Apr. 17 what it takes to be a
Business Manager
(Co-sponsored with SBA)
May 4 Nonverbal Communication
May 4 Overcoming Microcomputer
Fears: A Hands-On Experience!
May 11 Personal Development for Greater
Job Satisfaction
May 11 Spelling Tips
May 15 Financing a Small Business Venture
(Co-sponsored with SBA)
May 18 Women in Business
June 1 Read Less So You Can Read More
June 8 Interviewing and Personnel Selection
June 19 How To Read a Financial Statement
June 22 Beyond the Typewriter
Tune 20 Cotting Your First Dusiness
June 29 Getting Your First Business
Microcomputer
July 13 Payroll Accounting
July 17 Should I Start or Buy a Small
Business
(Co-sponsored with SBA)
July 20 Collecting the Uncollectibles
July 20 Performance Appraisal
July 27 Working for Yourself or Others:
Personal Factors in Business
(Co-sponsored with SHA)
July 27 Technical Report Writing
Aug. 3 Microcomputer Business Software
Packages
Aug. 3 Dressing for the World of Business
Aug. 10 Punctuation Updated
Aug. 10 Creative Thinking and
Problem Solving
Aug. 14 Credit and Collections
Aug. 14 Create and Concentrals
(Co-sponsored with SBA)
**************************************
Additional workshops will be planned upon
request of the community. They can also be lai-
lored to the words of a provide awalescence
lored to the needs of a specific employer on a
contract basis Many workshops are co-stlon-

sored with other agencies.

## **Business Occupations Learning Centers**

#### (Main and Montoya Campuses)

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

Students may begin using these centers at any time during a trimester and stop going when personal goals have been met. Hours are arranged to suit individual needs when equipment is available.

The Main Campus center is open from 7:20 a.m. to 9 p.m. Mondays through Thursdays, 8 a.m. to 5 p.m. on Fridays, and from 10 a.m. to 2 p.m. Saturdays.

The Montoya Campus center is open from 8 a.m. to 9 p.m. Mondays through Thursdays and from 8 a.m. to 5 p.m. Fridays.

The fee is \$15 per course.

Instruction is offered on new equipment including electronic typewriters, electronic calculators, transcribing machines, text-editing word processors, microcomputers, and audiovisual training equipment.

#### SUBJECT/SKILL AREAS ·

Typing I Typing II Typing III 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** Electronic Calculating Accounting Fundamentals Records Management Machine Transcription Medical Transcription Legal Transcription Word Processing Cash Register Operation **Keypunch Operation (Main Campus)** Microcomputer Operation

#### COURSE DESCRIPTIONS

#### Typing I

Students learn the keyboard and basic techniques with instruction on mechanics, letters and tabulation. (Students having no prior typing courses are encouraged to enroll in a formal Typing I course before entering the BOLC.)

#### 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 is a continuation of Typing II with more complex production tasks including abstracted tables, line justification and secretarial projects.

#### Alphabetic Shorthand I

This shorthand system utilizes alphabetic characters. Students learn to read, write and transcribe shorthand notes.

#### Century 21 Shorthand I (Main Campus).

Students learn to read, write and transcribe this symbolic shorthand system.

#### Forkner Shorthand I

Students learn to read, write and transcribe this combination alphabetic and symbol shorthand system.

#### Gregg Shorthand I

All theory and brief forms are learned leading to the ability to read, write and transcribe Gregg shorthand.

#### 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.

#### 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 who desire 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

.Awareness of the most common types of errors in written messages and the standard marks for correcting them is the objective of this course.

#### **Business Mathematics Fundamentals**

This is a review of the fundamental arithmetic operations to build speed and accuracy leading to the use of the percentage formula in solving business problems.

#### **Business Mathematics II**

(Prerequisite: placement test) This course includes the mathematics of interest, marketing, payroll and taxes,

#### **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.

#### Accounting Fundamentals

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

#### Records Management

This area provides basic principles of filing.

#### Machine Transcription

(Prerequisite: Demonstrated English and typing skills) Instruction in the use of transcribing machines to prepare mailable business correspondence is provided.

#### Medical Transcription

(Prerequisite: Demonstrated English, transcription and typing skills) This area develops familiarity with medical terminology and transcription.

#### Legal Transcription

(Prerequisite: Demonstrated English, transcription and typing skills) Familiarity with legal terminology, forms and transcription is developed.

#### Word Processing

(Prerequisite: Demonstrated English, transcription and typing skills) Training is on text-editing, magnetic keyboard typewriters with emphasis on the capabilities and mechanics of the machines.

#### Cash Register Operation

Cash register operation and procedures for handling cash, checks and credit card transactions are covered.

#### Keypunch Operation (Main Campus)

(Prerequisite: Typing speed of 40 wpm) Skill is developed on the alphanumeric keyboard and emphasis is placed on the program card,

#### Microcomputer Operation

Courses available on the microcomputer are Keyboarding, Computer Literacy, Basic Programming (prerequisite: Computer Literacy), and Accounting.

#### EVENING DIVISION COURSE SUBSTITUTIONS

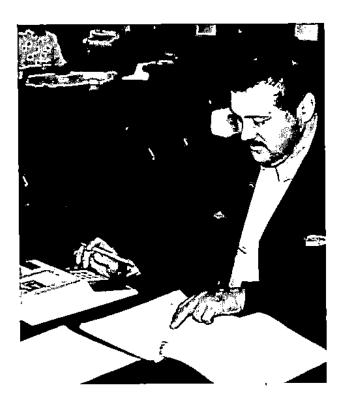
Enrolled Day Division students, or those who have dropped out of a Business Occupations program but plan to return in a later trimester, may substitute certain courses in T-VI's Evening Division for some diploma requirements. The student must tell the Evening Division instructor during the first week that the class is to be counted toward a Day Division diploma.

Classes which may be substituted are marked with a in the Evening Division schedule in this cata-

log. The courses are:

Evening Division Course	Day Division Program	Substitutes for:
Auditing	Accounting	supporting course
Beginning Typing	Accounting	required course
Intermediate Typing	Accounting	required course
Personal Lines Insurance	Business Administration Accounting	supporting course
Commercial Lines Insurance	Business Administration Accounting	supporting course
Secretarial Accounting	Office Occupations	required course.
Alphabetic Shorthand	Office Occupations	required course
Beginning Shorthand	Office Occupations	required course
Intermediate Shorthand	Office Occupations	required course
Small Business Accounting	Office Occupations	Secretarial Accounting
Beginning Typing and Intermediate Typing (both required)	Office Occupations	Typing Lab I
Business Mathematics	all BOD programs	required course
Electronic Calculators and Filing	all BOD programs	supporting or required
Office Supervision	all BOD programs	supporting course
Small Business Management	Business Administration Accounting	supporting or required
Small Business Law .	Business Administration Accounting	supporting or required
Salesmanship	all BOD programs	supporting or required
Introduction to Data Processing	all BOD programs	required course





## Accounting

Trimester II

#### 4 Trimesters (Main and Montoya Campuses)

Accounting is an excellent field for persons who are looking for a career that is a challenge and has the potential for unlimited personal growth.

This program begins with the basic principles of bookkeeping and progresses to more complicated accounting theory. The graduate is prepared for entry-level job opportunities ranging from payroll clerk to full-charge bookkeeper to computer-assisted bookkeeper. The potential for advancement into jobs with increasing responsibility is good.

A diploma is awarded to students who complete the required 1500 hours of instruction of which 525 hours are laboratory work and 975 are related theory. Students receive a proficiency certificate for each course completed.

Students may select either the computerized or manual accounting track and any of the supporting courses. At least one supporting course must be an accounting course. A minimum of 15 students is required for a supporting course to be offered.

Students have an employable skill after completion of all courses listed under Trimesters I and II. If a student leaves the program at this point, a Bookkeeping Certificate is awarded if the request is made within 12 months of the exit date.

Some T-VI Evening Division courses may be substituted for courses in the Accounting program (see list on page 29).

Several courses in this program may be transferred to either the University of Albuquerque for credit toward a Business Administration degree, or the University of New Mexico's General College.

Students receiving Veterans Administration education benefits receive only partial benefits if they elect the supervised work experience in the fourth trimester.

A \$10 supplies fee is charged each trimester.

#### ACCOUNTING PROGRAM

Trimester I	Hours/Week
Accounting Principles Lab I.	10
Principles of Data Processing	5
Accounting Math	5
Typing	

Accounting Principles Lab II	
Electronic Calculators (7½ weeks)5	)
Business Computer Lab I (71/2 weeks)* 5	
Introduction to Business (7½ weeks)** 5	į
BASIC Programming for Business*5	
Supporting Course**5	
Trimester III	
Intermediate Accounting Lab I 10	
Tax Accounting	
Business Communications II 5	
Business Computer Lab II*	
Supporting Course**	
Supporting Course	
Trimester IV	
Intermediate Accounting Lab II	
Business Computer Lab III*	
Managerial Accounting** 5	
Supporting Courses	
1	
Supporting Courses .	
Accounting Systems Design5	
Auditing	
BASIC Programming for Business5	
Business Law5	
Cost Accounting	
Governmental Accounting5	
Principles of Management5	
Supervised Work Experience10	
,	
*Computerized Accounting track.	
**Manual Accounting track	
11 1	

#### COURSE DESCRIPTIONS

#### 0410018-Accounting Principles Lab I

(Corequisite: Accounting Math) This is an introductory course in the theory and practice of accounting.

#### 0410707-Principles of Data Processing

This course covers manual and automated information systems, digital computers and other hardware, data entry, basic programming techniques, and business software applications and provides hands-on experience with microcomputers.

#### 0410315-Accounting Math

(Corequisite: Accounting Principles Lab I) This course covers basic arithmetic operations and familiarizes the student with a wide range of accounting procedures for which mathematics is required.

#### 0410753—Typing

Individual instruction permits a student to progress at his or her own pace. A student completing the course should be able to type a minimum of 25 words per minute.

#### 0410065-Accounting Principles Lab II

(Prerequisite: Accounting Principles Lab I) This is a continuation of Accounting I. Planning of and accounting for the partnership and corporate forms of business organization are covered. A brief introduction to cost accounting is also included.

Upon successful completion of this course, the student, with minimum supervision, should be a competent book-keeper for most small business organizations.

#### 0410401—Business Communications I

The student learns to communicate effectively through the study of writing fundamentals. Students also have the opportunity to develop oral and listening skills.

#### 0410724—Electronic Calculators (71/2 Weeks)

Skill is developed in the touch method of operating electronic calculators.

#### 0410748—Business Computer Lab I (71/2 Weeks)

(Prerequisites: Principles of Data Processing, Typing)
The student will use an actual business accounting program to process prepared practice sets for a service, a merchandising or a manufacturing concern.

#### 0410805-Introduction to Business (71/2 Weeks)

The structure of business, its activities and problems are surveyed in this course. An understanding of the nature of the business world is also provided.

#### 0410862—BASIC Programming for Business

(Prerequisite: Principles of Data Processing) The student will learn how to code, debug, create, update, store and retrieve accounting data and programs using the BASIC programming language. Maximum use will be made of the conversational computer environment.

#### 0410112-Intermediate Accounting Lab I

(Prerequisite: Accounting Principles Lab II) 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.

#### 0410191-Tax Accounting

(Prerequisite: Accounting Principles Lab II) This course examines the fundamental characteristics of federal income taxes as applied to individuals, partnerships and corporations.

#### 0410423—Business Communications II

(Prerequisites: Business Communications I, Typing) A student completing this course will write effective business letters, reports and memoranda. Continued use of communications and listening skills is stressed.

#### 0410766-Business Computer Lab II

(Prerequisites: BASIC Programming for Business, Typing) This microcomputer lab is divided into three 5-week blocks including Payroll Preparation, Introduction to Word Processing and Advanced BASIC Programming. Students will use prepared business software and will write and test one BASIC program using sequential and random access files.

#### 0410159-Intermediate Accounting Lab II

(Prerequisite: Intermediate Accounting Lab I) Accounting for capital stock transactions, dividends; retained earnings, income tax allocation, error correction, long-term in-

vestments, amortization schedules, statements from incomplete records, flow of funds statements, and analysis and interpretation of financial statements are covered in this course.

#### 0410774—Business Computer Lab III

(Prerequisites: BASIC Programming for Business, Typing) This microcomputer lab is divided into three 5-week blocks including Inventory Control, Cost Accounting and Introduction to Electronic Spreadsheets. Students will use prepared business software to solve business problems.

#### 0410200-Managerial Accounting

(Prerequisite: Intermediate Accounting Lab I) This course is concerned with how accounting data can be interpreted and used by management in planning and controlling business activities.

#### 0410852—Accounting Systems Design

(Prerequisite: Accounting Principles Lab II) This course deals with the design of a chart of accounts, an accounting manual, flow charts, the system of internal control and reports to management.

#### 0410846—Auditing

(Prerequisite: Accounting Principles Lab II) Auditing procedure, and reports and working papers used in financial investigations are studied and analyzed. Audit practices with verification of assets, liabilities, expense and revenue accounts are stressed. Internal control techniques are studied with the idea of developing the student's ability to conserve company assets.

#### 0410862—BASIC Programming for Business

(Prerequisites: Principles of Data Processing, Typing)
The student will learn how to code, debug, create, update, store and retrieve accounting programs and data using the BASIC computer language. Maximum use will be made of the conversational computer environment.

#### 0410782-Business Law

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.

#### 0410172—Cost Accounting

(Prerequisite: Accounting Principles Lab II) 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.

#### 0410832—Governmental Accounting

(Prerequisite: Accounting Principles Lab II) This course provides the student with additional accounting training for government and other nonprofit entities.

#### 0410814—Principles of Management

This is an introductory course to help the student develop an understanding of the basic management functions including planning, organizing, staffing, directing and controlling.

#### 0410953-Supervised Work Experience

(Prerequisite: Intermediate Accounting Lab I) Students work a minimum of 150 hours at accounting-related supervised work stations. The student trainee is paid by the cooperating firm and is supervised jointly by T-VI and the employer.

## **Business Administration**

#### 3 Trimesters (Main Campus)

The Business Administration program is designed to develop the skills, knowledge and attitudes which enable individuals to function in decision-making positions. Business knowledge of a general nature combined with basic accounting skill and special supporting courses prepare students for a variety of job options in the business community.

The three-trimester program offers up to 1350 hours of instruction. A diploma is awarded to those students who complete the required 1125 hours. Students receive a proficiency certificate for each course completed.

Students may select any of the listed supporting courses which will prepare them for their employment goals. Not all supporting courses are offered each trimester, and a minimum of 15 students is required for a supporting course to be offered. Also, courses from other programs may be substituted for Business Administration supporting courses with departmental approval.

Students acquire an employable skill after successful completion of all courses listed under Trimesters I and II. If a student leaves the program at this point, a Bookkeeping Certificate is awarded if a request is made within 12 months of the exit date and if a typing course has been taken or a minimum typing skill can be demonstrated.

Some T-VI Evening Division courses may be substituted for courses in the Business Administration program (see list on page 29).

Students receiving Veterans Administration benefits receive only partial benefits during a trimester in which they elect to take supervised work experience.

A \$10 supplies fee is charged each trimester.

#### **BUSINESS ADMINISTRATION PROGRAM**

	Hours/Week
Accounting Principles Lab I	10
Accounting Mathematics	5
Introduction to Business	5
Principles of Marketing	5
Trimester II	
Accounting Principles Lab II	10
Business Communications I	5
Electronic Calculators (71/2 weeks	s) 5
Principles of Data Processing	5
Human Relations (71/2 weeks)	5

# Principles of Management 5 Financial Analysis 5 Business Law 5 Business Communications II 5 Supporting Courses 5-10

#### Supporting Courses

Trimester III

appointing Courses	
Payroll Preparation (7½ weeks)	5
Sales Techniques and Promotions	5
Keyboarding (7½ weeks)	5
BASIC Programming for Business	5
Principles of Economics	. 5
Supervised Work Experience 5	

#### COURSE DESCRIPTIONS

#### 0413019-Accounting Principles Lab I

(Corequisite: Accounting Math) This is an introductory course in the theory and practice of accounting.

#### 0413316—Accounting Mathematics

(Corequisite: Accounting Principles Lab I) This course covers basic arithmetic operations and familiarizes the student with a wide range of business applications for which math is required.

#### 0413708-Introduction to Business

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 is also provided.

#### 0413744-Principles of Marketing

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.

#### 0413066—Accounting Principles Lab II

(Prerequisite: Accounting Principles Lab I) This is a continuation of Accounting I. Planning and accounting for the partnership and corporate forms of business organization are covered. A brief introduction to cost accounting is also included.

Upon successful completion of this course, the student, with minimum supervision, should be a competent book-keeper for most small business organizations.

#### 0413402-Business Communications 1

The student learns to communicate effectively through the study of writing fundamentals. Students also have the opportunity to develop oral and listening skills.

#### 0413822—Electronic Calculators (71/2 Weeks)

Skill is developed in the touch method of operating electronic calculators.

#### 0413772—Principles of Data Processing

This course covers manual and automated information systems, digital computers and other hardware, data entry, basic programming techniques and business software applications, and provides hands-on experience with microcomputers.

#### 0413815—Human Relations (71/2 Weeks)

This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and the work ethic is stressed.

#### 0413793-Principles of Management

In this introductory course, students develop an understanding of the basic management functions including planning, organizing, staffing, directing and controlling.

#### 0413113—Financial Analysis

(Prerequisite: Accounting Principles Lab II) This course covers the gathering and analysis of financial data in a manner that aids management in the decision-making process.

#### 0413725-Business Law

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.

#### 0413422—Business Communications II

(Prerequisite: Business Communications I) A student completing this course is able to write effective business letters, reports and memoranda. Use of oral communications and listening skills is stressed.

#### 0413807—Payroll Preparation (71/2 Weeks)

Students learn how to calculate, pay and report wages and to keep adequate records for payroll accounting.

#### 0413863-Sales Techniques and Promotions

Personal selling skills are accented along with how to promote oneself, goods and services.

#### 0413834—Keyboarding (71/2 Weeks)

A student completing the course will have knowledge of the keyboard. Individual instruction permits a student progress at his or her own pace.

#### 0413783—BASIC Programming for Business

(Prerequisite: Principles of Data Processing) The sudent will learn how to code, debug, create, update, store and retrieve accounting data and programs using the BASIC programming language. Maximum use will be made of the conversational computer environment.

#### 0413855-Principles of Economics

The economic system is studied from both a micro- and macro-economic perspective. Emphasis is placed on supply and demand, production, savings, consumption and investment, pricing, mixed economy, money and banking, and governmental fiscal policy.

#### 0413958-Supervised Work Experience

(Prerequisite: Accounting Principles Lab II) Students work a minimum of 150 hours at management trainee supervised work stations. The student trainee is paid by the cooperating firm and is supervised jointly by T-VI and the employer.

### **Distributive Education**

#### 71/2 Weeks (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 distribution of goods and services to the public, including all retail, wholesale and service occupations. It also is a good place to begin for 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.

Operational skills are taught on various makes and models of both electromechanical and electronic cash registers as well as produce calculating scales.

The 7½-week program provides up to 112 hours of classroom instruction and a minimum of 75 hours of paid supervised work experience with an approved cooperating employer. Students who complete the course receive certificates from the Business Occupations Department.

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

A \$10 supplies fee is charged.

#### DISTRIBUTIVE EDUCATION PROGRAM

Trimester I	Hours/Week
Cashier-Sales Education Lab.	15
Supervised Work Experience.	10-20

#### **COURSE DESCRIPTIONS**

#### 0420020-Cashier-Sales Education Lab

Learning the techniques of operating the cash register is a skill subject and this instruction and drill normally take place every day. Merchandising math, store salesmanship and retailing are covered also.

#### 0420954-Supervised Work Experience

Students work a minimum of 75 hours at retailingrelated, teacher-approved work stations. The student trainee is paid by the cooperating employer and is 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.



## **Legal Office Worker**

#### 1 Trimester (Main Campus)

The Legal Office Worker program prepares persons for jobs as entry-level, legal word processing operators, clerks or transcriptionists. An aptitude for operating sophisticated machines is important for persons in this field.

A typing prerequisite of 50 words per minute is required.

Students attend class four hours a day, five days a week, for 15 weeks—a total of 300 class hours. An additional 75 hours of word processing operation is strongly recommended when equipment is available.

The course provides a basic background in legal terminology, procedures, grammar, punctuation, machine transcription, word processing concepts and machine operation on modern equipment.

Upon completing this program, students are awarded special recognition and receive proficiency certificates.

This program is approved for Veterans Administration training benefits but does not qualify for other student financial aids.

A \$10 supplies fee is charged for this program.

#### LEGAL OFFICE WORKER PROGRAM

Trimester I	Hours/Week
Word Processing Concep	ts (71/2 weeks) 5
Word Processing Operation	on (7½ weeks) 5
Grammar/Punctuation.	
Legal Terminology/Proc	edures5
Legal Typing	5

#### COURSE DESCRIPTIONS

#### 0450709-Word Processing Concepts (71/2 Weeks)

This introductory course helps the student to understand the purpose, organization and application of word processing in the legal field.

#### 0450727-Word Processing Operation (71/2 Weeks)

Students receive an introduction to operation of textediting typewriters with emphasis on the capabilities and mechanics of the machines.

#### 0450404—Grammar/Punctuation

Students review grammar, punctuation and spelling and are encouraged to develop oral communication and listening skills.

#### 0450027—Legal Terminology/Procedures

Meaning and spelling of legal terminology, familiarization with legal procedures and client relationships are included in this course.

#### 0450745—Legal Typing

Instruction is in the preparation of mailable legal correspondence and forms from different types of input, including machine transcription, copy type and pre-printed forms.

## Medical Records/Receptionist

#### 1 Trimester (Main Campus)

The Medical Records/Receptionist program is for persons who are people-oriented and interested in working in hospitals or other medical facilities as clerks or receptionists. Graduates are qualified for entry-level positions as medical record clerks and receptionists. They should be prepared to work odd hours.

A typing prerequisite of 40 words per minute is required.

Students attend class four hours a day, five days a week for fifteen weeks—a total of 300 class hours.

Course content includes basic anatomy, medical terminology, math, English, calculators and transcribing machines, typing, word processing, filing, recordkeeping, insurance form completion, appointment handling, telephone techniques, medical ethics and human relations.

Upon completing this program, students are awarded special recognition and receive proficiency certificates.

This program is approved for Veterans Administration training benefits but does not qualify for other student financial aids,

A \$10 supplies fee is charged for this program.

#### MEDICAL RECORDS/ RECEPTIONIST PROGRAM

Trimester I Hours/Week
Medical Records/Receptionist Lab . . . . . 20

#### **COURSE DESCRIPTION**

#### 0432022-Medical Records/Receptionist Lab

Typing speed and accuracy development are emphasized. Students also become familiar with letter styles, tabulations, rough drafts, medical histories and medical forms. General business transcription, medical transcription and introduction to word processing are included.

Basic filing terminology is taught along with practical applications in alphabetic and terminal-digit filing.

Basic math is reviewed, including addition, subtraction, multiplication, division, fractions, decimal point usage and percents. This helps in understanding many of the functions performed with a calculator. The workings of a calculator and proper finger usage are taught.

Demonstration of the Pegboard System of accounting is given. Billing and basic accounting functions are also included.

Terminology is taught through the use of videotapes. The different systems that make up the body are studied through a basic anatomy course. ICD-9 and CPT coding are introduced

Guest speakers provide information about the completion and proper handling of insurance claims.

Grammar, punctuation and letter-writing skills are studied in depth.

Medical ethics, confidentiality, assistance of patients, appointmentmanagement, telephonetechniques, grooming and other areas pertinent to the medical office are discussed.

# Merchandising

### 1 Trimester (Main Campus)

The Merchandising program provides a basic foundation for entrance into the broad merchandising field.

Persons interested in this program must be prepared to work a possible combination of long hours, odd hours, weekends and split shifts, with salaries often starting at minimum wage. For the individual who enjoys merchandising and selling goods, personal and financial rewards are certainly possible.

The Merchandising Lab course includes salesmanship, merchandising, retailing, communications, human relations, math and cashiering.

This one-trimester program offers 300 hours of instruction and a minimum of 150 hours of paid supervised work experience with an approved cooperating employer. Upon completing this program, students are awarded special recognition and receive proficiency certificates.

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

A \$10 supplies fee is charged for this program.

### MERCHANDISING PROGRAM

Course Requirements  Merchandising Lab  Supervised Work Experien	Hours/Week
Merchandising Lab	
Supervised Work Experien	ice

### **COURSE DESCRIPTIONS**

0440025—Merchandising Lab

The student will blend oral communication and human relation skills with selling techniques. Principles of merchandising goods and services and a basic knowledge of retailing are emphasized.

Students perform basic math functions needed for calculation of profit, pricing, mark-up, mark-down, discounts and payroll. Techniques of operating various cash registers are emphasized along with how to solve procedural problems that occur at a register.

### 0440955-Supervised Work Experience

Students work a minimum of 150 hours at retailingrelated, teacher-approved work stations. The student trainee is paid by the cooperating employer and is 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.

# **Office Occupations**

### 3 Trimesters (Main and Montoya Campuses)

Career opportunities in office occupations are unlimited. 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 office worker has a choice of many fields in which to work: legal, medical, governmental, technical, service and educational.

Since office workers represent their employers and companies, it is important that persons in this field enjoy working with people. They should also be interested in routine office work.

The Office Occupations program prepares' students for receptionist, clerical, clerk-typist and typist positions. In addition, the program offers supporting courses beyond the required courses which qualify graduates for secretarial and stenographic positions.

Students acquire an employable skill upon successful completion of the second trimester. If a student leaves the program at this point, a Clerical or Secretarial Certificate is awarded if requested within 12 months of the exit date.

This program provides 1125 hours of instruction. An additional 225 hours of supporting courses may be taken. To earn a Diploma in Clerical Occupations, a student must successfully complete 1125 hours of which 450 are laboratory work and 675 are related theory. Those who also demonstrate shorthand proficiency will receive a Diploma in Secretarial Occupations.

Proficiency certificates are given to students for each course completed.

Office Occupations labs and classrooms contain modern equipment including electric and electronic typewriters, electronic calculators, transcribing machines, text-editing word processors and individualized learning equipment.

An entering student who has a strong background in clerical or secretarial skills may waive any course by examination and may substitute a more advanced course or add a supporting course.

Upon completion of this program, courses may be transferred to the University of New Mexico for credit toward an Associate Degree in Secretarial Studies.

Some T-VI Evening Division courses may be substituted for courses in the Office Occupations program (see list on page 29).

A \$10 supplies fee is charged each trimester of this program.

### OFFICE OCCUPATIONS PROGRAM

Trimester I	Hours/Week
Typing Lab I	10
Office Communications I	
Business Mathematics	
Fundamentals of Business	
i diddinentals of Business	
Trimester II	
Typing Lab II	. 10
Office Communications II	
Secretarial Accounting	
Electronic Calculators (71/2 wee	
Records Management (71/2 weel	ks) 5
Trimester III	
Office Simulation Lab III	
	T als 10
or Supervised Work Experien	
Office Communications III	
Fundamentals of Data Processi	
Business Relations	5
Supporting Courses	
Supporting Courses	-
Business Law	
Cashiering	
Individualized Word Processing	
Principles of Management	
Shorthand I*	5
Shorthand II*	5
Transcription (Shorthand III)*	

\*Shorthand proficiency is required for a Secretarial Diploma and Shorthand is an additional course each day.

### COURSE DESCRIPTIONS

### 0430021—Typing Lab I

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.

### 0430403—Office Communications I

This is an introduction to oral and written communications with emphasis on vocabulary building, spelling, grammar, punctuation, oral expression and listening skills.

### 0430317—Business Mathematics

This is a thorough review of math fundamentals and their application in solving business problems.

### 0430806—Fundamentals of Business

This introduction to business organization and operation includes banking, insurance, credit and economic concepts.

### 0430067—Typing Lab II

(Prerequisite: Typing Lab I) Typing competence of at least 50 words per minute is the goal of this course. Students produce mailable business letters, manuscripts, tables, business forms and other correspondence.

### 0430431—Office Communications II

(Prerequisite: Office Communications I) This course is a continuation of Office Communications I with greater emphasis on punctuation and sentence and paragraph construction. Students receive an introduction to telephone techniques.

### 0430773—Secretarial Accounting

(Prerequisite: Business Mathematics) This course is a study of the complete bookkeeping cycle, including preparation of the balance sheet, income statement and worksheet. Emphasis is on journalizing and posting to the general ledger and posting from the combined cash journal. Payroll accounting is covered also.

### 0430726—Electronic Calculators (71/2 Weeks)

(Prerequisite: Business Mathematics) Skill is developed in the touch method of operating electronic calculators.

### 0430816-Records Management (71/2 Weeks)

Filing, operational and managerial duties of the office worker are studied in this course.

### 0430114-Office Simulation Lab III

(Prerequisites: Typing II, Secretarial Accounting) Students practice time management, decision making and priority setting in a realistic office setting. This lab offers the culmination of clerical applications utilizing modern electronic typewriters, word processors, machine transcribers, electronic calculators and telephones. A typing speed of 60 words per minute should be reached at the end of the course.

### 0430957—Supervised Work Experience Lab

(Prerequisites: Typing Lab II and 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 is supervised jointly by T-VI and the employer.

### 0430440—Office Communications III

(Prerequisite: Office Communications II) Principles of writing and composing business correspondence are covered. Continued emphasis is on grammar, punctuation, spelling, and oral communication and listening skills.

### 0430764—Fundamentals of Data Processing

This course covers manual and automated information systems, digital computers and other hardware, basic programming techniques and provides emphasis on data entry and hands-on experience with microcomputers.

### 0430794—Business Relations

Office procedures, human relations and job portfolio preparation are included in this course.

### 0410782-Business Law

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.

### 0430754—Cashiering

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.



### 0430853—Individualized Word Processing

(Prerequisites: Office Communications II, Typing II and Machine Transcription at 20 words per minute) Students receive instruction in the use of text-editing type-writers with emphasis on the capabilities and mechanics of the machines. Instruction is individualized and self-paced.

### 0413793-Principles of Management

This introductory course helps the student develop an understanding of the basic management functions including planning, organizing, staffing, directing and controlling.

### 0430823—Shorthand I (Gregg)

This introductory course covers the theory and writing of Gregg shorthand. A writing speed of 50 words per minute is attained upon completion.

### 0430825—Shorthand I (Alphabetic)

Reading and writing of ABC Stenoscript shorthand is learned. A writing speed of 50 words per minute is achieved upon completion.

### 0430833-Shorthand II

(Prerequisite: Shorthand I) The ability to write shorthand at a rate of 70 words per minute is sought, with emphasis on speed, accuracy, grammar and punctuation well as transcription speed.

### 0430844—Transcription (Shorthand III)

(Prerequisite: Shorthand II) 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

# Receptionist

# 1 Trimester, Open-entry/Open-exit (Main Campus)

The Receptionist program is for persons who have little or no work experience, who are interested in a short, job-training program, and who are people-oriented. Individuals completing this one-trimester course will qualify for entry-level receptionist jobs.

A typing prerequisite of 40 words per minute is required.

Students may enter this program through the tenth week as space is available and may leave upon completing their training goal. Upon completing the program, students are awarded special recognition and receive proficiency certificates.

This is an individualized course in which the student progresses at his or her own rate with special emphasis on particular areas that need review and improvement. Students attend class four hours a day, five days a week, for a maximum of 15 weeks, totaling 300 class hours.

Instruction is on the most modern equipment available. Course work includes typing, electronic calculating, recordkeeping, filing, telephone techniques, human relations, receptionist duties, and introduction to word processing.

Some T-VI Evening Division courses may be substituted for courses in the Receptionist program (see list on page 29).

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

A \$10 supplies fee is charged for this program.

### RECEPTIONIST PROGRAM

Trimester I						F	10	u	rs	:/1	We	ek	
Receptionist Lab												20	ì

### COURSE DESCRIPTION

### 0434024-Receptionist Lab

Letters, memos, tabulations, forms and rough drafts are studied using the latest electronic typewriters. Routine word processing functions are introduced on a CRT machine.

Basic business mathematics is reviewed, and the touch method is applied to operating the ten-key calculator. Recordkeeping involving accounts receivable, accounts payable, petty cash and banking is presented.

Alphabetic, numeric, subject and geographic filing methods are studied. Basic punctuation and spelling are reviewed and practiced.

Appointments, time management, handling mail and travel arrangements are introduced. Various aspects of dealing with people are covered, including telephone techniques, office etiquette and grooming.

# **Refresher Course for Office Workers**

# 1 Trimester, Open-entry/Open-exit (Main Campus)

The Refresher Course is for persons who need a review of office skills and procedures in order to go back to work. Students entering this program must have a minimum of two years' fulltime secretarial or general office experience.

Students may enter this program through the tenth week as space is available and may leave upon completion of their training objective. Upon completion of this program, students are awarded special recognition and receive proficiency certificates.

This is an individualized course in which a student progresses at his or her own rate with special emphasis on particular areas that need review and improvement. Students attend class four hours a day, five days a week, for a maximum of 15 weeks, totaling 300 class hours.

Review is in typewriting, shorthand, machine transcription, calculators, English, mathematics, filing, human relations and job application.

All work is on the most modern electric and electronic typewriters, electronic calculators, dictation equipment, and basic word processors.

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

A \$10 supplies fee is charged for this program.

### REFRESHER PROGRAM

Trimester I						$H_{\epsilon}$	oı	ır.	s/	V	Ve	ek!
Refresher Lab												20

### COURSE DESCRIPTION

### 0433023—Refresher Lab-

Letter styles, memoranda, tabulations and manuscripts are reviewed. Speed and accuracy are stressed. Routine word processing functions are introduced.

Shorthand theory is reviewed with emphasis on speed building and transcribing. Written and oral communication are practiced, including punctuation, grammar, letter writing and telephone usage. The transcribing machine is also used.

'Skill is built on electronic calculators which reinforces practical application of business math. Filing methods are reviewed.

Other office procedures and human relations are covered. A job portfolio is prepared.



# **Small Business Operation**

### 1 Trimester (Main Campus)

The Small Business Operation program is for persons who plan to open a small business and for persons owning or managing a business who want further training. The program emphasizes areas directly affecting the businessman in day-to-day operation. Individualized courses are tailored to the specific needs of the enrollees.

A partial list of individualized courses follows:

- (1) Entrepreneurship—What's It All About?
- (2) Day-to-Day Management Skills
- (3) Goal Setting for the Business
- (4) Self-Motivation
- (5) Business Plan Development
- (6) Licensing Procedures
- (7) Accounting Systems
- (8) Customer Development and Relations
- (9) Credit Procedures and Collections
- (10) Pricing for Profit
- (11) Sales Promotion
- (12) Contracts
- (13) Inventory Control
- (14) Employer-Employee Relations
- (15) Tax Report Procedures

Students completing the 150-hour program are issued a certificate.

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

A \$10 supplies fee is charged for this program.

# SMALL BUSINESS OPERATION PROGRAM

•	
Course Requirements	Hours/Week
Small Business Lab	h 0

### COURSE DESCRIPTION

### 0442026-Small Business Lab

During the first few days of the trimester, the instructor will meet with each student to determine specific goals, problems or needs. Once these are identified, a program of study is tailored to the individual. The student may progress at his or her own pace in completing the proposed program. Most of the daily tasks/activities will be accomplished through the use of learning modules. However, special workshop or seminar-type activities will be scheduled throughout the trimester to deal with common areas of concern for all. These include such areas of interest as Time Management, Value Clarification, Improving Supervisory Skills, Interpersonal Communication Skills and Stress Management.

# **Word Processing Operator**

### 1 Trimester (Main Campus)

The Word Processing Operator program is for persons interested in working as operators in word processing centers or general office settings. Individuals must have an aptitude for operating sophisticated machines.

A typing prerequisite of 50 words per minute is required.

Students attend class four hours a day, five days a week, for 15 weeks—a total of 300 class hours.

Instruction is on the most modern equipment available. The course content provides a basic background in word processing concepts and machine operation, grammar, punctuation and machine transcription.

Upon completing this program, students are awarded special recognition and receive proficiency certificates.

This program is approved for Veterans Administration training benefits but does not qualify for other student financial aids.

A \$10 supplies fee is charged for this program.

# WORD PROCESSING OPERATOR PROGRAM

Trimester 1	Hours/Week
Word Processing Conc	epts (7½ weeks) 5
Word Processing Opera	
	(7½ weeks)10
Grammar/Punctuation	1
Machine Transcription	

### COURSE DESCRIPTIONS

### 0452746-Word Processing Concepts (71/2 Weeks)

This introductory course helps the student to understand the purpose, organization and application of word processing. The student also learns the importance of human relations and the opportunities in the field.

### 0452028/0452710-Word Processing Operations

Students receive instruction in the use of text-editing typewriters with emphasis on the capabilities and mechanics of the machines.

### 0452405—Grammar/Punctuation

Students review grammar, punctuation and spelling and are encouraged to develop oral communication and listening skills.

### 0452728-Machine Transcription

Instruction in the use of transcribing machines to prepare mailable business correspondence is provided.

# HEALTH OCCUPATIONS DEPARTMENT

T-VI's Health Occupations Department includes Nursing Assistant, Practical Nurse, Licensed Practical Nurse Refresher, Respiratory Therapy Technician, Phlebotomist and Health Unit Clerk programs. The Practical Nurse program is cosponsored by T-VI and Presbyterian Hospital Center.

Classes for all six programs are held in the Presbyterian Hospital Health Education Center, 1215 Hazeldine SE. The center includes the Helene Fuld Library and Media Center, one of the best health occupations libraries in the area with a large collection of books and films. 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 their clinical experiences.

Students have supervised patient care and observation experiences at different health care agencies. They include Kaseman Presbyterian Hospital, University of New Mexico Hospital, Bernalillo County Mental Health Center, Presbyterian Hospital, St. Joseph Hospital, Veterans Administration Hospital, Manzano del Sol Intermediate Care Facility, Pickard Presbyterian Convalescent Center, Four Seasons Nursing Home, La Vida Llena Elder Care Center, Hospital-Home Health Care Agency and Visiting Nurse Service.

ADMISSIONS: All health occupations programs except Nursing Assistant require a high school diploma or GED to apply, because of licensing or health care employer requirements. There is also a math skill requirement which is met by making a satisfactory score on a math examination.

Nursing Assistant, Phlebotomist and Health Unit Clerk applicants follow regular T-VI admission procedures. Health Unit Clerk is offered Fall and Winter Trimesters only. Phlebotomist and LPN Refresher are offered only once a year. Contact the Health Occupations Department for information on starting dates and application procedures.

Practical Nurse has special application forms and admission tests, and special application dates. There are beginning groups in both the Fall and Winter Trimesters. See the Practical Nurse program description for application times and location.

Respiratory Therapy Technician (traditional and non-traditional) has beginning groups in the Fall Trimester only. There are special applica-

tion forms and admissions tests, and special application dates. See the Respiratory Therapy Technician program description for application times and location.

Practical Nurse and Respiratory Therapy Technician graduates may apply for transfer credit toward an Associate of Arts degree at the University of Albuquerque.

### OPTIONAL CLASSES FOR HEALTH OCCUPATIONS

Basic Mathematics and Anatomy and Physiology I are optional classes offered in both Summer and Fall Trimesters. Registration for Fall 1984 Anatomy/Physiology is Aug. 22, 1984. Math class applicants can also register then or wait until the class starts on Oct. 16.

Summer 1985 registration for both classes is May 22, 1985.

Cost for Anatomy/Physiology (or both classes) is the \$10 preregistration fee and \$10 book deposit. For the math class only, cost is the \$10 preregistration fee only.

### Anatomy and Physiology I

The first trimester of both the Respiratory Therapy Technician and Practical Nurse programs is difficult for most students because a lot of material is covered in a short period of time. Students passing Anatomy and Physiology I in this option will not have to take it in the regular class schedule.

Class size is limited, and persons accepted to Practical Nurse and Respiratory Therapy Technician have first priority. Other interested persons will be admitted on a space-available basis.

The class will meet on Mondays and Wednesdays from 12:30 to 2:30 p.m. during the 1984 Fall Trimester; and Tuesdays, Wednesdays and Thursdays from 9:30 to 11:30 a.m. between May 29 and Aug. 8, 1985.

### **Basic Mathematics**

Applicants for the Practical Nurse and Respiratory Therapy Technician programs who do not make a satisfactory score on the math admissions test are not accepted until they achieve the minimum requirements. This must be done at least one week before the beginning of classes. To meet that objective, applicants can obtain a tutor, study at the T-VI Adult Learning Center, take math classes offered in the Nursing

Assistant program or Developmental Studies Department, or sign up for this special Basic Math class. Other math study options can be discussed during the entrance interview.

This class will be offered Tuesdays, Wednesdays and Thursdays from 8:30 to 9:30 a.m. between Oct. 16 and Nov. 21, 1984, and between May 29 and July 11, 1985. Included in the course are fractions, decimals, percentages, Roman numerals and ratio and proportions.

### Health Unit Clerk

### 15 Weeks (Health Education Center)

The Health Unit Clerk program trains persons to work in hospitals, elder care centers 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.

Applicants must have a high school diploma or GED, read at the seventh grade level, pass a math test and type 40 words per minute to be admitted. They 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 and health tests. Uniform slacks are required, but are not covered by the fee.

The 375-hour program is 15 weeks long with nine weeks of classroom theory and six weeks of clinical practice in local hospitals, elder care centers and physicians' offices. A certificate is awarded upon completion.

Health Unit Clerk is offered in the Fall and Winter Trimesters only.

### HEALTH UNIT CLERK

Course Requirements  Health Unit Clerk Theory and La  Health Unit Clerk Clinical Practic	Total	Hot	ırs
Health Unit Clerk Theory and La	b	2	25
Health Unit Clerk Clinical Practic	ce	1	50

### **COURSE DESCRIPTIONS**

### 0540618-Health Unit Clerk Theory and Lab

This course combines a number of topics, including orientation to the hospital, the patient and the role of the health unit clerk. Presentations and practice of medical terms, anatomy, abbreviations, communications, pharmacological terms, computerized patient information systems, forms and transcription of orders are included.

### 0540032—Clinical Practice

Supervised clinical experience takes place in local hospitals, elder care centers and physicians' offices during the last six weeks of the program.

# **Nursing Assistant**

### 1 Trimester (Health Education Center)

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 and dental offices, and in the home.

Persons completing the program successfully will receive certificates as Nursing Assistants.

To be admitted, applicants must pass a math test and be able to read at the seventh grade level. Good communication skills are necessary in the program as well as being able to clean and cook. Applicants should have a New Mexico driver's license, because students must provide their own transportation to the various health care agencies and patients' homes. Since city buses often do not go to all the places students are assigned, students will need other transportation.

A \$30 personal equipment fee covers the cost of the required uniform top and health tests. A watch with a second hand, and uniform slacks and shoes are required but not covered in the fee.

The 15-week program totals 320 hours of instuction of which 130 are clinical work and 190 are lab and theory. 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 health care agencies. A student attends an average of 22 hours per week throughout the program.

### NURSING ASSISTANT PROGRAM

Course Requirements	Total Hours
Nursing Assistant Lab and Th	еогу125
Health Communications	40
Mathematics	25
Nursing Assistant Clinical	
Experiences	
T	otal $\overline{320}$

### COURSE DESCRIPTIONS

### 0530031/0530016-Nursing Assistant Lab and Theory

During the first nine weeks, students attend classes in basic nursing skills they will use in health care agencies and in homes. Practice of these skills is provided in the laboratory.

### 0530406—Health Communications

This course includes introductions to medical terminology, anatomy and physiology and nutrition. Medical terminology covers the abbreviations and terms used in the health field. Nutrition includes regular and special diets used in hospitals, elder care centers and homes. Home management, community resources, the purchasing and

preparing of foods as well as basic understanding of the structure and normal function of the body systems and some of the health problems which can occur in these systems, are covered.

### 0530319—Mathematics

Basic math is reviewed in this course with practice working selected problems.

### 0530070-Nursing Assistant Clinical Experiences

Hospital experiences are a four-week portion of the last six weeks of the program and include supervised practice of nursing skills in hospitals and elder care centers throughout the city.

Home health experiences are a two-week portion of the last six weeks and include nursing care of patients in selected home settings.

# Licensed Practical Nurse Refresher

### 6 Weeks (Health Education Center)

This six-week course is designed to renew skills of inactive Licensed Practical Nurses, to introduce new trends and procedures and to 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. Twelve people are admitted to each course. Participants pay a \$10 registration fee plus the costs of required textbooks. No definite dates are set, and interested persons should contact the Health Occupations Department office for more information.

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

### LICENSED PRACTICAL NURSE REFRESHER PROGRAM

Course Requirements	Total Hours
LPN Refresher Theory/Lab	94
LPN Refresher Clinical Practice	
Total	182

### COURSE DESCRIPTIONS

### 0511625-LPN Refresher Theory/Lab

Medical and surgical trends, new procedures and techniques, and pharmacology are covered in the theory portion of the program.

### 0511040-LPN Refresher Clinical Practice

Medical and surgical clinical experiences include administration of medications.

### **Phlebotomist**

### 6 Weeks (Health Education Center)

The primary work of a phlebotomist is to draw blood specimens from health care clients for testing. A phlebotomist generally works parttime 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 record keeping. 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 a math test and read at the seventh grade level.

A \$45 personal equipment fee covers the cost of a lab coat, health tests, name tags and equipment.

For a certificate as a phlebotomist, a student must complete the six-week program totaling 150 hours of instruction, including clinical experience in a local hospital.

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 aids.

### PHLEBOTOMIST PROGRAM

Course Requirements	Total Hours
Phlebotomist Theory and Lab	75
Phlehotomist Clinical Practice	75

### COURSE DESCRIPTIONS

### 0533617-Phlebotomist Theory and Lab

Students learn the procedures for collecting blood and other specimens from patients. Interpersonal relationships with patients, peers and staff are stressed. An introduction to computer processes and laboratory clerical duties is also included.

### 0533038-Phlebotomist Clinical Practice

Students practice skills and apply the theory learned in class during supervised clinical practice in one of the city's hospitals.

# **Practical Nurse**

### 3 Trimesters (Health Education Center)

This program prepares students to care for patients in a variety of health care facilities under the supervision of registered nurses and physicians. Men and women who want to work in a field in which they can provide help to others should find practical nursing a satisfying choice.

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).

After completing the 12-month program, graduates are eligible to take the state practical nursing license examination given by the NMSBN.

Practical Nurse applicants must have either a high school diploma or GED.

Applications for the January 1985 class will be accepted July 17, 18, 19, 24, 25 and 26, 1984. 'Applications for the September 1985 class will be accepted March 5, 6, 7, 12, 13 and 14, 1985. They must be made in person between 8 a.m. and 3 p.m. at the Health Education Center, 1215 Hazeldine SE, by the applicant or a representative. Test dates are scheduled when the application is submitted.

Because this program is very demanding, and because the number of applicants far exceeds the training positions available, an admission process is used to select the Practical Nurse classes. Fifty students will be selected for the January 1985 class and sixty for the September 1985 class.

To be eligible for selection, you must meet the requirements of qualifying test scores, have an interview and submit letters of recommendation. One-third of the students selected for the Practical Nurse class will be those scoring highest on the preadmission test and having a health occupations background. A second portion of the class will be made up of alternates selected, but not called, for the previous class. The ast portion of the class will be made up of persons randomly selected by computer from the maining qualified applicants.

Required for a diploma are 1350 hours of instruction, of which 785 are laboratory work and 565 are theory. Clinical experiences often have to be scheduled at varying times, so the hours of classes and clinical experiences may change from day to day, and there may be an occasional Saturday class.

Students must attend classes, observations and clinical experiences as scheduled, and plan

for their own transportation to the agencies and hospitals. The first trimester, or 15-week block, consists of preclinical training in nursing skills with related theory courses. The second and third trimesters are spent in classroom and clinical experiences related to medical-surgical nursing for children and adults, maternal-infant nursing and geriatric nursing.

The Practical Nurse program has a \$75 personal equipment fee which supplies required uniforms, stethoscope, scissors and identification tags. It does not cover the cost of an entrance physical examination, a cap, a watch with a second hand, uniform shoes, graduation uniform, graduation pin or state board exam fees.

There is a math prerequisite for the program which is met by making a satisfactory score on a math entrance exam. See the section on optional courses for information on basic math classes and labs at T-VI.

After becoming licensed and working one year, graduates of the Practical Nurse Program may apply for the career ladder nursing program at the University of Albuquerque. This program leads to an Associate Degree in Nursing and the opportunity to take the State Board examination to become a registered nurse.

Transfer credits accepted by the U of A from the T-VI/PH School of Practical Nursing are:

Nursing 111	6 credits
Nursing 112	7 credits
Nursing 113	2 credits
Anatomy and	
Physiology	4 credits
2 4-	19 total credits

Applicants to the U of A program must take a two-hour seminar in August before beginning the program. Interested persons should check with the U of A for more information.

### PRACTICAL NURSE PROGRAM

Health Occupations Basic Mathematics is a prerequisite for this program.

Trimester I (15 Weeks)	Total Hours
*Anatomy and Physiology I	
Nursing I	
Theory	
<ul> <li>Skills Lab and Clinical</li> </ul>	
Experiences	195
Dosages and Solutions	
	otal $\overline{450}$

# Trimester II (22 Weeks) Nursing II 220 Clinical Experiences 440 Total 660 Trimester III (8 Weeks) 80 Nursing III 80 Clinical Experiences 160 Total 240

\*May be taken in Summer or Fall Trimester prior to beginning program.

### COURSE DESCRIPTIONS

### 0510521-Anatomy and Physiology I

This course gives the student basic concepts of the plan, structures and normal functions of all the body systems and how they work together. The class may be taken as an optional course in the summer or fall just prior to beginning the program.

### 0510614/0510029—Nursing I

Concepts of the nursing processes used to meet the needs of clients in all stages of growth and development are introduced in this class. Normal needs of people and changes from the normal needs are discussed. Introductory presentations are given on aspects of illness, surgery, pregnancy, minor accidents and behavior disorders.

Nursing skill laboratories and clinical experiences accompany the theory learned in Nursing I.

### 0510318—Dosages and Solutions

Dosage calculations and drug preparation are taught as a nursing skill. The mathematics used in preparing drug dosages and solutions are included. Safety is stressed in medication preparation and administration.

### 0510068/0510646--Nursing II

Nursing II builds upon the content of Nursing I and presents more information on the needs of people in all stages of life from before birth to death. The nursing process, patient teaching, communication skills and rehabilitation concepts are presented.

Clinical experiences include the theory and its application to caring for medical, surgical, pediatric, obstetric and geriatric clients. Assessment of client needs, nursing care skills and medication administration are practiced. The role changes of the L.P.N. in some specialty areas are also discussed.

### 0510117/0510668-Nursing III

Use of the nursing process to meet more complex needs



# 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 housing of the program, offering the clinical facility for patient care experiences and sharing in operational costs. The Presbyterian Hospital School of Practical Nursing in 1972 became the first and only nursing program in New Mexico accredited by the National League for Nursing. The program was reaccredited in 1980. It is also covered by T-VI's accreditation from the Commission on Higher Education of North Central Association of Colleges and Schools.

of people in various stages of growth and development is presented in Nursing III. Acute, life-threatening conditions and disorders of behavior are studied. The role of the L.P.N. in acute-care areas is discussed. A nursing elective in this course allows students to choose experiences to help their personal and professional growth and development.

Clinical experiences are in advanced medical-surgical nursing care settings as well as the elective areas chosen by students, such as psychiatric or community health agencies.

# **Practical Nurse Challenge**

Persons with a health occupations background and the ability to perform basic nursing skills may apply to challenge part of the Practical Nurse program.

Persons must score satisfactorily on the challenge exam and be full-time students for at least 12 weeks.

Challenge examinations are given twice a year. The exams are scheduled Oct. 10, 1984 and Feb. 28, 1985. Challenge applications will be accepted at the Health Occupations Department between Sept. 1 and Oct. 5, 1984, for the October test; and Jan. 8 to Feb. 22, 1985, for the February test. Application forms are available those dates by visiting the department or calling 243-2844.

An applicant who does not score satisfactorily on the challenge exams must take all of the Practical Nurse program coursework to obtain a diploma. Persons may not retake the challenge examinations.

Four tests are given. The first two tests cover primarily first trimester content of the Practical Nurse program, and you must score satisfactorily on the first two tests to take the others. The third and fourth tests cover material taught in the second and third trimesters and are used to determine an applicant's theory and clinical experience needs.

Challenge students are admitted for residency in the program on the basis of available space, performance on challenge exams, prior experiences, interviews and ranking by the faculty.

This residency gives the faculty opportunities to evaluate each student's performance. Following this period, the faculty considers a student for graduation, based on how well the student completes work in the program.

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

Challenge students who meet the program objectives are considered full graduates and are recommended for state board examinations.

# Respiratory Therapy Technician

# TRADITIONAL PROGRAM 3 Trimesters (Health Education Center)

The Respiratory Therapy Technician program teaches the skills required for treatment, management, control and care of patients who have problems breathing. The program is one-year long and includes classroom instruction and specialized clinical experiences in local hospitals. It is accredited by the American Medical Association Council on Education.

Applicants must have either a high school diploma or GED. Because respiratory therapy involves handling and care of treatment equipment, applicants also must be able to lift materials weighing up to 50 pounds.

The program has a beginning group in the Fall Trimester only. Applications for the September 1985 class will be accepted at the Health Occupations Center from April 2 until April 25, 1985, or until 125 applications have been received. The preadmission and math tests are scheduled when the application is submitted.

Because the Respiratory Therapy program is demanding, and because the number of applicants exceeds the training positions available, an admissions process is used to select a class of 22 students.

The admission process begins with testing. Those who meet minimum requirements on the test are considered on the basis of past academic records, work experiences, letters of recommendation and interviews.

Respiratory Therapy Technician students bay a \$75 personal equipment fee when they begin the program. This covers the cost of required uniforms and identification tags. It does not cover the cost of the school's graduation pin, stethoscope, scissors or preentrance physical examination.

The program totals 1350 hours of instruction of which 885 are laboratory/clinical work and 465 are theory. The clinical experience schedule may vary from day to day but attendance averages 30 hours per week.

Students must provide their own transportation to the clinical facilities.

There is a basic math prerequisite for the program which is met by making a satisfactory score on a math entrance exam. See the section on summer courses for information on basic math classes and labs at T-VI.

Graduates of the Respiratory Therapy Technician program may apply for the career ladder respiratory therapist program at the University

of Albuquerque. This program leads to an Associate Degree in Respiratory Therapy and the opportunity to take the national examination to become a registered therapist.

Transfer credits accepted by the U of A from the T-VI Respiratory Therapy Technician program are:

Anatomy and
Physiology . . . . . 4 credits
Respiratory Therapy
Resp 101, 102, 103 . . 14 credits
18 total credits

Interested individuals should check with the U of A for more information.

### RESPIRATORY THERAPY PROGRAM

Health Occupations Basic Mathematics is a prerequisite for this program.

Trimester I Total Hours
*Anatomy and Physiology I
Chemical and Physical Principles
of RT60
RT Principles and Practices I60
RT Lab I
Clinical Experiences I
Total $\frac{450}{450}$
Trimester II
Anatomy and Physiology II60
Psychosocial Aspects of Patient Care 30
Microbiology and Demonstration Lab 60
RT Principles and Practices II 30
RT Lab II
Clinical Experiences II 240
Total $\overline{450}$
Trimester III
Cardiopulmonary Pathophysiology30
Respiratory Therapy Seminar15
RT Principles and Practices III15
RT Lab III
Clinical Experiences III
Total $\overline{450}$
*May be taken in Summer Trimester prior to be-

# \*May be taken in Summer Trimester prior to be ginning program.

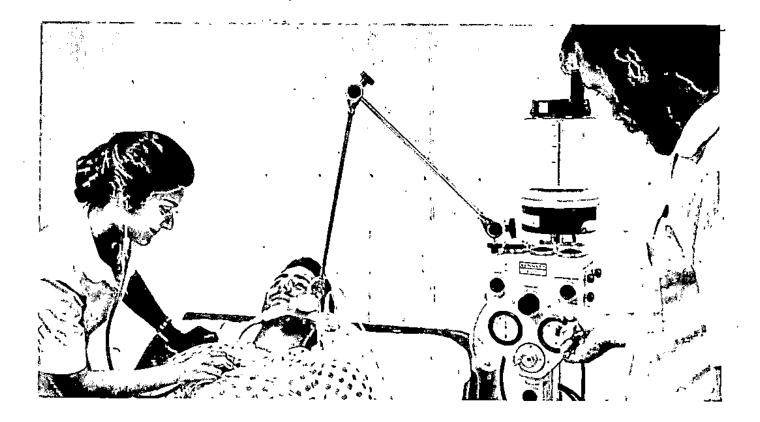
### COURSE DESCRIPTIONS

0520512-Anatomy and Physiology I

This course gives the student basic concepts of the plan, structures and normal functions of all the body systems and how they work together. The class may be taken as an optional course in the summer just prior to beginning the program.

0520540—Chemical and Physical Principles of RT

Physics, chemistry and mathematics pertinent to respiratory therapy are included in the general survey source.



### 0520615—Respiratory Therapy Principles and Practices I

This basic course surveys respiratory therapy as a paramedical profession—the personal qualifications, ethics, expectations and opportunities—and also presents practices and procedures of respiratory care including beginning pharmacological principles.

### 0520030-Respiratory Therapy Lab I

This course allows students to practice basic RT procedures in the Health Education Center learning laboratory.

### 0520115-Clinical Experiences I

Beginning clinical experiences in city hospitals introduce the student to the clinical setting and the patient, as well as supervised practice in basic skills.

### 0520522-Anatomy and Physiology II

This course emphasizes more advanced knowledge of the anatomy and physiology of the circulatory, pulmonary, renal and nervous systems and their relationship to each other.

### 0520729—Psychosocial Aspects of Patient Care

The basic psychodynamics of human behavior are presented. Emphasis is placed on human behavior during illness, especially chronic pulmonary disease. Understanding self as well as others is also included.

### 0520531-Microbiology and Demonstration Lab

This course includes some of the microorganisms related to sickness and health, particularly those affecting patients with respiratory problems. The microbes discussed in class are studied during the lab. Cleaning of respiratory therapy equipment is practiced.

### 0520647—Respiratory Therapy Principles and Practices II

This course presents additional theory of RT procedures beyond the first level with more emphasis on pharmacology in respiratory treatments.

### 0520069—Respiratory Therapy Lab II

This course allows students to practice additional RT procedures in the Health Education Center learning laboratory.

### 0520160-Clinical Experiences II

Supervised clinical experiences continue with practice in giving various respiratory treatments and maintenance and care of equipment.

### 0520570—Cardiopulmonary Pathophysiology

General pathological processes are studied as applied to different pathological conditions, both surgical and medical. Each condition will be explained from the standpoint of etiology, symptoms, diagnosis, therapy and prognosis.

### 0520669—Respiratory Therapy Seminar

Class discussions will center on current trends in respiratory therapy education, supervision, management and research. Students will prepare case presentations, article, drug and disease reviews.

# 0520684—Respiratory Therapy Principles and Practices

This course presents theory and application of advanced RT procedures including major emphasis on neonatal, pediatric and adult mechanical ventilation and cardio-pulmonary pharmacology.

### 0520163—Respiratory Therapy Lab III

Students practice advanced RT procedures including experiences with mechanical ventilation devices in the Health Education Center learning laboratory.

### 0520192—Clinical Experiences III

Supervised clinical experiences continue with special emphasis in critical care areas, especially concentrations on neonatal, pediatric and adult mechanical ventilation.

# NON-TRADITIONAL PROGRAM (Statewide Hospitals)

The Non-Traditional Respiratory Therapy Technician (RTT) program provides an accredited educational program for individuals employed in respiratory therapy departments throughout New Mexico. As part of T-VI's accredited RTT program, non-traditional graduates are eligible to take the N.B.R.C. entry level exam for Certified Respiratory Therapy Technician (CRTT) credentials.

Ten people are admitted to the program on a space-available basis, and students have 8 months to complete the coursework. Students are admitted at the beginning of each trimester to fill any vacancies in the ten positions. Interested RT practitioners in any New Mexico hospital should contact the Health Education Center for information.

Applicants must be employed in RT at least 21 hours a week, have at least three months of RT work experience, and have a high school diploma or GED. Preference will be given to applicants working in hospitals outside of Albuquerque.

The non-traditional program covers all material presented in the traditional RTT program. A preparatory program is required of all applicants before the RTT program, and includes basic sciences and introductory RT theory.

Non-traditional students study educational materials which are mailed to them. Written tests, given by proctors in the hospitals and scored by T-VI faculty, are used throughout the program. Students' RT skills are supervised and verified by N.B.R.C.-credentialed personnel in the hospitals. An RT faculty member visits students in their hospitals as needed to help with program materials and objectives.

Students must visit the T-VI Health Occupations campus once a trimester for written exams and laboratory skill demonstrations. During their final trimester, non-traditional students must attend a two-week (80 hour) laboratory/clinical session in Albuquerque. Each student must arrange for transportation, room and board.

Non-traditional students pay the \$10 preregistration fee each trimester of enrollment, including the preparatory program. When admitted to the RTT program, students must pay a program fee of \$300 each trimester. If a student leaves before completing the program, a refund of fees paid will be given on a prorated basis. Required textbooks must be available, and can be purchased by the student or provided by the hospital where he or she works.

# RESPIRATORY THERAPY TECHNICIAN CHALLENGE

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

The first is through credit for equivalent coursework from an accredited technical-vocational school or college. Credit may be given when transcripts are received in the department 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 Trimester I coursework may apply at the Health Education Center from March 19 to March 29, 1985. Challenge exams and the basic math test will be held early in April. A written exam will be used to challenge theory courses; competency testing under simulated conditions at the Health Education Center, using RT equipment, will be used to challenge lab and clinical work.

Challenge students accepted must submit transcripts of prior education and proof of high school graduation or GED. They must also pay required T-VI fees, purchase their own school uniforms and other needed equipment, have a physical examination before admission, and attend the first week orientation and communication sessions.

Those with previous RT work experience under medical supervision must document at least 200 hours to challenge Trimester I coursework and another 240 hours to challenge Trimester II coursework.

Applicants must score at least 90% on the Basic Math test. Those taking challenge exams must score at least 77% on each component to receive Trimester I credit. Components not passed at this level must be completed as coursework during Trimester I. Challenge exams may be taken once only. Persons given challenge credit for Trimester I will be admitted to Trimester II on a space-available basis only.

Persons successfully completing all Trimester I requirements may apply to challenge Trimester II coursework. Trimester II challenge applications will be accepted during November and tests will be scheduled in December, 1985.

Portions of Trimester III may be challenged depending on prior clinical experience and coursework.

All challenge credit will be applied toward the T-VI diploma and certificate of completion required by the National Board for Respiratory Therapy to qualify for the Certified Respiratory Therapy Technician exams.

# TECHNOLOGIES DEPARTMENT

Programs in the Technologies Department are the longest at the Institute. All of them except Electromechanical Drafting are four trimesters (16 months) in length. Being the most technical of T-VI's programs, the Technologies also have the highest math skill entry requirements.

Because the Technologies programs are in very high demand by applicants, some of them often have an entry standby list of up to eight months. If you are interested in one of the Technologies, you should apply as early as possible—a year ahead of the starting time you want is not too soon.

All of the Technologies except Electromechanical Drafting are offered at the Main Campus. Three—Data Processing Technology, Electronics Technology, and Laser Electro-Optic Technology—are offered at both the Main and Montoya Campuses. Electromechanical Drafting is available only at the Montoya Campus.

There are beginning groups each trimester in all Technologies except Electromechanical Drafting, which starts once a year only in the Summer Trimester.

### SUPERVISED WORK EXPERIENCE PLAN

Supervised work experience is for students who have acquired most of the skills and work attitudes needed to succeed in an entry-level job. In Technologies, students may apply for this option during the final trimester.

This on-the-job experience may be substituted for the laboratory part of a program and is actually a training plan developed by the cooperating employer and the T-VI instructional staff. Before beginning a supervised work experience, the student must have the approval of the instructor, academic advisor, counselor, department chairman and Director of Student Services (or Assistant Resident Administrator at Montoya Campus).

The supervised work experience option is not eligible for Veterans Administration benefits.

### OPTIONAL SUPPORTING COURSES

There are several optional supporting courses common to Technologies programs. At least 12 students must sign up for an optional support-

ing course before it can be offered. Common optional courses available are:

Course Title	Hours/Week
Calculus	5
BASIC Language Programming	5
FORTRAN Programming	
PASCAL Programming	
Reading Improvement	5
Technical Writing (71/2 weeks)	5
Thinking Strategies (71/2 weeks).	5
Introduction to Typing	5

### COURSE DESCRIPTIONS

### 0130360--- Calculus

Topics covered are the basic concepts of limits, derivatives, integrals, areas, volumes and centroids. These concepts are applied to electronics, optics and laser problems.

### 0130703-BASIC Language Programming

This introduction to BASIC, a beginning computer programming course, 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.

### 0130872—FORTRAN Programming

This is an introductory course in FORTRAN IV computer programming.

### 0110212—PASCAL Programming

This class uses microcomputers and covers the PASCAL language for personal or mainframe computers.

### 0091241-Reading Improvement

This course helps students understand what they read. Students with special reading problems are counseled to take this course.

### 0110420—Technical Writing

This course consists of two parts: a skills brush-up emphasizing writing with control (word choice, material placement, organization, and punctuation); and application of these skills to technical writing situations. Students practice writing lab reports, technical reports, and various types of technical documentation.

### 0110891—Thinking Strategies

This is a course for those who want to improve their general thinking abilities. Several thought processes are explored and applied to general problem-solving situations, math word problems and group processes.

### 0110880-Introduction to Typing

This course is for students who want or need to learn the skill of typewriting. Students in Data Processing who have unique difficulties in learning typewriting may also enroll. This course is not eligible for Veterans Administration benefits.

# Civil and Surveying Technology

### 4 Trimesters (Main Campus)

Civil and Surveying Technology provides students with job-entry skills for all phases of surveying, as entry-level cartographic technicians and as design (civil) drafters. Positions are with surveying, mining, engineering and drafting organizations.

The program uses labs that contain modern drafting machines, drafting stations, theodolites, transits, levels, electronic distance meters and a projection-type steroplotter. Also used are a Wang 2200 LPV minicomputer with digitizer and plotter.

To earn a diploma, students must complete successfully 1530 hours of which 1035 are laboratory work and 495 are related theory.

Because of the nature of the instruction, it is necessary to alternate student contact hours in Trimesters II and IV in the plane surveying courses. During those trimesters, students attend classes up to seven hours for two days of the week and four hours the remaining days.

Students must pay a \$35 personal equipment fee before entering the first trimester and other \$30 for the second trimester.

### CIVIL AND SURVEYING PROGRAM

Trimester I Hours/W	
Civil and Surveying Lab/Theory I	. 15
Civil and Surveying Mathematics I	. 10
Trimester II	
Cartographic Techniques Lab/Theory	. 15
Civil and Surveying Mathematics II	5
Plane Surveying I	
Trimester III	
Photogrammetric Techniques	
Lab/Theory	
BASIC Language Programming	5
Surveying and Mapping Techniques	5
Plane Surveying II	6
Computer-Assisted Civil Drafting	3
Trimester IV	
Civil Design Lab/Theory	. 15
Technical and Legal Communications	5
Plane Surveying III	
Supporting Courses	
Calculus	5
FORTRAN Programming	5
Reading Improvement	
- "	

### COURSE DESCRIPTIONS

### 0120001-Civil and Surveying Lab/Theory I

This course introduces general drafting theory and techniques needed to produce a variety of engineering drawings and survey maps. Emphasis is placed on development of graphic skills and freehand lettering. The student also learns to trace from rough sketches and manuscripts and to develop maps from field notes.

### 0120301—Civil and Surveying Mathematics I

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.

### 0120050—Cartographic Techniques Lab/Theory

(Prerequisite: Civil and Surveying Lab/Theory I) 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.

### 0120330—Civil and Surveying Mathematics II

(Prerequisite: Civil and Surveying Math I) Trigonometry is related in detail to surveying and civil problems. The course includes traversing, adjustments, area calculations, intersections and partitioning.

### 0120701-Plane Surveying I

(Corequisite: Civil and Surveying Math II) The student learns basic techniques and equipment used in surveying, including tape, level, theodolite and the engineering transit. Field work and related computations are done in leveling, distance and angle measurement and traversing related to mapping.

### 0120102-Photogrammetric Techniques Lab/Theory

(Prerequisite: Cartographic Techniques Lab/Theory)
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.

### 0120771—BASIC Language Programming

(Prerequisite: Civil and Surveying Math 1) This introduction to BASIC, a computer programming language, includes the use of input and output statements, arithmetic operations, comparison and branching commands, use of subroutines and the library functions. Algorithms and programs associated with surveying and engineering computations are developed.

### 0120739-Surveying and Mapping Techniques

A study of modern surveying methods is related to surveys of the U.S. Public Lands, land grants, small holding claims and mining claims. Boundary survey law and boundary survey techniques are introduced. Extensive practice in the use of the NGS Horizontal and Vertical Networks and the New Mexico State Coordinate System are provided along with training in the astronomical determination of azimuth.

### 0120721—Plane Surveying II

(Prerequisite: Plane Surveying I) Instruction includes practice in the use of one-second theodolites, topographic, stadia and control surveys, EDM equipment and data reduction by computer and field checking a topographic map. A concentrated unit on field observations of the sun for determination of azimuth is included, and a retracement survey of U.S. Public Lands is conducted.

### 0120780—Computer Assisted Civil Drafting

The student will learn how to operate the digitizer, the plotter and the graphics CRT on the Wang LVP System. The input of coordinates of civil and surveying plats and drawings by digitizing or keyboard input will be followed by the creation of symbol and annotation files and the preparation of drafting sequence files. These files will be used to produce finished drawings.

### 0120153—Civil Design Lab/Theory

(Prerequisite: Photogrammetric Techniques Lab/ Theory; Corequisites: Plane Surveying III and Communications) Students practice up-to-date development and calculation techniques to analyze route surveys and produce highway, utility plan and profile drawings. A unit on subdivision design, including draining plans and sanitary sewers, is included.

### 0120400-Technical and Legal Communications

Reading, writing and speaking skills are developed through practice in writing and interpreting land descriptions and interpretation of codes and specifications related to subdivision ordinances.

### 0120750—Plane Surveying III

(Prerequisites: Surveying and Mapping Techniques and Plane Surveying II) Mine surveying methods, grid topographic surveys, and retracement of a boundary survey are included along with horizontal and vertical curve calculations, design and layout, earth-work measurements, subdivision surveys and the staking of civil engineering projects.

See also the common supporting course descriptions on page 48 of the Technologies section.

# **Construction Drafting**

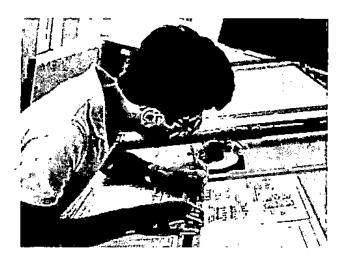
### 4 Trimesters (Main Campus)

Construction Drafting provides students with job-entry skills for drafting architectural, structural and environmental systems for residential and commercial buildings; and for estimating and scheduling positions. Supporting technical courses are included.

The drafting lab contains modern drafting machines, drafting stations and related equipment. A minicomputer with graphic terminals, digitizers and a plotter are also used. Computer user applications are found throughout the program.

To earn a diploma, students must complete successfully a total of 1650 hours, of which 675 are laboratory work and 975 are related theory.

Students pay a personal equipment fee of \$50 at the beginning of the program.



### CONSTRUCTION DRAFTING PROGRAM

Trimester I Hours/Week Construction Drafting Lab/
Theory I
Construction Drafting Mathematics I 5
Building Materials and Methods I
Trimester II
Construction Drafting Lab/
Theory II
Energy Systems
Building Materials and Methods II 5
Construction Drafting Mathematics II5
Trimester III
Construction Drafting Lab/
Theory III
Structural Detailing5
Construction Drafting Mathematics III 5
Building Materials and Methods III5
Trimester IV
Construction Drafting Lab/
Theory IV
Building Systems Analysis 10
Supporting Courses
Architectural Rendering5
Architectural Landscaping
Architectural Design

### COURSE DESCRIPTIONS

### 0121002-Construction Drafting Lab/Theory 1

(Corequisite: Building Materials and Methods I) This course introduces general drafting theory and techniques needed to produce construction drawings and related contract documents for residential structures. Emphasis is on the development of graphic skills. The student also learns to use manufacturers' materials and standard references in developing drawings.

### 0121302—Construction Drafting Mathematics I

This course applies algebra and geometry concepts to the drafting field. This course may be waived depending on the student's performance on a math test. A computer-related course could be substituted for the math course with permission of the program advisor.

### 0121702-Building Materials and Methods I

Properties of building materials are related to actual methods of light construction and building design. Blueprint reading, zoning, building codes, material estimates, aspects of solar energy and financing are included.

### 0121051—Construction Drafting Lab/Theory II

(Prerequisite: Construction Drafting Lab/Theory I; Corequisites: Building Materials and Methods II, Construction Drafting Math II) This course continues Construction Drafting Lab/Theory I with emphasis on commercial construction and the sharpening of graphic skills. Students develop selected working drawings for light commercial structures using appropriate codes, reference works and manufacturers' catalogs.

### 0121842—Energy Systems

This course teaches the use of current energy conservation techniques, including passive solar design. Concepts covered are heat gain, heat loss, efficiency calculations hancement techniques and daylighting. The student plores systems to control energy gains and losses, and applies these concepts to an individual residential design project.

### 0121787—Building Materials and Methods II

(Prerequisite: Building Materials and Methods I) With emphasis on heavy construction, students study various aspects of building codes and specifications. Mechanical and electrical systems for buildings, including solar applications, are covered also.

### 0121375—Construction Drafting Mathematics II

(Prerequisite: Construction Drafting Math I) Applied trigonometry is related to surveying and mechanical moblems.

### 0121331—Construction Drafting Lab/Theory III

(Prerequisite: Construction Drafting Lab/Theory II; Corequisite: Building Materials and Methods III) This course offers drafting applications and theory for heavy construction projects built with wood, steel and concrete. Working drawings are prepared for a multilevel building. Drawings are developed for this project in four major modes of construction: structural steel, precast concrete, cast-in-place concrete, and heavy timber.

### 0121851-Structural Detailing

(Corequisite: Construction Drafting Lab/Theory III)

This class introduces typical steel fabricating shop practices in the preparation of structural steel shop drawings. The techniques and standards of developing these shop drawings are presented. Steel beam, steel column, and steel reinforcing detailing information is given.

### 0121331—Construction Drafting Mathematics III

(Prerequisite: Construction Drafting Math II) 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.

### 0121901-Building Materials and Methods III

(Prerequisites: Building Materials and Methods II, Construction Drafting Math II) This course is an extension of Building Materials and Methods II, and further explores heavy construction with detailed study of wood, steel, concrete, and masonry construction systems. The building elements included in architectural fenestration, finishes, equipment and specialties are surveyed. Building documentation analysis and planning are presented. In several course projects, complete sets of construction documents for large buildings are used as teaching materials.

### 0121154—Construction Drafting Lab/Theory IV

(Prerequisites: Construction Drafting Lab/Theory III, Construction Drafting Math III) This is an application course that gives students layout and drawing experience with mechanical, electric and piping systems. Primary emphasis is placed on the standard symbols and conventions of the above disciplines. Large buildings and industrial complexes are used as the vehicle for drawing assignments.

### 0121760-Building Systems Analysis

(Prerequisite: Energy Systems) This is a theory course that involves general and layout information and code requirements for commercial equipment. Topics include power and light, plumbing and air-conditioning equipment. Industrial microprocessor software applications are used in the design phase to expedite the design progress.

### 0121842-Architectural Rendering

Techniques in architectural rendering and technical illustration are explored in this course. Students work with isometric and perspective drawings in a variety of media, such as pencil sketching and inking.

### 0121731-Architectural Design

(Prerequisites: Construction Drafting Lab/Theory I, Building Materials and Methods I) Students explore various aspects of design by creating their own proposals using different methods of analysis and presentation, bubble diagrams, perspectives and models. Structure, space, light and function and their interrelationships are examined.

### 0121730-Architectural Landscaping

This course covers general landscaping considerations, such as ecology, spatial relationships and landscape design around the world. Students also apply specific aspects of design, including the use of plant materials, inorganic materials, water and outdoor furniture to class projects.

See also the common supporting course descriptions on page 48 of the Technologies section.

# **Data Processing Technology**

### 4 Trimesters (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 being used at T-VI are the Data General M600, 96MB disk drives, CRT terminals, magnetic tape, line printer and card reader; an IBM 4361, disk drives, tape drives, 3278 CRT displays, printer and reader, IBM 029 and Univac 1710 keypunches; and a variety of microcomputers.

The first and second trimesters give students a sound background in fundamental skills used on a wide variety of computer and computer-related equipment. The third and fourth trimesters continue to build computer application skills with emphasis on problem-solving techniques and the man-machine interface. Minicomputer and mainframe environments are used in teaching five widely-used programming languages.

A Data Processing Trainee Certificate may be requested after completing all courses required in the first two trimesters if a student leaves the program at this point. To earn a diploma, students must complete successfully 1575 hours of which 825 are laboratory work and 750 are related theory.



# DATA PROCESSING TECHNOLOGY PROGRAM

FRUGRAM	
Trimester I  ANSI COBOL Introduction to Computers/JC Computer Mathematics I Data Processing Accounting I.	L5 5
Trimester II  Advanced ANSI COBOL Report Program Generator II.  JCL File Structures Computer Mathematics II Data Processing Accounting II	
Trimester III  Advanced Programming Techniques  Assembler  BASIC Language Programming Applied Business Systems	
Trimester IV Advanced Report Program Generator II Computer System Software Database and Telecommunicati Advanced BASIC Language Programming Programming Projects	ons 5
Supporting Courses FORTRAN Programming PASCAL Programming Reading Improvement Technical Writing (7½ weeks). Thinking Strategies (7½ weeks) Introduction to Typing	

### **COURSE DESCRIPTIONS**

### 0110242—ANSI COBOL

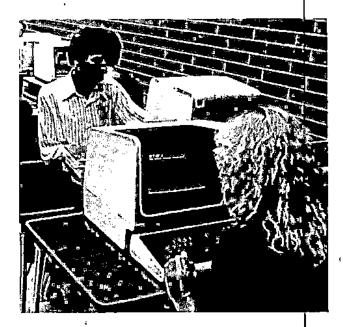
(Corequisite: Introduction to Computers/JCL or equivalent) Projects directly related to programming business and accounting applications are coded, debugged and executed in structured ANSI COBOL programming.

### 0110801—Introduction to Computers/Job Control Language (JCL)

Instruction is provided in computer vocabulary, logic and control. Structured programming techniques including hierarchy charts and topdown planning are included. Also utilities, sorts and JCL for batch systems are included.

### 0110300—Computer Mathematics I

Algebra fundamentals are covered in this course, along with selected business and management math applications.



### 0110700-Data Processing Accounting I

In this course, students learn data accounting theory, practice and terms, and their relation to computer data processing.

### 0110250-Advanced ANSI COBOL

(Prerequisite: ANSI COBOL or equivalent) This course continues development of programming skills in the ANSI COBOL languages with emphasis on more complicated statements, clauses and concepts; interactive programming; file processing; and program documentation.

### 0110220-Report Program Generator II

Students are introduced to the RPG II programming language used in business organizations.

### 0110600-Job Control Language File Structures

(Prerequisite: Introduction to Computers/JCL) Operating systems, utilities and control languages, as well as standard mass storage devices and data file organization for on-line interactive systems, are studied.

### 0110370—Computer Mathematics II

(Prerequisite: Computer Math I) This course continues the development of algebra and management math skills.

### 0110720—Data Processing Accounting II

(Prerequisite: Data Processing Accounting I) Study of the vocabulary and concepts used in accounting is continued. Emphasis is placed on the more common applications in which computers are being used.

### 0110263—Advanced Programming Techniques

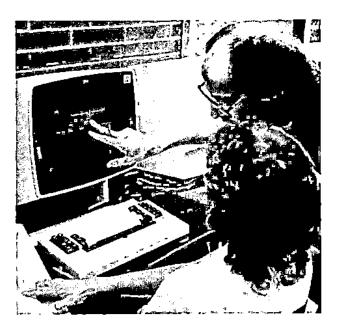
(Prerequisite: Advanced ANSI COBOL) This course uses advanced aspects of various programming languages and systems. Program assignments include file creation with multiple indices, direct access methods and menudriven programs.

### 0110122-Assembler

(Prerequisite: Introduction to Computers/JCL) This course provides an understanding of programming echniques necessary to write and refine efficient programs.

### 0110841—BASIC Language Programming

This course uses the BASIC language to further the stu-



dent's knowledge of interactive programming, routines using menu selection, and search and retrieval routines.

### 0110860-Applied Business Systems

(Prerequisite: Data Processing Accounting II) In this course, standard business reports, forms and procedures are designed, programmed and implemented. Business systems will be applied to the microcomputer.

### 0110633-Advanced Report Program Generator II

(Prerequisite: RPG II) The remaining features of the RPG II language are included with emphasis on more sophisticated business applications, file structures, and interactive concepts.

### 0110660—Computer System Software

(Prerequisites: Advanced ANSI COBOL, Assembler or a demonstrated working knowledge of some other high-level programming language.) This course includes topics to understand better the design and operation of general-purpose computer operation systems. Examples of topics included are concurrency of operation, sharing of resources and information, and interaction of software and hardware using assembler programming fundamentals to reinforce these concepts.

### 0110831-Database and Telecommunications

(Prerequisite: JCL File Structures) Practical application of Database Management Systems through the use of networks, telecommunication lines and hardware are covered.

### 0110164—Advanced BASIC Language Programming

(Prerequisite: BASIC Language Programming) This course covers file structures, data base techniques, interactive computing, statistics, management methods and string manipulations.

### 0110165—Programming Projects

(Prerequisite: Advanced Programming Techniques) This course is a continuation of individualized or group data processing projects.

See also the common supporting course descriptions on page 48 of the Technologies section.

# **Electromechanical Drafting**

### 3 Trimesters (Montoya Campus)

Electromechanical Drafting is a complex field of drafting for persons with a strong interest in electronics and mechanical design. This program presents drafting fundamentals in electrical and electronics applications. Also included are specialized mechanical drafting and design concepts.

Graduates are prepared for jobs as electromechanical drafters with a background in conceptual and applied experiences to allow growth and development in typical industrial situations.

The lab contains modern drafting stations, drafting machines and other typical drafting equipment. Computer user applications are found throughout the program.

To earn a diploma, students must successfully complete 1237.5 hours of which 562.5 are laboratory work, 375 are theory, and 300 are supervised work experience. A new class is accepted at the beginning of the Summer Trimester only.

The Supervised Work Experience in Trimester III does not qualify students for Veterans Administration benefits or other financial aid.

A personal equipment fee of \$50 is required when entering the program.

# ELECTROMECHANICAL DRAFTING PROGRAM

Trimester I	Hours/Week
Electromechanical Drafting Lab/Theory I Technical Mathematics I Mechanical Analysis	5
Trimester II	
Electromechanical Drafting Lab/Theory II Technical Mathematics II Basic Electronics	5
Trimester III	
Technical Mathematics III (71/2	weeks) 5
Technical Writing (71/2 weeks).	5
Electromechanical Drafting Lal	b/Theory
III (7½ weeks) Supervised Work Experience	
(7½ weeks)	40
Supporting Courses	
BASIC Language Programming.	5
FORTRAN Programming	
Reading Improvement	
Thinking Strategies (7½ weeks)	

### COURSE DESCRIPTIONS

### 0122041—Electromechanical Drafting Lab/Theory I

This is an introduction to orthographic projection, isometric drawings and mechanical assemblies related to the electromechanical industry.

### 0122322—Technical Mathematics I

Algebra, geometry, formula manipulation, and tolerances are covered.

### 0122716-Mechanical Analysis

Mechanical processes used to form and join metallic and nonmetallic materials are presented. The student is introduced to fabrication techniques and strength of materials.

### 0122074—Electromechanical Drafting Lab/Theory II

(Prerequisite: Electromechanical Drafting Lab/Theory I; Corequisite: Basic Electronics) This lab incorporates the fundamental concepts of the electrical/electronics field. Students learn to use correct symbology, designations and layout techniques in accordance with conventional standards to describe formal schematics, logic diagrams, wiring layouts, cable drawings, single-sided and double-sided printed circuit boards, and fabrication drawings.

### 0122356-Technical Mathematics II

(Prerequisite: Technical Math I) An applied approach to trigonometry is presented based on mechanical computational needs. An introduction to calculus is included.

### 0122715-Basic Electronics

(Prerequisite: Technical Math 1) This course provides basic concepts of electronics and digital logic relevant to electromechanical drafting and printed circuit design. Circuitry characteristics, functions of components, typical circuitry applications, and the composition of discrete and integrated circuitry are studied.

### 0122357-Technical Mathematics III (71/2 weeks)

(Prerequisite: Technical Math II) This course concentrates on practical solution of engineering problems through mathematical manipulation, including formulas, charts and tables, identification and use of math resource materials, development of math logic sequences, and applications for CAD/CAM system operations.

### 0110420-Technical Writing (71/2 weeks)

Communication skills essential to the drafting technician are the focus of this course, which includes identifying report "targets," effective vocabulary and notation, outlining, technical writing techniques, process descriptions, report formatting and types of reports.

# 0122121—Electromechanical Drafting Lab/Theory III (71/2 weeks)

(Prerequisite: Electromechanical Drafting Lab/Theory II) This combined lab/theory course stresses advanced drafting skills and application techniques practiced in industry. Included are exposure to and use of computer-aided design hardware and software, advanced geometric tolerancing applications and simplified electromechanical techniques. Class work includes a cumulative electrical mechanical design project.

### 0122950-Supervised Work Experience (71/2 weeks)

(Prerequisite: All courses in Trimester I & II) Students work a minimum of 300 hours at electromechanical-related supervised work stations. The student trainee is paid by the cooperative firm and is supervised jointly by T-VI and the employer. At times when it is impossible to place all students in work stations because of local employment conditions, an equivalent activity will be conducted on campus.

See also the common supporting course descriptions on page 48 of the Technologies section.

# **Electronics Technology**

### 4 Trimesters (Main and Montoya Campuses)

The Electronics Technology program has been developed to provide the student with a broad base of skills in analog and digital dircuits.

The program provides training in the fundamental concepts of electronics with an emphasis on digital equipment such as computers and electronic control devices.

Circuits are studied which have application in the semiconductor, digital equipment manufacturing, measurement and control, communications and display industries.

Lab facilities contain modern equipment for testing, troubleshooting, calibrating, analyzing and designing electronic circuits. Such electronic circuits may be found in communications equipment, computers, electronic instruments and many other electronic devices.

For a Diploma in Electronics, the student must complete successfully 1650 hours of which 1050 hours are laboratory work and 600 are theory. To qualify for an endorsement on the diploma in Communications Electronics, students must complete an additional 150 hours in RF Fundamentals and Telecommunications.

A personal equipment fee of \$15 is required when entering the program.



### ELECTRONICS TECHNOLOGY PROGRAM

Trimester I Hours/Week Electronics Lab/Theory I
Trimester II  Electronics Lab/Theory II
Trimester III  Electronics Lab/Theory III
Trimester IV  Electronics Lab/Theory IV
*Indicates courses are optional during Trimester III and IV and may be scheduled to receive a Communications Electronics endorsement on the diploma. The optional courses are offered on the Main Campus only.
Supporting Courses Troubleshooting Techniques

### COURSE DESCRIPTIONS

### 0130003/0130601-Electronics Lab/Theory 1

This course covers the basic concepts of direct current electricity, Ohm's Law, Kirchoff's Law, meter circuits, magnetism and an introduction to alternating circuit principles. The laboratory supports the classroom theory. Students also obtain skills in the use of oscilloscopes, function generators, multimeters and breadboarding circuits from schematic diagrams.

### 0130303-Electronics Mathematics

Emphasis is given to basic and advanced algebra. Common number bases and basic mathematic operations used in computers are taught. Trigonometry and its applications to alternating current circuit theory are covered.

### 0130052/0130634—Electronics Lab/Theory II

(Prerequisites: Electronics Lab/Theory I and Electronics Math) The study of AC circuit theory is continued. Semiconductor theory is studied and applied to power supplies and amplifier circuitry.

### 0130380—Digital Circuits

(Prerequisite: Electronics Lab/Theory I) Logic circuit concepts are introduced. Small and medium scale integrated circuitry is used to introduce logic gates, counters, shift registers, arithmetic circuits, memories and connections with analog devices. The essential building blocks of many digital systems in computers, instruments, clocks and data processors are covered.

### 0130104/0130661—Electronics Lab/Theory III

(Prerequisite: Electronics Lab/Theory II) Circuit analysis and troubleshooting are studied and applied to waveshaping, power supplies, amplifiers and oscillators. AM communications systems and frequency modulation principles are included.

### 0130385—Introduction to Microprocessors

(Prerequisite: Digital Circuits) This course is an introduction to the microcomputer. The first part focuses on programming in machine language. The student learns microcomputer architecture, CPU block diagrams, BUS structures and machine cycles. After learning to program the computer, students are exposed to the hardware that makes up a computer. Topics covered include clock circuitry, BUS drivers, input and output ports and memory. Troubleshooting the different computer components is emphasized.

### 0130717—RF Fundamentals

(Corequisite: Electronics Lab/Theory III) This course provides study and practical analysis of broadcast communications systems. Included are single side band, radio, video equipment and regulations. Specific equipment may cover receivers, transmitters and related monitoring or recording devices.

### 0130155/0130680-Electronics Lab/Theory IV

(Prerequisite: Electronics Lab/Theory III) This course teaches theory and practical applications of differential and operational amplifiers. Switched power supplies, transducers and instrumentation are also studied. Related laboratory exercises, troubleshooting and component replacement techniques are included.

### 0130390-Advanced Digital Techniques

(Prerequisite: Digital Circuits III; Corequisite: Electronics Lab/Theory IV) This course provides students with practical experience in microcomputer interfacing. Topics include interfacing with keyboards, video monitors and serial communication devices. Electromechanical devices are interfaced with the computer. Solving malfunctions in both hardware and software is stressed.

### 0130861—Troubleshooting Techniques

(Corequisites: Electronics Lab/Theory II and Digital Circuits) Students learn systems analysis of various electronic equipment which will be encountered in the industry. Emphasis is on locating problems and using proper methods for replacing defective components. The course includes theoretical work to complement the laboratory assignments.

### 0130430-Telecommunications

(Prerequisites: Electronics Lab/Theory III, Introduction to Microprocessors) Students learn data communication techniques and analog-to-digital applications. Topics studied include UARTS and USARTS, standards of interface such as RS2320, protocols for interface, FSK and modems. Telephone switching systems and microwave transmission modes will be introduced.

See also the common supporting course descriptions on page 48 of the Technologies section.

# Instrumentation and Control Technology

### 4 Trimesters (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. Topics covered include digital and analog circuitry, microprocessors, 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, microprocessors, servo trainers, hydraulic-pneumatic and process control equipment, and a student shop area.

To qualify for a diploma, students must complete successfully 1500 hours of class work of which 750 are laboratory work and 750 are theory. An Instrumentation and Control Testing Certificate may be requested after completion of all courses required in the first three trimesters if a student leaves the program at this point.

All students must pay a personal equipment fee of \$15 at the beginning of the program.

# INSTRUMENTATION AND CONTROL TECHNOLOGY PROGRAM

Trimester I	. Hours/Week
Electronics Lab/Theory I	15
Technical Mathematics	
Trimester II  Electronics Lab/Theory II  Digital Circuits	15
Trimester III Industrial Electronics III Instrumentation and Control Feedback and Control	10
Trimester IV Industrial Electronics IV Advanced Feedback and Con Digital Applications	itrol10
Supporting Courses  Basic Tool Applications Introduction to CNC Machin Calculus BASIC Language Programm FORTRAN Programming Reading Improvement	nes
Technical Writing (71/2 weeks	s)5



### COURSE DESCRIPTIONS

### 0130005/0133624—Electronics Lab/Theory I

This course covers basic concepts of direct current electricity, Ohm's Law, Kirchoff's Law, meter circuits, magnetism, and an introduction to alternating current circuit principles. The laboratory supports the classroom theory. Students also obtain skills in the use of oscilloscopes, function generators, multimeters and hand tools.

### 0130305—Technical Mathematics

Emphasis is given to algebra in this course. Number system concepts are covered, including bases 10, 8 and 2, and the hexadecimal system. Trigonometry and its applications to alternating current circuit theory are covered.

### · 0130054/0133635—Electronics Lab/Theory II

(Prerequisites: Electronics Lab/Theory I and Electronics Math) The study of AC circuit theory is continued. Emphasis is placed on inductance, capacitance, transformers, vacuum tubes and semiconductors. Power supplies and amplifier circuitry are studied.

### 0130350-Digital Circuits

(Prerequisite: Electronics Lab/Theory I) Logic circuit concepts are introduced. Small scale and medium scale integrated circuitry is used to introduce gates, counters, shift registers, arithmetic circuits, memories, and connections with analog devices. Operational amplifiers, 6800 microprocessor programming and servo mechanisms are introduced. It is recommended that this course be taken concurrently with Electronics Lab/Theory II.

### 0133106-Industrial Electronics III

(Prerequisite: Electronics Lab/Theory II) Diodes, ransistors, thyristors, optoelectronics, amplifiers, power supplies, oscillators, operational amplifiers and modulation techniques are studied in both theory and laboratory.

### 0133813-Instrumentation and Control

(Prerequisite: Digital Circuits) Microprocessor interfacing, AC and DC motor control techniques, stepper motor control and robot construction are studied in theory and in the laboratory.



### 0133740—Feedback and Control

(Prerequisite: Digital Circuits) AC and DC motor principles, pneumatic and hydraulic components and circuits are studied. Introductory pneumatic and hydraulic experiments are done, and computer applications are illustrated.

### 0133156-Industrial Electronics IV

(Prerequisite: Industrial Electronics III) Serial and parallel data communications, fiber optic communications, process control, AC and DC motor control, instrument and computer troubleshooting, and advanced pneumatic and hydraulic techniques are studied in theory and in the laboratory.

### 0133781-Advanced Feedback and Control

(Prerequisite: Feedback and Control) Circuit analysis of typical electronic instruments, video terminals and computers are studied. Transducers used in industry are studied and applications are shown.

### 0133376-Digital Applications

(Prerequisite: Instrumentation and Control) This course provides students with practical experience in microcomputer interfacing. Topics include interfacing with keyboards, video monitors and serial communication devices. A/D and D/A converters and electromechanical devices are interfaced with the microprocessor. Solving malfunctions in both hardware and software is stressed.

### 0920765-Basic Tool Application

This combined laboratory and theory course provides instruction in shop safety, basic benchwork, precision measuring instruments, and basic operations on the drill press, lathe and band saw. The fundamentals of machining and benchwork operations are covered thoroughly.

### 0920824—Introduction to CNC Machines

This course will offer an introduction to computer numerical control (CNC) machine applications. The course uses paper tape input and output, computer-assisted programming using on-line graphics and three axis plotters.

See also the common supporting course descriptions on page 48 of the Technologies section.

# **Laser Electro-Optic Technology**

### 4 Trimesters (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.

To earn a diploma, students must complete successfully 1650 hours of which 900 are laboratory work and 750 are related theory.

The program's facilities include modern classrooms and laboratories containing state-of-theart lasers, lenses, mirrors and analytical test equipment.

A \$15 personal equipment fee is required of beginning students.

# LASER ELECTRO-OPTIC TECHNOLOGY PROGRAM

Trimester I	Hours/Week
Electronics Lab/Theory I Laser Mathematics I	
Digital Principles	5
Trimester II	
AC Circuits with Semiconduct Introduction to Microprocesso	r
Circuitry	<i>,</i> 5
Laser Mathematics II	
Introduction to Lasers with Op	oucs5
Trimester III	_
Semiconductor Circuit Applica	
Microprocessor Interfacing Advanced Laser Systems	
LEO Components	
Trimester IV	•
Advanced Laser Systems with	
Applications	
Laser Measurements Op-Amps and Linear Integrate	
Circuits	
Technical Physics	
Supporting Courses	
Calculus	5
BASIC Language Programming	; 5
FORTRAN Programming	5
Reading Improvement Technical Writing (7½ weeks)	5
roommoat writing (172 weeks)	

### COURSE DESCRIPTIONS

### 0132004/0132626—Electronics Lab/Theory I

This course covers basic concepts of direct current electricity, Ohm's Law, Kirchoff's Law, meter circuits, magnetism, and alternating current circuit principles. Students also obtain skills in the use of certain multimeters, the oscilloscope and the function generator.

### 0132333—Laser Mathematics I

Beginning and advanced algebra are emphasized. Concepts in trigonometry and geometry are covered.

### 0132304—Digital Principles

This course provides an introduction to logic circuit devices and concepts applicable to many areas of the electronics industry, and covers such topics as logic gates, truth tables and flip-flops. Laboratory time is provided for students to wire circuits using actual digital integrated circuits. Analysis and development of larger digital systems are covered in both theory and lab.

### 0132053—AC Circuits with Semiconductors

(Prerequisites: Electronics Lab/Theory I, Laser Math I) The study of AC circuits is continued to include resonant circuits, filters, and amplifiers. Inductance, capacitance, transformers, vacuum tubes and semiconductors are introduced.

### 0132843—Introduction to Microprocessor Circuitry

(Prerequisite: Digital Principles) Clocked logic, multiplexers, shift-registers, memories and digital displays are studied. The topics covered in this course are essential building blocks of many digital controlled systems in computers, digital instrumentation and clocks. Machine and assembler programming are introduced.

### 0132386-Laser Mathematics II

(Prerequisites: all Trimester I courses) This is the further study of mathematics and its application to lasers, optics and electronics. Where applicable, problems will be solved using BASIC language programming on a microcomputer.

### 0132704-Introduction to Lasers with Optics

(Prerequisites: all Trimester I courses) This is the study of the nature of light, laser operation as applied to the helium-neon laser, and laser safety. The use of lenses, prisms, mirrors and flats is studied from the viewpoint of geometric optics. The importance of keeping an accurate lab notebook is stressed.

### 0132105—Semiconductor Circuit Applications

(Prerequisite: AC Circuits with Semiconductors) Circuit analysis and troubleshooting are studied and applied to waveshaping, power supplies, amplifiers and oscillators.

### 0132361-Microprocessor Interfacing

(Prerequisites: all Trimester II courses) A system of digital circuits is studied using a microcomputer which is based upon the 8080A microprocessor. Interfacing and programming are studied.

### 0132821—Advanced Laser Systems

(Prerequisites: all Trimester II courses) Wave propagation is examined in terms of interference, diffraction, and polarization. Also studied are solid state, molecular gas,



ion gas, and semi-conductor lasers. Laboratory experiments stressing safety, accuracy, and technical writing skills are performed.

### 0132812-LEO Components

(Prerequisites: all Trimester II courses) Physical opics are used to illustrate the operation and compare the performances of windows, prisms, lenses, filters, gratings, polarizers and frequency doublers.

### 0132162—Advanced Laser Systems with Applications

(Prerequisites: all Trimester III courses) 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.

### 0132371—Laser Measurements

(Prerequisites: all Trimester III courses) Detection of radiation is studied. Various devices such as calorimeters,

photo-multiplier tubes, semiconductor diodes, and pyroelectric detectors are studied for appropriate use as well as performance. Interferometric measurements are also studied with supporting laboratory work.

### 0132788-Op-Amps and Linear Integrated Circuits

(Prerequisites: all Trimester III courses) Linear integrated circuits are studied with emphasis on applications in instrumentation, signal generation active filters and control circuits.

### 0132500—Technical Physics

(Corequisite: Advanced Laser Systems with Applications) Concepts studied are potential and kinetic energy, force, work, momentum and an introduction to atomic and nuclear physics. Concepts will be applied using the technology of lasers and electro-optics.

See also the common supporting course descriptions on page 48 of the Technologies section.

# TRADES DEPARTMENT

Most classes in the Trades, the largest skill cluster at T-VI, meet on the Main Campus in classrooms, indoor and outdoor lab spaces, and live work areas. The Commercial Printing program and an additional Welding laboratory are located at the Montoya Campus. Admissions information is available at either campus.

Most Trades programs accept new students at the beginning of each trimester.

Entrance requirements shared by all Trades programs are that the applicant be able to lift materials weighing 50 pounds and be free of allergies or health conditions which cannot be controlled and which would endanger his or her own safety or the safety of others. These include allergies to such things as fuels, solvents, detergents, lime or cement products, sheet metal fluxes or sawdust, depending on the program. Normal color differentiation and correctable depth perception are vision requirements in several programs.

All students must wear approved safety glasses or goggles which conform to ANSI 287.1 in classes where they are required.

Each applicant has an interview with an admissions counselor and may also be interviewed by the program supervisor during the admissions process. The applicant must also make a satisfactory score on the preadmissions tests to be admitted to the program.

Students in the Trades must furnish their own shop clothes appropriate for the program.

### SPECIFIC ENTRANCE REQUIREMENTS

All Trades programs have in common two entrance requirements. They are that the applicant must make an acceptable score on mathematics and reading tests, and must be able to lift materials and equipment weighing 50 pounds.

Some programs have additional requirements. They are:

AIR CONDITIONING, HEATING AND REFRIG-ERATION: Must be free of chronic respiratory diseases and allergies to sheet metal fluxes and metals, and have normal color differentiation.

AUTO COLLISION REPAIR: Must be free of chronic respiratory diseases and have the ability to differentiate shades of color (those interested in the painting area).

AUTOMOTIVE TUNE-UP TECHNOLOGY: Must be free of chronic respiratory diseases and allergies to automotive fuels and solvents, 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 must have normal color differentiation.

CULINARY ARTS: Must be free of chronic allergies to detergents and soap. Health Requirement: To enroll in this field is it 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 and signed by a licensed physician no more than 90 calendar days before the start of classes.

DIESEL MECHANICS: Must be free of chronic respiratory diseases and allergies to diesel fuels and solvents.

ELECTRICAL TRADES: Must have normal color differentiation.

INDUSTRIAL ELECTRICITY: Must have normal color differentiation.

MACHINE TRADES: Must be free of chronic respiratoryl diseases and allergies to oils, solvents and cutting fluids; must be able to stand on concrete floors for long periods of time; and must 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.

WELDING: Must be free of chronic respiratory diseases and have depth perception correctable in both eyes.

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SAFETY NOTE: Students are advised that it can be dangerous to wear contact lenses in any area where there are fumes from chemicals, solvents and gases. These students should plan to wear regular eyeglasses, rather than contacts, in classes where such hazards exist.

### 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 trimester.

This on-the-job experience may be substituted for the laboratory part of a program and is actually a training plan developed by the cooperating employer and the T-VI instructional staff. Before beginning a supervised work experience, the student must have the approval of the instructor, counselor, department chairman and the Director of Student Services.

The supervised work experience option does not qualify students for Veterans Administration benefits.



# EVENING DIVISION COURSE SUBSTITUTIONS

APPRENTICESHIP PROGRAMS: Students interested in applying for an apprenticeship after attending T-VI are advised that completion of an algebra course must be on their transcript. This requirement can be met by taking the Evening Division algebra courses SK351-352 for Day Division transcript credit.

AUTO AIR CONDITIONING: The Evening Division course Automotive Air Conditioning may be applied toward the day diploma requirement in Automotive Tune-Up Technology.

Students are responsible for notifying their Evening Division instructor at the beginning of the course if they want it to transfer to their Day Division transcript.

# POLE CLIMBING CLASS

In cooperation with communication industries, T-VI offers a 15-week class in pole climbing which meets on Saturday mornings during the Fall and Winter trimesters. Information on this class is found under the Evening Division Skill Improvement course listings at the back of this catalog.

### OPTIONAL SUPPORTING COURSES OPEN TO ALL T-VI STUDENTS

At least 12 students must sign up for a course and instruction space must be available before it

can be offered. As a result, not all courses are offered each trimester. Most are offered only at the Main Campus.

Course Title	Hours/Week						
Energy Management/Solar							
Applications							. 5
Industrial Safety							
Welding Skills Improvement*							. 5

\*This is an open-entry/open-exit class and is not eligible for Veterans Administration benefits.

### COURSE DESCRIPTIONS

### 0920854—Energy Management/Solar Applications

This combination theory and lab practice course is for students interested in the management of a residential energy package. Instruction is provided on how life-styles, design and orientation conserve natural resources. Emphasis is on the selection, installation, maintenance and repair of solar equipment as they relate to heating water and air.

### 0920711—Industrial Safety

This course includes training in the Red Cross Multimedia System and cardiopulmonary resuscitation, for which Red Cross Certification is issued upon successful completion.

### 0920985—Welding Skills Improvement

This laboratory practice class includes safety practices, general tools and equipment, sources of heat, operational procedures, metals and their properties, and applications of oxyacetylene and arc welding. It is an open-entry/open-exit course which will start students at their level of skill and advance them from that point as the time available and the individual's ability permit.

# Air Conditioning, Heating and Refrigeration

### 3 Trimesters (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 brand-oriented training, the graduate of this program should be able to advance quickly.

Training includes the installation of mechanical equipment, ductwork, piping and electrical controls; servicing various air conditioning, heating and refrigeration components; trouble-shooting systems; and performing required preventive maintenance.

The program is housed in three working labs: the basic Air Conditioning, Heating and Refrigeration Lab; the Sheet Metal Lab; and the Residential and Commercial Air Conditioning, Heating and Refrigeration Lab.

The student spends half of the first trimester in the basic lab learning the principles of mechanical refrigeration and half in the sheet metal lab learning to use metal-forming equipment and hand and power tools.

During the second trimester, the student is introduced to increasingly complex control circuitry and domestic heating and cooling equipment.

The third trimester includes servicing of commercial freezers and ice makers, and system design of air distribution systems. Training on pneumatic and electronic controls is provided.

To earn a diploma, a student must complete successfully a total of 1275 hours of which 675 are laboratory work and 600 are related theory.

A student may leave the program when a training objective is reached and receive a rating sheet detailing the skills mastered.

A Sheet Metal Certificate may be requested upon successful completion of all Trimester I courses, if the student leaves the program at that point.

Air Conditioning, Heating and Refrigeration students must pay an equipment fee of \$90 before entering the first trimester and \$70 before each additional trimester, totaling \$230.

# AIR CONDITIONING, HEATING AND REFRIGERATION PROGRAM

Trimester I	Hours/Week
Air Conditioning, Heating and	
Refrigeration Lab I (71/2 week	(s) 15
Air Conditioning, Heating and	,
Refrigeration Theory I (7½ w	/eeks)5
Control Circuitry/Math I	
Sheet Metal Applications Lab	
(7½ weeks)	15
Sheet Metal Applications Theor	
(7½ weeks)	
Trimester II	·
Air Conditioning, Heating and	
Refrigeration Lab II	15
Air Conditioning, Heating and	
Refrigeration Theory II	5
Air Conditioning, Heating and	
Refrigeration Mathematics II	5
Control Circuitry II	5
Trimester III	
Air Conditioning, Heating and	
Refrigeration Lab III	15
Air Conditioning, Heating and	
Refrigeration Theory III	5
Control Circuitry III	5
Systems Design	5
Supporting Courses	
See page 61 at the beginning	of the Trades
section.	

### **COURSE DESCRIPTIONS**

# 0230009/0230606—Air Conditioning, Heating and Refrigeration Lab/Theory I

Beginning 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 knowledge for the mechanical refrigeration cycle and components.

### 0230157/0230682-Sheet Metal Applications Lab/Theory

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.

### 0230511/0230308—Control Circuitry/Math I

This course is designed to lay the groundwork of knowledge required in diagnosis and service of refrigeration equipment with emphasis on the function and operation of DC circuits as applied to Ohm's Law, including the operation of transformers, capacitors, relays and single phase motors. Included are symbols, terminology and introduction to wiring diagrams and line schematics.

This course also reviews basic arithmetic as applied to the air conditioning, heating and refrigeration field. Students are taught algebra as applied to DC electricity, and geometry as applied to sheet metal.

# 0230058/0230639—Air Conditioning, Heating and Refrigeration Lab/Theory II

(Prerequisites: All Trimester I courses or equivalent) instruction is in the installation, maintenance and service of residential air conditioning, heating and refrigeration systems. Emphasized are the characteristics of heat pumps, electrical controls and problems, gas-electric packages, electric heat, compressors, condensers, pressure-reducing devices, load and heat transfer calculations, use of psychrometric charts, and safety code for mechanical refrigeration. Principles of air distribution are covered also.

# 0230336—Air Conditioning, Heating and Refrigeration Mathematics II

(Prerequisite: Control Circuitry/Math I or equivalent) Students will cover elements of algebra and physics as applied to the industry.

### 0230520-Control Circuitry II

(Prerequisite: Control Circuitry/Math I or equivalent)
This course includes the design, installation and troubleshooting of air conditioning, heating and refrigeration
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 development of wiring diagrams and line schematics.

# 0230109/0230665—Air Conditioning, Heating and Refrigeration Lab/Theory III

(Prerequisites: Trimester II Lab/Theory and Control Circuitry II, or equivalent) The installation, maintenance and service of commercial air conditioning, heating and various refrigeration systems are covered, plus multizone heating/cooling, chilled water and hot water systems including piping designs. Job responsibilities, employeremployee relationships, and customer relations are reviewed.

### 0230530—Control Circuitry III

(Prerequisite: Control Circuitry II or equivalent) More advanced control theory and terminology are covered, as well as review of prior subjects. Instructional emphasis is on electrical, pneumatic and solid state circuitry as well as electronic and electric control devices, their installation and service.

### 0230791—Systems Design

(Prerequisites: All Trimester I courses or equivalent)
This course includes the study of the design, layout and application of air distribution duct sytems for air conditioning. A review of first trimester sheet metal fabrication leads into trigonometry applications and more complex designs. Emphasis is on basic principles of physics as related to human comfort and the thermodynamics of air flow.

### **Auto Service**

### 1 Trimester (Main Campus)

This program is for people who want to find an auto service job quickly, or who want to learn the basics of auto engines, drive trains and suspensions to prepare for the Automotive Tune-Up Technology program.

Students wanting to use Auto Service as preparation for the technology program must meet all entrance requirements for Automotive Tune-Up Technology before they can transfer to it.

The first half of Auto Service covers the servicing of automotive engines, drive trains, suspensions, brakes and tires. There is also instruction on job-seeking and job-retention skills. A student who has made satisfactory progress in these units may then select one of two options

OPTION 1—The student and instructor cooperatively seek an entry-level job for which he student qualifies. An on-the-job training program is established with a cooperating employer, under supervision of the instructor, for the rest of the trimester. Most of these jobs are expected to be of a permanent nature.

OPTION 2—The student continues to take classes, as listed below, in preparation for the Automotive Tune-Up Technology program. Only students wanting the technology program should take this option.

All students entering the Auto Service program must have a current New Mexico driver's

license, and must be able to count money and give change accurately.

The 15-week program provides either 258 or 375 hours of classroom and laboratory instruction, and up to 160 hours of supervised work experience if Option 1 is chosen.

Students who complete the program receive a proficiency certificate.

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

### **AUTO SERVICE PROGRAM**

Trimester I	Hours/Week
Auto Service Lab/Theo	ry (7½ weeks) 20
Auto Service Math/Mea	surement I
(7½ weeks)	
OPTION 1	
Supervised Work Experi	ence
(7½ weeks)	10-20
OPTION 2	
Auto Engines/Drive Tra	ains/Suspensions
Lab (7½ weeks)	
Auto Engines/Drive Tra	ains/Suspensions
Theory (7½ weeks).	
Auto Service Math/Mea	isurement II
(7½ weeks)	5
Auto Manual/Schematic	c Reading
(7½ weeks)	5

### COURSE DESCRIPTIONS

### 0291012/0291608—Auto Service Lab/Theory (7½ weeks)

This combined lab and theory course teaches shop safety, trade ethics, work habits, job orientation, hand and power tool operation; and servicing procedures for belts, lubricants, filters, coolants, batteries, tires, headlights, alternators, starters, windshield wipers, fuel pumps and shock absorbers. The theory portion teaches skills needed to find job openings, apply and interview for jobs, and human relations to keep a job; and safety, hand and power tool use, and industrial materials used in servicing operations.

### 0291377—Auto Service Math/Measurement I (71/2 weeks)

This course reviews basic mathematics and teaches use of measuring equipment required in the auto servicing field.

### 0291952-Supervised Work Experience (71/2 weeks)

As each student is considered to be prepared, he/she begins work at a teacher-approved work station. The student is supervised jointly by the instructor and the cooperating employer.

# 0291230/0291627—Auto Engines, Drive Trains and Suspensions Lab/Theory (7½ weeks)

Instruction in this combined lab and theory course includes engine construction, operation, testing and diagnosis; and front suspensions, transmissions, transaxles and drive train mechanisms.

### 0291381-Auto Service Math/Measurement II (71/2 weeks)

This course continues basic mathematics review and offers further instruction in the use of auto service measuring equipment.

# 0291873—Auto Manual and Schematic Reading (7½ weeks)

Students work with current manufacturers' repair manuals, testing equipment manuals and schematics to develop skills in their efficient use.

# **Automotive Collision Repair**

### 2 Trimesters (Main Campus)

The Automotive Collision Repair program prepares a student for entry-level metal or painting employment in the automotive industry. The student should be able to qualify in the area of his or her choice and ability.

The Auto Collision Repair Lab contains sanders, buffers, air chisels, paint sprayers, welding equipment, paint booths, frame machines and many other factory and dealership training units.

In the first trimester, students are given instruction and practical experience in minor body work and basic auto painting procedures. They are encouraged to specialize as they progress in their training. The quality of work and the flat rate manual are used to determine the student's rating.

The second trimester includes advanced metal work and painting. The metal worker does more complex removal and replacement of panels and front-end sections, and frame and unitized body straightening, alignment and repair. Quality and flat rate skills are used for evaluating students. The painting area rating is based on quality and the amount of supervision required.

To earn a diploma, a student must complete successfully 750 hours of which 600 are laboratory work and 150 are related theory.

A student may leave the program when a training objective is reached and receive a rating sheet detailing the skills mastered.

Automotive Collision Repair students must pay an equipment fee of \$90 before entering the first trimester and another \$75 before the second trimester, totaling \$165. They must also , provide their own industrial safety glasses or goggles which conform to ANSI 287.1.

# AUTOMOTIVE COLLISION REPAIR PROGRAM

Trimester I Auto Collision Repair Lab I Auto Collision Repair Theory I Welding Auto Collision Repair Math	5
Trimester II  Auto Collision Repair Lab II Auto Collision Repair Theory II	
Supporting Courses See page 61 at the beginning of	of the Trades

### COURSE DESCRIPTIONS

### 0210006/0210603—Automotive Collision Repair Lab/ Theory I

The laboratory practice teaches shop safety, chassis construction, hand and power tool operation, minor fender and body section repairing, basic body pulls, trim and hardware replacement, preparing for painting and basic painting processes.

Theory includes body and chassis nomenclature, metal alloy characteristics, uses of grinders and abrasives, metalworking techniques, metal finishing with lead and reinforced plastic, and basic painting procedures.

### 0210705-Welding

section.

This laboratory practice class covers safety, general tools and equipment, sources of heat, operational procedures, metals and their properties, and applications of oxyacetylene welding. Emphasis is on welding 20 gauge steel to prepare students for body repair work.

### 0210351-Automotive Collision Repair Mathematics

This course reviews basic arithmetic operations including surface measurements and direct measurements, ratio and proportion, and percentage. Rules and formulas, volume, basic crash book estimating, work orders, flat rate costs and the metric system are covered thoroughly.

### 0210055/0210636—Automotive Collision Repair Lab/ Theory II

(Prerequisites: Auto Collision Repair Lab and Theory I or equivalent) The laboratory practice covers frame and

# unitized body straightening and alignment, body section replacement, interior trim removal and replacement, spray painting procedures and processes, surface buffing and polishing, body pulls and basic unitized body alignment. All students are taught correct methods for welding plastic.

During the theory section, students learn frame and unitized body straightening and alignment. Body straightening on panels and sections, clip replacement, accessory removal and replacement, finishing procedures and processes, and advanced estimating are covered.

# **Automotive Tune-Up Technology**

### 2 Trimesters (Main Campus)

The Automotive Tune-up Technology program provides students with the technical knowledge and occupational skills needed to enter the automotive service industry as a tune-up specialist.

The program is housed in two labs—one static and one live work—specifically designed for automotive tune-up. The static lab is equipped with a variety of operable automotive engines equipped with current ignition system and emission control devices. Students are given hands-on experience with ignition, starting, vacuum, and wiring harness systems; various console and hand-held electronic devices for analyzing starting systems; electrical and electronic systems; and emission control systems.

In the first trimester, instruction includes principles of operation of spark ignition engines, starting and charging systems, mechanical point ignition systems, wiring harness components and related schematics, vacuum systems, and electronic ignition systems. Emphasis is on learning diagnostic skills. Most of the training is related to late model automobiles.

In the second trimester, emphasis shifts of detailed study of manufacturers' systems on automobiles currently popular in this country. Vehicles with on-board computer-controlled carburetion, ignition and fuel injection will be covered. Imports with computer controls are included also, to prepare students for this highly-technical area.

To earn a diploma in Automotive Tune-up Technology, a student must complete successfully 750 hours, of which 450 are laboratory work and 300 are related theory.

Automotive Tune-up Technology students must pay an equipment fee of \$100 before entering the first trimester, and another \$80 for the second trimester, totaling \$180.

### AUTOMOTIVE TUNE-UP TECHNOLOGY PROGRAM

Trimester I	Hours/Week
Electronic Control Systems Lab	D 15
Electronic Control Systems The	огу 5
Automotive Math/Electronics.	
Trimester II	
Computer Control Systems Lab	o 15
Computer Control Systems The	ory 5
Transportation Electronics	5
Automotive Air Conditioning I	ab5

### COURSE DESCRIPTIONS

# 0292013/0292609—Electronic Control Systems Lab/Theory

Instruction covers shop safety, tools and equipment; principles of operation of the spark ignition engine; starting and charging systems principles, operation, and troubleshooting; mechanical point and carburetion electrical and fuel systems; wiring harness component troubleshooting and repairs; vacuum control components; and principles of electronic ignition, advanced fuel delivery, and emission control systems.

### 0292310-Automotive Math/Electronics

This course covers basic algebra, gear ratios, graphs, electrical math, geometry and basic mechanics of power. 0292060/0292641—Computer Control Systems Lab/Theory

This combined lab and theory course reviews the principles and test equipment leading to extensive use of automotive analyzer and test equipment to diagnose and repair late model vehicles. Factory-approved diagnostic trouble-shooting procedures are used on computer-controlled wiring and components, thoroughly covering aspects of the controls. Also covered are mechanical and electronic fuel injection systems.

### 0292723-Transportation Electronics

(Prerequisite: Automotive Math/Electronics or equivalent) This combination lab and theory course provides an introduction to the principles and operation of electronic devices found in modern automobiles and other transportation equipment. Students learn the basic components of various electronic systems. Fusing and voltage requirements are covered also.

### 0292706—Automotive Air Conditioning Lab

Safety, diagnosis, repair and service of current models of automotive air conditioning are covered in this theory and demonstration class.

# Carpentry

### 2 Trimesters (Main Campus)

The Carpentry program provides students with practical and realistic job skills to enter the construction industry.

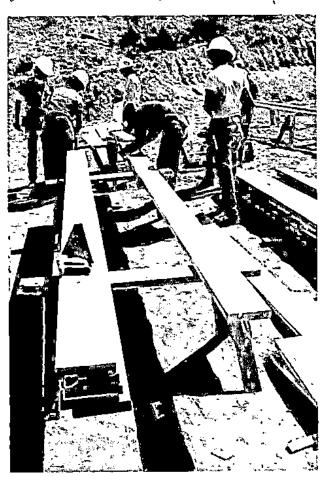
Carpentry meets in a lab specifically designed for carpentry and in an outside live work area. The well-equipped lab includes drill presses, band saws, doweling machine, table saws, a surfacer and other equipment used in industry.

During the first trimester, the fundamentals of residential framing and tools of the trade are taught. In the second trimester, 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 diploma, a student must complete successfully 750 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 rating sheet detailing the skills mastered.

A Framing Certificate may be requested upon successful completion of all Trimester I courses, if the student leaves the program at that point.



Carpentry students must pay an equipment fee of \$100 before entering the first trimester and an additional \$70 for the second trimester, totaling \$170. They must also provide their own carpenter's overalls or nail apron.

### CARPENTRY PROGRAM

Trimester I Carpentry Lab I Carpentry Theory I Carpentry Math/Blueprin	<b></b>
Trimester II  Carpentry Lab II  Carpentry Theory II  Carpentry Math/Blueprin	5
Supporting Courses  See page 61 at the beging section.	nning of the Trades

### **COURSE DESCRIPTIONS**

### 0311014/0311610—Carpentry Lab and Theory 1

This combined theory and laboratory practice class provides instruction in hand and power tools, site layout and foundations, rough framing, roof framing, structural shell basics, stair construction, exterior finish and safety.

### 0311311—Carpentry Mathematics/Blueprint Reading I

This course provides instruction in whole numbers, parts of numbers, combining numbers, lumber sizing, scaling, centering, geometric construction and triangle theory. Instruction is also provided on how to interpret elevation drawings and floor plans, symbols and notations, dimensions and structural information.

### 0311061/0311642—Carpentry Lab and Theory II

(Prerequisites: Carpentry Lab and Theory I or equivatent) This course is a continuation of Carpentry Lab/Theory I, with the addition of finish carpentry, basic construction and installation of cabinets and millwork. Maintenance, remodeling, concrete finishing and light commercial construction are emphasized. Sources of employment, proper completion of applications, the resume, letter of application, interviews, job responsibilities, payroll and benefits, and employee and customer relations are also covered.

### 0311338—Carpentry Mathematics/Blueprint Reading II

(Prerequisites: Math/Blueprint Reading I 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, ratio and proportion, volume, geometric construction and basic surveying computations.



# **Commercial Printing**

### 2 Trimesters (Montoya Campus)

This program teaches entry-level skills for jobs in the offset printing industry or in-plant print/duplication shops. Instructional units are assigned on an individual basis and each unit may have specific prerequisites. For example, only students who can type may take the type-setting unit. Good spelling is required for the proofreading unit.

The program lab contains process cameras, electrostatic master makers, platemakers, lineup and finishing tables, paper cutters, offset duplicators and presses, headliners, bindery machines, typesetting machines and other equipment used in the industry.

To earn a diploma, a student must complete successfully a total of 750 hours of which 525 are laboratory work and 225 are related theory.

When students leave the program they receive a rating sheet listing the skills mastered.

Commercial Printing students must pay a personal equipment fee of \$30 before entering the first trimester.

### COMMERCIAL PRINTING PROGRAM

Trimester I .	Hours/Week
Commercial Printing Theory I.	5
Commercial Printing Lab I	15
Layout and Planning	5
Trimester II	
Commercial Printing Theory II	5
Commercial Printing Lab II	20

### · COURSE DESCRIPTIONS

### 0715036/0715621—Commercial Printing Lab and Theory I

This combined laboratory and related theory course covers safety of tools, equipment, solvents and chemicals; use of tools and equipment; proportional design; composition, layout and pasteup; proofs, proofreading and corrections; basic photo typesetting; press type composition; papers and inks; basic set-up and operation of duplication and offset presses; bindery processes; and quality control.

### 0715747-Layout and Planning

This combined laboratory and related theory course provides instruction in proportional design; composition, layout and paste-up; cost estimating and job planning.

# 0715075/0715650—Commercial Printing Lab and Theory II

(Prerequisites: Trimester I Lab and Theory or equivalent) Students are exposed to more complex operations and set-ups on the various machines. Emphasis is on product quality control; preventive and routine maintenance and adjustments of equipment; collating and binding; advanced process camera and darkroom equipment; special copy and film developing; halftones and multicolor printing; processing of offset plates; offset systems and designs; system controls; troubleshooting techniques; cost estimating and legal considerations; film proofing systems; surface plates; light filters; and stripping. Specialization is encouraged in the final stages of training through actual production jobs.

Sources of employment, proper completion of applications, the resume, letter of application, interview, job responsibilities, payroll and benefits, and employee and customer relations are covered also.

# **Culinary Arts**

### Baking `

### 2 Trimesters (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 equipped with ovens, display cases, commercial mixers, doughnut machines, refrigerated display cases and proofing cabinets. The program's products are sold in the T-VI student lounge on a regular basis.

To earn a diploma, a student must complete successfully 750 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 rating sheet detailing the skills mastered.

Baking students must pay an equipment fee of \$100 before entering Trimester I and \$30 for Trimester II, totaling \$130.



### **BAKING PROGRAM**

Trimester I	Hours/Week				
Baking Lab I	15				
Baking Theory I					
Food Service Mathematics	<sub>.</sub> 5				
Trimester II					
'Baking Lab II	20				
Baking Theory II					

### COURSE DESCRIPTIONS

### 0611034/0611620—Baking Lab/Theory 1

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, and leavening agents.

### 0611321-Food Service Mathematics

Basic arithmetic for sales, portioning and costing of food products is covered. Students also learn to use cash registers.

### 0611072/0611649—Baking Lab/Theory II

(Prerequisites: Baking Lab/Theory I) 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 incorporated with actual shop procedures being followed.

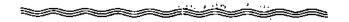


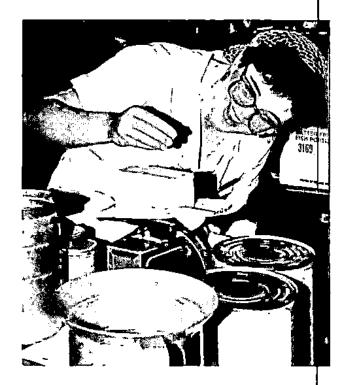
### 0613035—CULINARY APPRENTICESHIP PROGRAM

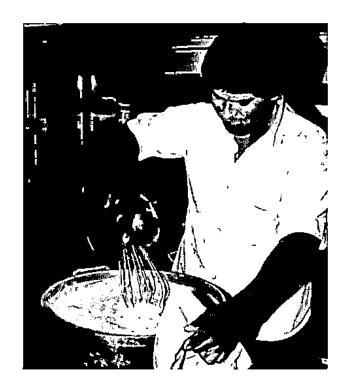
A Culinary Apprenticeship program is offered on the Main Campus for persons who are currently employed full-time in the cooking industry.

The apprenticeship classes meet each Tuesday from 3:30 to 7:15 p.m., and the length of the program for each student is three years.

Information about the Culinary Apprenticeship program is found under the Evening Division Skill Improvement courses at the back of this catalog.







# **Quantity Food Preparation**

### 2 Trimesters (Main Campus)

Quantity Food Preparation emphasizes nutritional food preparation leading to entry into one of the fastest growing industries, as a saute cook after the first trimester or dinner cook upon completion of the full program.

In the first trimester, students learn the fundamentals of food preparation and principles of cookery, use of tools and cleanliness of equipment. During the second trimester, students are taught the cooking, proper care, and refrigeration of foods; background knowledge of cuts of meats; and ordering and purchasing procedures.

Classes are held in an industrial kitchen. Sudents prepare food for and operate a cafeteria line, including cash registers. More than 250 meals are served on most school days.

To earn a diploma, a student must complete successfully 750 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 rating sheet detailing the skills mastered.

Graduates of this program are encouraged to enroll in the Baking program, as space permits. This will give them 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 trimester and another \$80 for the second trimester, totaling \$180.

### QUANTITY FOOD PREPARATION PROGRAM

Trimester I	Hours/Week								
<sup>1</sup> Quantity Food Lab I								,	15
Quantity Food Theory I									
Food Service Mathematics.	 •	•	•	•	•	•			. 5
Trimester II									
Quantity Food Lab II									20
Quantity Food Theory II									

### COURSE DESCRIPTIONS

### 0610033/0610619-Quantity Food Lab/Theory I

This lab and theory 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 as well as procedures for stocking and operating a cafeteria serving line.

### 0610320-Food Service Mathematics

Basic arithmetic for sales, portioning and costing of food products is covered. Students also learn how to use cash registers.

### 0610071/0610648-Quantity Food Lab/Theory II

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 and pantry work.

### Diesel Mechanics

### 4 Trimesters (Main Campus)

This program prepares students to work on a variety of diesel-powered equipment used in the trucking, heavy equipment, and mining industries. Emphasis of the program is on truck-type adaptations.

The program meets in five working labs designed for diesel mechanics activities. In the labs, students are introduced to a variety of the most widely-used makes of diesel engines, electrical and hydraulic test equipment, dynamometers, mobile refrigeration equipment, diesel generators, drive train components, fuel injection test and calibration devices, and related equipment.

In the first trimester, students learn basic engine block design; component parts disassembly, inspection, and reassembly; diesel engine accessories; introduction to diagnosis and troubleshooting; and injection system component replacement.

In the second trimester, students learn electrical and electronic components and circuits, hydraulic components and systems.

The third trimester is the transmission, drive train and fuel injection portions of the program. Students learn to diagnose, repair and maintain transmissions, final drives, clutches, brakes, steering and fuel injection systems.

The final trimester emphasizes diesel engine overhaul. Students study engine failure and perform testing using engine dynamometers.

A student may leave the program when a training objective is reached and receive a rating certificate detailing the skills completed.

To earn a diploma, a student must complete successfully 1650 hours, of which 1125 are laboratory work and 525 are related theory.

Diesel Mechanics students must pay an equipment fee of \$100 before entering the first trimester, \$100 for the Drive Train/Fuel Injection trimester, and \$80 for each of the other two trimesters, totaling \$360. They must also provide their own industrial safety glasses or goggles which conform to ANSI 287.1.

### DIESEL MECHANICS PROGRAM

Trimester I	Hours/Week				k			
Diesel Engine Principles and								
Accessories Lab							1	5
Diesel Engine Principles and								
Accessories Theory		. ,						5.
Diesel Mathematics								5

Trimester II
Electrical and Hydraulics
Systems Lab
Electrical and Hydraulics
' Systems Theory
Air Conditioning and Transport
Refrigeration Lab
Diesel Mathematics, Physics,
and Electronics
Trimester III
Transmission, Final Drive, Clutch, Brake
and Steering Lab (10 weeks)20
Transmission, Final Drive, Clutch, Brake
and Steering Theory (10 weeks)
Diesel Fuel Injection Lab (5 weeks) 20
Diesel Fuel Injection Theory (5 weeks) :
Oxyacetylene Welding
Trimester IV
Diesel Engine Overhaul Lab
Diesel Engine Overhaul Theory
Troubleshooting
Supporting Courses
See page 61 at the beginning of the Trade
section.

### COURSE DESCRIPTIONS

### 0240010/0240607—Diesel Engine Principles and Accessories Lab/Theory

This course covers diesel shop safety and basic tools and equipment used by the diesel mechanic. 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; drill bit use and sharpening; lubricating, cooling, air intake and fuel systems; governor control design; and introduction to diagnosis and troubleshooting. Basic procedures for identifying and replacing defective electrical and fuel injection components without a major teardown are included.

### 0240309—Diesel Mathematics

This course, directly related to Diesel Engine Principles and Accessories Lab/Theory, reviews basic arithmetic operations. Included are fractions and decimals, ratios and proportions, use of related formulas, graphs, gear calculations and metrics. Time is spent calculating engine run-in schedules for most common makes of diesel engines.

# 0240158/0240683—Electrical and Hydraulics Systems Lab/Theory

(Prerequisites: Trimester, L. Labaand Theory or equivalent) This course covers basic and advanced diesel elec-

tricity, electrical circuits and components with related schematics; carburetion for gasoline, liquified petroleum and natural gas engines; magneto design, construction and maintenance; and diesel electric generator operation, maintenance and repairs. Hydraulic pumps, control devices, cylinders and motors are studied, disassembled and repaired. Test and service procedures are stressed throughout the course.

# 0240792—Air Conditioning and Transport Refrigeration Lab

This industrially-based theory demonstration and training course offers students an understanding of the safety, diagnosis, repair and service of current models of diesel ar conditioning. The course also covers the refrigeration cycle of transport units with emphasis on electrical systems.

#### 0240353-Diesel Mathematics, Physics, and Electronics

(Prerequisite: Diesel Math or equivalent) Use and manipulation of formulas required for the diesel trade, including hydraulic principles, DC circuit principles, AC circuit principles as related to the generation of electricity, and principles of refrigeration are covered. Practice in making metric and English precision measurements is provided. The student is also introduced to elements of electronic circuitry.

# 0240110/0240666—Transmission, Final Drive, Clutch, Brake and Steering Lab/Theory

(Prerequisites: Trimester II Lab and Theory or equivalent) This class covers the service and repair of drive train components to the rear of the transmission, plus steering systems. Students also learn to repair manual transmissions and to perform standardized tests on automatic transmissions. Preventive maintenance programs are emphasized.

### 0240171/0240692—Diesel Fuel Injection Lab/Theory

(Prerequisites: Trimester II Lab and Theory or equivalent) Instruction is provided in fuel-system design, construction, operating principles and servicing procedures; distributor-type, pressure, time, AFC and multiplunger fuel systems; injectors and governors; and troubleshooting and analysis sequence procedures.

#### 0240742—Oxyacetylene Welding

This laboratory class includes safety practices, general tools and equipment, sources of heat, operational procedures, metals and their properties, and applications of oxyacetylene and are welding to diesel repairs.

#### 0240059/0240640—Diesel Engine Overhaul Lab/Theory

(Prerequisites: Trimester III Lab and Theory or equivalent) This combined laboratory and theory course deals with diagnosis and repair of diesel engine failures and reduced operational capabilities. Damaged bearings, rings, and other engine parts are studied to determine cause. Water pumps, oil pumps and other components are rebuilt. Extensive testing using engine dynamometers is performed.

#### 0240804—Troubleshooting

(Prerequisites: Trimester III Lab and Theory or equivalent) Students spend most of their classroom time practicing an analytical approach to the isolation and diagnosis of problems in lubrication, cooling, air induction, exhaust fuel starting and drive train systems. Some live trouble shooting problems are presented. Students are required to develop some of their own diagnostic charts.



# **Electrical Trades**

# 2 Trimesters (Main Campus)

This program provides students with entrylevel skills for employment in the construction industry and related electrical trades as an electrician trainee.

Electrical Trades is housed in a working lab specifically designed for residential electrical work, which includes electrical boxes, receptacles, switches, sockets, connectors, terminals, wiring and hardware used in the industry.

During the first trimester, the fundamentals of electrical theory, design and installation of basic residential wiring, identification and use of electrical devices and equipment, application of electrician's hand tools and electrical code interpretation are covered.

The second trimester emphasis is on residential and light commercial work, maintenance and remodeling, design and installation of appliance and special equipment circuitry, calculating service entrances, indepth study of electrical codes, estimating material requirements, job planning and coordination.

To earn a diploma, a student must complete successfully 750 hours of which 450 are laboratory work and 300 are related theory.

A student may leave the program when a training objective is reached and receive a rating sheet detailing the skills mastered.

Electrical Trades students must pay an equipment fee of \$90 before entering the first trimester and an additional \$70 before the second trimester, totaling \$160.

# **ELECTRICAL TRADES PROGRAM**

Trimester I	Hours/Week
Electrical Trades Lab I	15
Electrical Trades Theory/Code	e I 5
Electrical Math/Blueprint Rea	
Trimester II	
Electrical Trades Lab II	15
Electrical Trades Theory II	, 5
Electrical Math/Blueprint Rea	ding II5

# Supporting Courses

See page 61 at the beginning of the Trades section.

### COURSE DESCRIPTIONS

# 0350016/0350612—Electrical Trades Lab and Theory/Code I

This combined laboratory and related theory course provides instruction in safety; use of tools and equipment; electrical codes and utility regulations; basic electrical principles and measurements; wiring materials and devices; splices and connections; wiring systems and circuits; and installing outlets, switch boxes, nonmetallic-sheathed cable, overcurrent devices, low voltage equipment, branch circuits and service entrances.

### 0350313-Electrical Mathematics/Blueprint Reading I

Covered are basic arithmetic and simple electrical formulas; various trade application problems involving calculations of materials; Ohm's Law; series, parallel and combination circuits; mechanical work and power; and resistance of wire, size of wire and circuit loads. Also offered are basic sketching and reading of working drawings, blueprints and specifications for residential and light commercial work.

#### 0350063/0350644-Electrical Trades Lab and Theory II

(Prerequisites: Trimester I Lab and Theory or equivalent) Light commercial work, maintenance and remodeling; installation of range and clothes dryer circuits; electric service for water heaters, space heaters, electric heating; service and metering equipment; remote control and outside wiring; methods of wiring flexible armored cable and electrical conduit; modernizing electrical systems; electric lighting; electrical wiring design; and estimating electrical wiring and supplies for the job are included.

Sources of employment, proper completion of applications, the resume, letter of application, interviews, job responsibilities, payroll and benefits, and employee and customer relations are covered.

# 0350340-Electrical Mathematics/Blueprint Reading II

(Prerequisites: Math/Blueprint Reading I or equivalent) This course includes a detailed study of electrical drawings; knowledge of terms; methods of installation; local, state and national electrical codes; interpreting residential blueprints; and planning and coordinating the job. Instruction also is offered in electrical rules and formulas, ratio and proportion, volume, basic principles of square root, trade application of geometric principles and right triangles, basic algebraic principles involving electrical efficiency, resistance of wiring and wire sizing.

# **General Trades**

# 1 Trimester (Main Campus)

This program is offered to persons who want to find work quickly and learn a skill while working as a helper or a trainee.

The first half of the program provides instruction designed to help the student determine the types of work best suited to his or her interest and ability, coupled with skill development in job seeking and job retention. Instruction also includes use, care and maintenance of hand and power tools common to trades occupations, and industrial safety.

When a student has made satisfactory progress in the readiness unit, the student and instructor cooperatively seek an entry-level job for which the student qualifies. An on-the-job training program is established with the cooperating employer for the remaining weeks of the trimester under the supervision of the instructor. Most jobs are expected to be of a permanent, full-time nature.

The 15-week program provides up to 160 hours of classroom/laboratory instruction and about the same amount of supervised work experience.

Students who complete the program receive a proficiency certificate.

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

# GENERAL TRADES PROGRAM

Trimester I	Hours/Week
General Trades Lab/Theory	
(7½ weeks)	20
Supervised Work Experience	
(7½ weeks)	10-20

### COURSE DESCRIPTIONS

#### 0290011/0290623—General Trades Lab/Theory

The classroom/laboratory instruction provides the student with skills to find job openings, correctly apply and interview for jobs, and the human relations skills to keep the job obtained. Safety, hand and power tools, and industrial materials used in a variety of occupations are also covered.

### 0290951-Supervised Work Experience

As each student is considered to be prepared, the student begins work at a teacher-approved work station in the specific field chosen. The student trainee is supervised jointly by T-VI and the cooperating employer for the remainder of the trimester.

# **Industrial Electricity**

# 3 Trimesters (Main Campus)

The Industrial Electricity program provides students with entry-level skills for employment in commercial, industrial, or electrical systems maintenance areas.

The program is housed in a well-equipped lab which includes trainers, industrial controls, solid state controls, and hydraulic and pneumatic controls. The students also learn electrical system design, conduit bending and layout, and the use of a wide variety of tools and equipment associated with the trade.

To earn a diploma, a student must complete successfully a total of 1275 hours of which 675 are laboratory work and 600 are related theory.

A student may leave the program when a training objective is reached and receive a rating sheet detailing the skills mastered.

Industrial Electricity students must pay a personal equipment fee of \$100 before entering the first trimester, another \$85 for the second trimester and \$75 for the third trimester, totaling \$260. They must also provide their own shop clothing and industrial safety glasses or goggles which conform to ANSI 287.1.

# INDUSTRIAL ELECTRICITY PROGRAM

Trimester I Hours/Wes Industrial Electricity Lab I Industrial Electricity Theory/Code I Industrial Electricity Mathematics I	5
Trimester II  Industrial Electricity Lab II	5
Industrial Electricity Theory III/ Control Systems	5
Supporting Courses  See page 61 at the beginning of the Trad section.	es

#### COURSE DESCRIPTIONS

# 0351017/0351613-Industrial Electricity Lab and Theory/Code I

This combined laboratory and related theory course provides instruction in safety; use of tools and equipment; electrical codes and utility regulations; materials and devices; low voltage equipment; circuit design, troubleshooting, and maintenance of electrical circuits; and work plan interpretation. Electrical theory will be aimed at training the student to work closely with electronic technicians in interfacing primary power with state-of-art equipment. Also covered are basic concepts of direct current electricity, Ohm's Law, Kirchoff's Law, network theorems, meter circuits, capacitance and inductance.

#### 0351314-Industrial Electricity Mathematics 1

Covered are basic arithmetic and simple electrical formulas; various trade application problems involving calculations of materials; Ohm's Law, series, parallel and combination circuits; mechanical work and power; and resistance of wire, size of wire and circuit loads.

#### 0351064/0351645—Industrial Electricity Lab and Theory/ Code II

(Prerequisites: Industrial Electricity Lab and Theory I or equivalent) The course includes AC and DC theory and circuit application, magnetism, transformers, basic motor theory and application, relay logic and control application, schematic reading, symbol identification, basic solid state logic and continued study of electrical codes.

#### 0351354—Industrial Electricity Mathematics II

This course covers the mathematics encountered in the trade. Beginning algebra, trigonometric functions, power applications, wiring, magnetic circuits, generator and motor problems are included.

### 0351845-Industrial Electricity Blueprint Reading I

Basic instruction in reading and interpreting blueprints and specifications is provided. Emphasis is on terminology, symbols, notations, scaling, dimensioning and basic blueprint techniques. Construction methods, materials, structural support and cost and materials estimating are covered also.

# 0351111/0351667--Industrial Electricity Lab and Theory III/Control Systems

(Prerequisites: Industrial Electricity Lab and Theory II or equivalent) Field applications and methods are taught for transformers, motors, motor controls, development and servicing of automatic control devices, multi-station systems and solid state industrial controls, conduit bending, and layout. The student will work with actual motor controllers, electric and hydraulic conduit benders; and when situations occur, will work outside the lab on projects around campus to gain firsthand experience to reinforce the training.

Sources of employment, proper completion of applications, the resumé, letter of application, interviews, job responsibilities, payroll and benefits, and employee and customer relations are also covered.

#### 0351752—Blueprint Reading II

(Prerequisite: Industrial Electricity Blueprint Reading I or equivalent) Instruction in reading blueprints and specifications for industrial projects is offered in this course.

The blueprints include transformers, feeders, distribution panels, subfeeder panels, lighting circuits, motors and controllers, signal systems, HVAC controls, and power requirements.

# **Machine Trades**

# 4 Trimesters (Main Campus)

The Machine Trades program qualifies students for job entry as machine tool operators.

Students learn the fundamental operations of various machine tools. Classes meet in two wellequipped labs where students are introduced to micrometer calipers, height transfer micrometers, surface plates, taper micrometers, gauge blocks, plug gauges, snap gauges, drill presses. hand saws, engine lathes, milling machines, tool and cutter grinders, universal cylindrical grinders, numerical controlled equipment and other equipment used throughout the metal working industry.

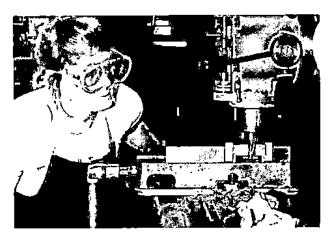
To earn a diploma, a student must complete successfully 1500 hours of which 750 are laboratory work and 750 are related theory.

A student may leave the program when a training objective has been reached and receive a rating sheet detailing the skills mastered.

Machine Trades students must pay an equipment fee of \$100 before entering the first trimester, \$80 before the second trimester, and \$70 for the third trimester, totaling \$250. Students must also provide their own industrial goggles or safety glasses with side shields which conform to ANSI 287.1.

#### MACHINE TRADES PROGRAM

Trimester I	Hours/Week
Machine Trades Lab I	15
Machine Trades Theory I	. <b></b> . 5
Machine Trades Math/Blueprin	t
Reading I	. <b></b> . 5
Trimester II	
Machine Trades Lab II	15
Machine Trades Theory II	. <i>. </i> . 5
Machine Trades Math/Blueprin	t
Reading II	. <i></i> 5



Trimester III
Machine Trades Lab III
Machine Trades Theory III 5
Machine Trades Math/Blueprint
Reading III
Numerical Control Programming I 5
Trimester IV
Machine Trades Lab IV 10
Tooling Applications/Metallurgy 5
Machine Trades Math/Geometrical
Tolerancing5
Numerical Control Programming II 5
Supporting Courses

See page 61 at the beginning of the Trades section.

# **COURSE DESCRIPTIONS**

#### 0220007/0220604—Machine Trades Lab/Theory I

These courses provide classroom/laboratory 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.

# 0220306-Machine Trades Mathematics/Blueprint

Review of basic math and introduction of simple formula manipulation, introduction to shop drawings and their purpose, and sketching of orthographic and isometric views are included.

#### 0220056/0220637-Machine Trades Lab/Theory II

(Prerequisites: Machine Trades Lab, Theory, and Math/ Blueprint Reading I 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 as applied to machine tools.

### 0220334-Machine Trades Mathematics/Blueprint Reading II

Instruction includes a continuation of algebra with an emphasis on machine related problems, geometric construction, theorems and their uses; and a continuation of print reading with greater emphasis on details.

#### 0220107/0220663-Machine Trades Lab/Theory III

(Prerequisites: Machine Trades Lab, Theory, and Math/ Blueprint Reading II 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 and cutter grinding and cylindrical grinding. N/C and C/N/C operations and setup are also covered. Theory and practice are provided in the use of measuring tools used in inspection. Also covered is an introduction to carbides.

# 0220352-Machine Trades Mathematics/Blueprint

An applied approach to trigonometry is presented as it can be related to the machine trades. Reading complete shop drawings and discussing materials and their manufacture are also included.

#### 0220755-Numerical Control Programming 1

(Prerequisites: All Machine Trades II courses or equivalent) The history of N/C, word address formats, and the programming and tape preparation necessary for numercal control machining are included.

#### 0220161-Machine Trades Lab IV

(Prerequisites: Machine Trades Lab, Theory, and Math/ Blueprint III) Major emphasis is on advanced milling and turning setups, advanced N/C, C/N/C setup, and operation of drilling/milling and turning machines. Advanced threading, cylindrical and tool and cutter grinding are also covered.

#### 0220803—Tooling Applications/Metallurgy

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:

#### 0220352—Machine Trades Math/Geometrical Tolerancing

This course covers application of geometric construction and trigonometry to solve problems related to the machine trades. Instruction is also offered in interpretation and application of the true position dimensioning system.

#### 0220761—Numerical Control Programming II

(Prerequisites: Numerical Control Programming I 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 used in C/N/C and D/N/C machining.

# Plumbing

# 2 Trimesters (Main Campus)

The Plumbing program provides the technical knowledge and occupational skills necessary to enter the plumbing industry.

The program meets in a lab which includes pipe threading machines, soldering machines, propane torches, power sewer cleaners, welding machines and other equipment used in industry. Students also work on plumbing projects in an outdoor construction area.

During the first trimester, 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 trimester is on residential and light commercial work, maintenance and remodeling; installation of fixtures; alteration, planning and coordinating of the job; repair of piping systems; installation of water, soil and vent lines; and application of codes.

To earn a diploma, a student must complete successfully 750 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 rating sheet detailing the skills mastered.

Plumbing students must pay an equipment fee of \$100 before entering the first trimester and another \$70 for the second trimester, totaling \$170.

# **PLUMBING PROGRAM**

Trimester I Hou	rs.	/1	We	еĸ
Plumbing Lab I				15
Plumbing Theory I				. 5
Plumbing Math/Blueprint Reading I				.15

Trimester II

See page 61 at the beginning of the Trades section.

### COURSE DESCRIPTIONS

# 0340015/0340611—Plumbing Lab/Theory I

This class covers safe and proper use of tools and equipment; identification of plumbing fittings and pipe; basic hydraulies and pneumatics; layout, assembly, installation, alteration and repair of pipe systems; safety practices; general tools and equipment; sources of heat and operational procedures.

# 0340312—Plumbing Mathematics/Blueprint Reading I

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 is basic instruction in sketching, reading workshop drawings, blueprints, and specifications for residential and light commercial work.

#### 0340062/0340643-Plumbing Lab/Theory II

(Prerequisites: Plumbing Lab and Theory I or equivalent) This course emphasizes design, layout and installation of water, soil and vent lines; related fixtures and fittings; inspecting and testing systems; soldering and brazing; rigging; and maintenance and repair of plumbing systems.

Sources of employment, proper completion of applications, the résumé, letter of application, interviews, job responsibilities, payroll and benefits, and employee and customer relations are also included.

# 0340339-Plumbing Mathematics/Blueprint Reading II

(Prerequisite: Math/Blueprint Reading I 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. Practical math applications will be covered throughout the course.

# Welding

### 3 Trimesters (Main and Montoya Campuses)

The Welding program qualifies students for entry-level employment in the metals-processing industry.

Beginning groups alternate between the two campuses. The Fall Trimester 1984 will start at Montoya Campus, Winter 1985 at Main, and Summer 1985 at Montoya.

Welding classes meet in well-equipped working labs designed to expose students to oxyacetylene, arc, TIG and MIG processes, power shears, radiography, hardness testers, dye penetrant and tensile testing.

During the first trimester, students study, practice, and certify in oxyacetylene welding. Instruction is also provided in shielded metalarc welding.

In the second trimester, certification may be obtained in shielded metal-arc and gas metal-arc welding. Instruction is also given in gas tungsten-arc welding.

During the third trimester, students may certify in gas tungsten-arc, and/or pipe welding. Instructional emphasis is on welding fabrication and materials testing.

A diploma is awarded to students who complete successfully 1200 hours of instruction of which 750 are laboratory work and 450 are related theory.

Specific welding certification is the goal of each trimester. A student may leave the program when a training objective is reached and receive a rating sheet detailing the skills mastered.

Welding students must pay a personal equipment fee of \$100 before entering the first trimester, \$50 for the second trimester and \$25 for the third trimester, totaling \$175.



### WELDING PROGRAM

Trimester I	Hours/Week
Welding Lab I	15
Welding Metallurgy I	
Welding Math/Blueprint F	Reading I 5
Trimester II	
Welding Lab II	15
Welding Metallurgy II	5
Welding Math/Blueprint F	
Trimester III	
Welding Lab III	20
Welding Metallurgy III/In	
Blueprint Reading III	
Supporting Courses	

See page 61 at the beginning of the Trades section.

#### COURSE DESCRIPTIONS

#### 0221008-Welding Lab I

This laboratory practice class teaches welding safety, general tools and equipment, common gases and their properties, welding materials, welding joints, oxyacetylene welding and brazing, metal cutting with gas, and shielded metal-arc welding procedures and processes.

#### 0221605-Welding Metallurgy 1

Instruction is offered in manufacturing processes, welding methods and processes, structure and properties of metal, temperature changes in welding, effects of alloying elements, variations of fluxes, and slags and gases for shielding.

#### 0221307-Welding Mathematics/Blueprint Reading I

This is a course in basic arithmetic. Surface and direct measurements, graphs and charts, and payroll calculations are studied. Instruction is also provided in basic drawing interpretation, welding symbols, terms, and detailed fittings applied to the welding area.

# 0221057—Welding Lab II

(Prerequisites: Welding I Lab and Welding Metallurgy I or equivalent) This laboratory practice course provides advanced instruction in shielded are and gas metal-are welding. Beginning instruction in gas tungsten-are welding is provided through the use of various gas are welding power sources, torches, electrodes and wire-feed systems. Occupational safety standards and practices are emphasized.

#### 0221638-Welding Metallurgy II

(Prerequisite: Welding Metallurgy I or equivalent) Instruction is offered in filler metal for joining iron, steel and non-ferrous 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.



# 0221335-Welding Mathematics/Blueprint Reading II

(Prerequisite: Math/Blueprint Reading I or equivalent) Covered are the use of rules, formulas, ratio, proportion, volume and right-angle calculations applied to the welding industry. Blueprint reading instruction is provided in which the student reads commercial construction and faprication drawings, complex detail section and assembly drawings related to the welding field.

# 0221108—Welding Lab III

(Prerequisites: Welding II Lab, Metallurgy II and Mainematics/Blueprint Reading II or equivalent) Working speed and proficiency through continued practice, shop fabrication and selected field work assignments are emphasized. Instruction also is provided in basic pipe welding and layout, materials testing and industrial safety. Welding and testing of pipe intersections designed in Blueprint Reading III, as well as pipe qualification tests, are included.

# 0221664—Welding Metallurgy III/Inspection

(Prerequisite: Metallurgy II or equivalent) This course

deals with technical reports and welding problems arising from the lab sessions, including daily discussion and review. Instruction is in the various welding processes and layout used in fabrication. Also stressed are sources of employment, proper completion of applications, the resume, letter of application, interviews, job responsibilities, payroll and benefits, and employee and customer relations. Emphasis is placed in the areas of specimen preparation, reporting and evaluating various types of weld qualifications.

#### 0221790—Blueprint Reading III

(Prerequisite: Blueprint Reading II or equivalent) This theory course teaches students to develop specifications for various types of pipe and fabrication welding, materials estimating, pipe layout and development, pipe and structural print reading, performance of pipe certification tests for the basic intersections, transferring of measurements from working drawings and blueprints, design considerations, layout and welding related to fabrication.

# **EVENING DIVISION**

# ADULT BASIC EDUCATION

Persons who want to take an Adult Basic Education class should begin by registering at either T-VI campus on one of the ABE registration days (Aug. 21-22, Dec. 27-28 and Apr. 23-24) between 10 a.m. and 8 p.m.

At that time, an Evening Division counselor will help persons find the right class for their needs and schedules. An ABE counselor is also available during the trimester at Main Campus from noon to 9 p.m. weekdays except Friday, when hours are 8 a.m. to 5 p.m. At the Montoya Campus, an ABE counselor is available during the trimester from 2 to 8:30 p.m., Monday through Thursday.

Textbooks are loaned to students at no cost during the classes. There are no fees for these classes because they are paid for with state and federal funds channeled through the New Mexico State Department of Education.

Persons or groups who are interested in additional ABE classes in the community should contact the Evening Division. It may be possible for T-VI to provide ABE classes at locations not listed here.

NOTE: English as a Second Language classes are for persons who are beginning to learn to speak English. Most of the class work is in speaking and listening although some written work is given. In addition to textbooks, tape recorders and other audiovisual equipment are used.

# 101-B: BEGINNING ENGLISH AS A SECOND LANGUAGE

This class is for students who do not speak English and for those who have not taken English before. The class uses a conversational approach to learning English. Linguistic differences as well as teacher recommendations will be considered for proper placement of students in the class.

#### Fall-Winter-Summer

MW or TTh	7-9 p.m.	T-VI Main Campus
MW	7-9 p.m.	T-VI Montoya Campus
MTWThF	9-11 a.m.	T-VI Main Campus
MTWThF	I1 a.m1 p.m.	T-VI Main Campus
MTWThF	1-3 n.m.	T-VI Main Campus

# 101-1: INTERMEDIATE ENGLISH AS A SECOND LANGUAGE

This class is for students who have completed the beginning conversational English class or students who speak some English. It is a continuation of the beginning class with emphasis on speaking and writing.

#### Fall-Winter-Summer

MW or TTh	7-9 p.m.	T-VI Main Campus
MW	7-9 p.m.	T-VI Montoya Campus
MTWThF	9-11 a.m.	T-VI Main Campus
MTWThF	11 a.m1 p.m.	T-VI Main Campus
MTWThF	1-3 p.m.	T-VI Main Campus

# 101-A: ADVANCED ENGLISH AS A SECOND LANGUAGE

Students who have had a previous conversational English class and students who can speak some English but need additional practice may take this class. Speaking, writing and basic grammar are taught.

#### Fall-Winter-Summer

MW or TTh	7-9 p.m.	T-VI Main Campus
MW	7-9 p.m.	T-VI Montoya Campus
MTWThF	9-11 a.m.	T-VI Main Campus
MTWThF	11 a.m1 p.m.	T-VI Main Campus
MTWThF	1-3 p.m.	T-VI Main Campus

### 101-L: BASIC ENGLISH LITERACY

This class is for students who are learning English as a second language and who have difficulty reading and/or writing at the beginning level. Students should understand and speak basic English and want to communicate in writing.

# Fall-Winter-Summer

TTh 7-9 p.m. T-VI Main Campus

PREREQUISITE: Completion of Beginning English as a Second Language or equivalent

#### 102-B: BEGINNING BASIC ENGLISH GRAMMAR/SPELLING

Recommended for students who can function in the English language or have taken at least two trimesters of conversational English, or students who have difficulty reading and writing the English language. This class includes speech correction, oral expression, writing, spelling and phonetics.

#### Fall-Winter-Summer

MW	7-9 p.m.	T-VI Main Campus
MW	7-9 p.m.	T-VI Montoya Campus

# 102-A: ADVANCED BASIC ENGLISH GRAMMAR/SPELLING

Persons who need English grammar and spelling review or reinforcement will benefit from this class. Since this is a review class, persons registering should first talk with an Evening Division counselor for proper placement. This is a structured class in English grammar which may be taken by high school graduates for review purposes.

# Fall-Winter-Summer

TTh 7-9 p.m. T-VI Main Campus TTh 7-9 p.m. 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. Time will be spent on each of the three subject areas—mathematics, English and spelling. Students are divided according to their abilities and individual instruction is given in the mathematics area. Students should talk with a counselor before registering for this class.

#### Fall-Winter-Summer

TTh 7-9 p.m. T-VI Main Campus
TTh 7-9 p.m. T-VI Montoya Campus

#### 104: BASIC MATHEMATICS

This class helps students understand numbers and how to work word problems. It uses numbers to help the student know how to buy on credit, how to borrow money, how to plan spending, facts about insurance and how to work with problems a student may meet in his or her dally work. The class is divided into groups of similar abilities. Some modern basic math will be covered. Algebra is not taught in this class.

# Fall-Winter-Summer

MW 7-9 p.m. T-VI Main Campus
TTh 7-9 p.m. T-VI Montoya Campus

# 107-B: BEGINNING READING IMPROVEMENT AND SPELLING

This is a class for native English speakers who have difficulty reading and recognizing words. It improves the sudent's reading ability and understanding of what is read. Word recognition, spelling and sight vocabulary are part of this class.

#### Fall-Winter-Summer

MW 7-9 p.m. T-VI Main Campus

# 107-1: INTERMEDIATE READING IMPROVEMENT AND SPELLING

This class improves the student's ability to read and understand what is read. In addition to the textbooks, controlled readers and other audiovisual aids are used to help the student improve reading, comprehension and spelling.

#### Fall-Winter-Summer

MW 7-9 p.m. T-VI Main Campus TTh 7-9 p.m. T-VI Montoya Campus

# 107-A: ADVANCED READING IMPROVEMENT AND SPELLING

This is an advanced reading class 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

TTh 7-9 p.m. T-VI Main Campus
TTh 7-9 p.m. T-VI Montoya Campus

#### 108: G.E.D. REVIEW IN WRITING SKILLS, MATHEMATICS, SCIENCE, SOCIAL STUDIES AND READING SKILLS

The five areas included in the GED (General Educational Development) examination are covered. They are: writing skills, social studies, science, reading skills and mathematics. Students are placed in this class if their pretest scores are in the middle range, which is approximately seventh grade overall. Much of this class can be planned for the individual student and students may complete materials at their own rate of speed. Students are encouraged to take the GED examination at the end of the trimester, but students with high demonstrated ability may take the test earlier.

The objective of this class is to prepare students for the GED examination. Such preparation enables students to complete the requirements of high school equivalency necessary for many jobs or positions.

The test is given free of charge and all textbooks are furnished to the student free on a card check-out basis.

#### Fall-Winter-Summer

MTWThF 8:20-11:15 a.m. T-VI Main Campus MTWThF 8-11 a.m. T-VI Montoya Campus MTWThF 12:20-3:15 p.m. T-VI Main Campus MTWThF 12 noon-3 p.m. T-VI Montoya Campus MTW 7-9 p.m. T-VI Main Campus MTW 7-9 p.m. T-VI Montoya Campus

This class can be offered in other locations if needed. Ask the registration monitors about locations.

Prerequisite: Persons wanting to take this class to prepare for high school equivalency exams must first take a pre-GED test at T-VI. Scores on that test will be used to help place the applicant in the best GED review class for his or her needs,

NOTE: Students should register for daytime GED classes at either campus between noon and 8:30 p.m. Monday through Thursday, 8 a.m. and 4:30 p.m. on Friday.

#### 109: CITIZENSHIP FOR ALIENS

This is a class in government and history of the United States 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 may also include information on national, state and municipal government. Free textbooks are given only to those students enrolled in the class.

#### Fall-Winter-Summer

TTh 7-9 p.m. T-VI Main Campus

# SKILL IMPROVEMENT COURSES

# **Changing Careers Course (SK440)**

# 5 Weeks (Main and Montoya Campuses)

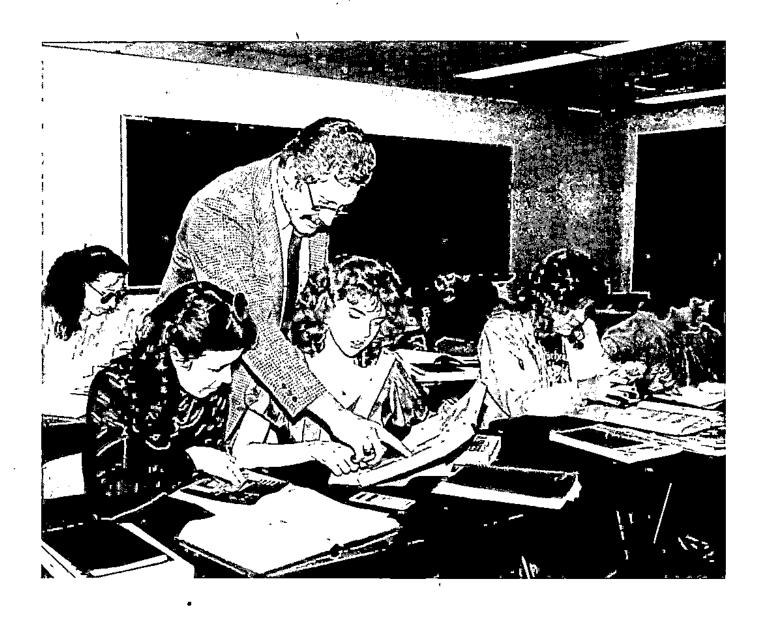
This course is designed for adults who have spent a long time as a homemaker or in another career, and who want or need to change careers, go to work, or return to school.

Changing Careers is offered each trimester at both campuses. The course meets for two hours a day, Monday through Friday, for five weeks. To meet different schedules, classes are offered at different starting times.

Anyone may enroll, and space is available first-come/first-served. The only cost for the

course is the \$5 Evening Division preregistration fee.

The course covers developing a positive self-image; self-assessment of marketable skills, abilities and interests; resume writing; interviewing techniques; the local job market and community resources; and help with personal decisions related to vocational and educational choices. Emphasis is placed on the many options open to people, including T-VI's Preparatory program, GED preparation classes and vocational-technical programs, other educational programs in Albuquerque, or entry into a job.



# **Business Education**

# 🕸 = transfers to a T-VI Day Division program

#### SK110: ACCOUNTING I

Principles of the double entry bookkeeping cycle, from the opening entry through the formal balance sheet and income statement, are covered. Business forms and their function, business terms, accuracy, neatness, orderliness, thoroughness and responsibility are included.

#### Fall-Winter

MW 7-9 p.m. Cibola High School Highland High School

> T-VI Main Campus T-VI Montoya Campus Valley High School

TTh 7-9 p.m. Del Norte High

\* School

\* T-VI Main Campus
T-VI Montoya Campus

#### Summer

MW or TTh T-VI Main Campus
T-VI Montoya Campus

TEXTS: College Accounting, 11th Ed.-\$17.25

Workbook-\$5.50

Boyd's Clothiers Practice Set-\$7.75

#### SK111: ACCOUNTING II

This is a continuation of Accounting I. Units cover purchasing and sales accounting, installment sales, inventory and prepaid expenses, tangible assets, accruals and reversing entries along with further study of financial statements. A unit on accounting for a partnership is also included.

#### Fall-Winter

MW 7-9 p.m. Highland High School

T-VI Main Campus

TTh 7-9 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

PREREQUISITE: Completion of a beginning class in double-entry bookkeeping or accounting

TEXTS: College Accounting, 11th Ed. -\$17.25

Workbook-\$5.50

Holling & Renz Practice Set-\$8.75

#### SK112: ACCOUNTING III

A continuation of Accounting II, various aspects of coporate accounting, the voucher system of accounting and accounting for a manufacturing business are covered. Cost accounting is introduced.

#### 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 Montoya Campus

PREREQUISITE: Completion of Accounting II or equi-

valent

TEXTS: College Accounting, 11th Ed. -\$17.25

Workbook-\$5.50

B. J. Patrick Manufacturing Company Practice

Set-\$9.25

### SK113: AUDITING

Auditing procedure, reports and working papers used in financial investigations are studied and analyzed. Audit practice with 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.

#### Fall

TTh 7-9 p.m. T-VI Main Campus

PREREQUISITE: Accounting I, II and III or equivalent

TEXTS: Principles of Auditing, 7th Ed.—\$17.50 Audit Problem: Crafters—\$11

### 

Instruction in basic bookeeping, incorporates the complete bookkeeping cycle. Included are preparation of the balance sheet, income statement, trial balance, worksheet, payroll records, petty cash disbursement record and subsidiary ledgers. Emphasis is on the principles of journalizing and posting from the combined cash journal. A practice set is used to help the student understand the complete procedure of double entry bookkeeping.

#### Fall-Winter

MW 7-9 p.m. T-VI Main Campus
TTh 7-9 p.m. T-VI Montoya Campus

TEXTS: Accounting Essentials for Career Secretaries, 4th

Ed.-\$9.75

Working Papers-\$5.25

Wesley R. Baker Practice Set-\$7.50

#### SK115: INCOME TAX ACCOUNTING

This class progresses from problems of taxpayers who use the short form to those of the higher bracket wage earner. Tax procedures for the self-employed person, investor, property owner, retired person, business partner and the small corporation are explained.

#### Fall

MW 7-9 p.m. Highland High School

Winter

TTh 7-9 p.m. T-VI Montoya Campus

PREREQUISITE: Completion of a double entry book-keeping cycle

TEXT: Income Tax Procedures—\$15

#### SK118: PAYROLL ACCOUNTING

Calculation of gross wages and local, state, and federal payroll reporting requirements are covered. Students are introduced to certified payroll requirements of certain federally-funded projects.

# Fall-Winter

TTh 7-9 p.m. T-VI Main Campus

TEXT: Payroll Records and Accounting—\$12.75

### **SK120: BUSINESS MATHEMATICS**

This class begins with a thorough review of arithmetic and proceeds to specific business problems. Forms, practices and formulas used in business—including discounts, mark-ups, mark-downs and percentages—are covered. Real estate math involving square footage, cubic footage, acreage calculations, market value methods, compound interest and depreciation are included.

#### Fall-Winter

MW 7-9 p.m.

T-VI Main Campus

TEXT: Business Mathematics, 3rd Ed.—\$15

#### SK125: BUSINESS ENGLISH

Basic grammar, punctuation, vocabulary and spelling are reviewed as they apply to business situations.

#### Fall-Winter-Summer

TTh

7-9 p.m.

T-VI Main Campus

TEXT: College English and Communication, 4th Ed.—

\$16

Communicating Problems—\$18

#### SK130: PUBLIC SPEAKING

A study of basic principles of spoken communications is followed by units on the art of conversation, meeting the public in person and by telephone, working with groups, giving a talk, employment interviews and parliamentary procedures.

#### Fall-Winter

MW

7-9 p.m.

T-VI Main Campus

TEXT: Speaking in Public-\$12,50

#### SK139: LEGAL SECRETARY

This is a specialized class for the beginning legal secretary or persons who want to work in the legal field. It includes a general background of basic legal terms, practice in dictation and transcription of legal terms and letters, and study of law office procedures as they apply to the legal secretary.

#### Fall-Winter

MW

7-9 p.m.

T-VI Main Campus .

PREREQUISITE: Proficiency of at least 60 wpm in typ-

ing

TEXTS: The Career Legal Secretary—\$18.50

Student Workbook—\$5.75

# SK145: PERSONAL LINES INSURANCE

Insurance history, fundamentals, marketing, underwriting, regulations, deductibles, homeowners, auto and special coverage are included in this course.

#### Fall-Winter

Th 7-9 p.m.

T-VI Montoya Campus

PREREQUISITE: Must be able to type at least 30 wpm



# SK146: COMMERCIAL LINES INSURANCE

Commercial lines of property and casualty insurance, excluding life insurance, are covered. Areas discussed include the coverage and rating of various commercial property casualty insurance policies and the coverage and rating of the commercial automobile policy. The last six weeks of the class are divided into coverage and rating of commercial fire insurance policies, commercial umbrella policies and worker's compensation policies.

#### Fall, Winter

 $M_{\perp}$ 

6:30-9:30 p.m. T-V1 Main Campus

NOTE: Students must supply their own rating manual.

# SK150: ELECTRONIC CALCULATORS AND FILING

Skills on the most widely-used electronic calculators, spirit duplicator and mimeograph machine are developed, and practical application of business mathematics is reinforced. Also covered are the processing, storing, retrieving and restoring of various kinds of records. Alphabetic, geographic, numeric, alpha-numeric and subject filing are explored.

### Winter

ΜŴ

7-9:30 p.m.

T-VI Montoya Campus

PREREQUISITE: Must be able to type at least 20 wpm by the touch method

LAB FEE: \$7

TEXTS: Electronic Calculators and Office Machines, 2nd Ed.—\$7.50

Records Management, 2nd Ed.—\$9.50

Records Management Lab Materials—\$9.50

# SK156: ALPHABETIC SHORTHAND

This system of rapid writing uses alphabetic abbreviations and 43 special rules. It is an easy, fast method of learning to take dictation at acceptable speeds for a job.

#### Fall-Winter

MW TTh

MW

7-9 p.m.

T-VI Main Campus

7-9 p.m.

T-VI Montoya Campus

#### Summer

7-9 p.m.

T-VI Main Campus

PREREQUISITE: Must be able to type at least 20 wpm by the touch method.

TEXTS: Stenoscript ABC Shorthand—\$10

Student Workbook—\$5,50

#### SK160: BEGINNING SHORTHAND

This class offers beginning instruction in the theory of symbol (Gregg) shorthand Series 90. Daily study and practice in the reading and writing of shorthand is imperative.

#### Fall-Winter

MW 7-9:30 p.m. T-VI Main Campus
TTh 7-9:30 p.m. Del Norte High
School

T-VI Montoya Campus

#### Summer

MW 7-9:30 p.m. T-VI Main Campus TTh 7-9:30 p.m. T-VI Montoya Campus

PREREQUISITE: Must be able to type at least 20 wpm by the touch method or be taking a class in typing

TEXTS: Gregg Shorthand for Colleges, Vol. I, DJS, 3rd

Ed.—\$18 Workbook, Vol. I—

Workbook, Vol. I—\$6.75 Student Transcript, Vol. I—\$6.25

### SK161: INTERMEDIATE SHORTHAND

This advanced shorthand class emphasizes skill and speed development. Regular attendance, study and practice are necessary.

#### Fall-Winter

MW 7-9:30 p.m. T-VI Main Campus TTh 7-9:30 p.m. T-VI Montoya Campus

#### Summer

MW 7-9:30 p.m. T-VI Main Campus

PREREQUISITE: A beginning class in shorthand; must be able to type at least 20 wpm by the touch method

TEXTS: Gregg Shorthand for Colleges, Vol. 2, DJS, 3rd

Ed.—\$18

Workbook, Vol. 2—\$6.75 Student Transcript, Vol. 2—\$6.25

#### SK164: TYPING-SHORTHAND REVIEW

This class is for persons who can type and take short hand but have not used either for some time and are now planning to return to work.

#### Fall-Winter-Summer

TTh 7-9:30 p.m. T-VI Main Campus:

PREREQUISITE: Minimum of one year of typing and one year of shorthand experience

TEXTS: College Typewriting, 10th Ed.—\$15.25 Refresher Course in Gregg Shorthand—\$11.75

# SK165: BEGINNING TYPING

Typing by the touch method and basic arrangement obusiness letters, memos, reports, tables and forms are in cluded in the production units. Drills to increase speed and accuracy are continued throughout the class.

# Fall-Winter

MW 7-9:30 p.m. Cibola High School Highland High School

T-VI Main Campus T-VI Montoya Campus

Valley High School

TTh 7-9:30 p.m. Del Norte High School T-VI Main Campus

Summer

MW or TTh 7-9:30 p.m. T-V1 Main Campus

T-VI Montoya Campus

T-VI Montoya Campus

TEXT: College Typewriting, 10th Ed.—\$15.25

### SK166: INTERMEDIATE TYPING

Basic typing skills are reviewed with emphasis on building speed, accuracy and number control. Production emphasis is on business letters, reports and forms.

#### Fall-Winter

MW 7-9 p.m. Cibola High School

Highland High School T-VI Montoya Campus

TTh 7-9 p.m. T-VI Main Campus

#### Summer

MW 7-9 p.m. T-VI Montoya Campus' TTh 7-9 p.m. T-VI Main Campus

PREREQUISITE: The ability to type at least 20 wpm by the touch system and background knowledge of manuscript and tabulation typing

TEXTS: College Typewriting, 10th Ed.—\$15.75 Lab Materials, Part 2—\$7.00

#### SK167: ADVANCED TYPING

This class is for the typist who wishes to increase speed, accuracy and production output of office typewriting. Letter styles, fill-in business forms, manuscripts, financial reports and the making of multiple copies for office work are developed.

#### Fall-Winter

TTh 7-9 p.m. T-VI Main Campus

PREREQUISITE: The ability to type at least 40 wpm by the touch system and background knowledge of manuscripts with footnotes, tabulation typing with subheadings, column headings and outline typing

TEXTS: College Typewriting, 10th Ed.—\$15.25 Lab Materials; Part 3—\$7.00

# SK170: OFFICE SUPERVISION

The relationships of people within a business environment, including managers with employees and employees with employees, are reviewed. Supervisory authority and responsibility factors in supervision are discussed, and human relationships and measurements used for decision-making are included. This class is recommended for office employees now in a leadership position and those interested in supervision.

#### Fall-Winter

Th 7-9 p.m. T-VI Main Campus

LAB FEE: \$7

# SK172: HUMAN RELATIONS AND PERSONNEL DEVELOPMENT

This class is for persons who want to explore human behavior and develop a more positive attitude. Applications to family and work situations are stressed, including understanding manager/employee relations. This class is recommended for employee advancement to supervisory positions.

### Fall

MW 7-9 p.m. T-VI Main Campus

#### Summer

MW 7-9 p.m. T-VI Montoya Campus

TEXT: Human Relations, 2nd Ed.-\$17

#### SK173: HUMAN RELATIONS AND SUPERVISION

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.

#### Winter

7-9 p.m.

MW

T-VI Main Campus

PREREQUISITE: Human Relations and Personnel Development

#### SK175: BANK TELLER

Bank organization, human relations, personal appearance, interrelationships and banking ethics are included in this introductory class.

#### Fall-Winter

MW TTh 7-9 p.m. T-VI Montoya Campus

7-9 p.m.

T-VI Main Campus

#### Summer

TTb TTh 7-9 p.m. T-VI Main Campus

7-9 p.m.

T-VI Montoya Campus

TEXT: Teller World-\$15.50

### SK180: SMALL BUSINESS MANAGEMENT

This class provides fundamental business program and management skills for owners and managers of any type of business.

# Fall-Winter-Summer

MW ·

7-9 p.m. T-

T-VI Main Campus

TEXT: Successful Small Business Management, 3rd

Ed.-\$19.75



#### SK181: 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-Summer

ΜW

7-9 p.m.

T-VI Main Campus

TEXT: Accounting Principles and Practices, Module

IA, 2nd Ed.—\$13.25

Accounting Simulation I, 2nd Ed., \$7.00

### 热 SK182: SMALL BUSINESS LAW

A basic knowledge of law as it applies to small business dealings is provided. Emphasis is on commercial transactions, contracts, commercial paper, personal property insurance and Uniform Commercial Code.

#### Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

TEXT: College Law for Business, 9th Ed.—\$11.75

#### **SK410: CASHIERING**

This class teaches cash register operation by the touch method. Procedures for handling cash, checks and credit card transactions and the role of the cashier in meeting the public are covered. Basic mathematics and bookkeeping skills are reviewed and operation of the produce scale is taught. Punctuality, dependability, honesty and personal grooming are emphasized.

#### Fall-Winter

M, T, or W

6:30-9:30 p.m. T-VI Main Campus

# Summer

M or T

6:30-9:30 p.m. T-VI Main Campus

LAB FEE: \$7

TEXTS: Crown Supermarket, 4th Ed.—\$3
Marketing Math—\$5.75

### SK411: SALESMANSHIP

This class is for persons who want to enter the field of selling or who want to upgrade salesmanship skills. Leadership and motivation are stressed.

#### Fall

MW

7-9 p.m.

T-VI Main Campus

TEXT: Professional Selling, 3rd Ed.—\$17.75

#### **SK412: MARKETING AND RETAILING**

This class covers many facets of marketing and retailing from the processing of goods or services to the consumer. Areas such as inventory, buying, pricing, advertising, displaying, merchandising, credit management and services are included.

#### Winter

MW

7-9 p.m.

T-VI Main Campus

TEXT: Marketing Principles, 2nd Ed. - \$22.25



#### SK416: FASHION CONCEPTS AND MERCHANDISING

In this class students are introduced to the world bf fashion merchandising. Topics covered are fashion terminology, elements of design, apparel sizing and styling, basic construction and current trends in the fashion industry.

Fall

TTh.

7-9 p.m.

T-VI Montoya Campus

TEXT: Introduction to Fashion Merchandising—\$15.50

#### SK430: REAL ESTATE PRACTICE

This is a class in general real estate practice and is for persons who need to review the field and for those who want a basic knowledge of the real estate business.

# Fall-Winter

MW TTh 7-9:30 p.m.

7-9:30 p.m.

T-VI Main Campus T-VI Montoya Campus

#### Summer

MW

7-9:30 p.m.

T-VI Main Campus

Real Estate Principles and Practices, 7th Ed. TEXT:

\$21.50

### SK431: REAL ESTATE LAW

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-Summer

MW

7-9:30 p.m. T-VI Main Campus

'7-9:30 p.m. T-VI Montoya Campus

TEXT: Real Estate Law, 9th Ed. -\$19.75



#### SK432: REAL ESTATE APPRAISAL

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

TTh

7-9:30 p.m. T-VI Main Campus

MW

7-9:30 p.m.

T-VI Montoya Campus .

PREREQUISITE: Completion of Real Estate Practice TEXT: The Appraisal of Real Estate, 7th Ed.-\$17

# SK433: REAL ESTATE FINANCE

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.

TTh

7-9:30 p.m.

T-VI Montoya Campus

#### Winter

TTh

7-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Real Estate Practice .TEXT: Essentials of Real Estate Finance, 2nd Ed. -\$25

#### SK434: REAL ESTATE INVESTMENT

The background necessary to understand the fundamentals of real estate investment is provided. Major topics include methods of financing investment real estate, tax advantages, projected income potential and preparation and evaluation of real estate analysis forms.

# Fall-Winter

MW.

7-9:30 p.m.

T-VI Montoya Campus

PREREQUISITES: Completion of Real Estate Practice and Real Estate Law

TEXT: Essentials of Real Estate Investment—\$25

# BUSINESS OCCUPATIONS LEARNING CENTER

The BOLC serves T-VI students and members of the public who want to review or learn a particular subject or skill on an individual basis.

Students may begin using this center at anytime during the trimester and stop going to the center when personal objectives have been met. Hours are arranged to suit individual needs.

The Main and Montoya Campus centers are open from 8 a.m. to 9 p.m., Monday through Thursday; both centers are open 8 a.m. to 5 p.m. Fridays; and the Main Campus center from 10 a.m. to 2 p.m. on Saturdays.

A fee of \$15 per course is required of students who are not attending T-VI full-time.

Instruction is conducted using new equipment which includes electric typewriters, electronic office machines, transcribing machines, textediting typewriters and audio-visual equipment.

#### SUBJECT/SKILL AREAS

**Accounting Fundamentals** 

(Prerèquisite: Business Mathematics II or Placement Test) A basic understanding of accounting principles and their application is provided.

#### **Business Mathematics Fundamentals**

This review of fundamental arithmetic operations builds speed and accuracy. The percentage formula for solving business problems is included.

#### **Business Mathematics II**

(Prerequisite: Placement Test) The mathematics of interest, marketing, payroll and taxes are covered.

#### Cash Register

Cash register operation and procedures for handling cash, checks and credit card transactions are covered.

#### Communications Review

Instruction is in grammar, spelling and punctuation.

#### **Electronic Calculating**

Skill is developed on electronic calculators.

### Machine Shorthand

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

#### Gregg Shorthand I

All theory and brief forms are learned leading to the ability to read, write and transcribe Gregg shorthand.

#### Gregg Shorthand II

(Prerequisite: Ability to write Gregg shorthand at 60 words per minute and transcribe into mailable form)

Theory and brief forms are reviewed with emphasis on dictation and transcription.

#### **Shorthand Review**

This course is for students who have typing and Gregg or ABC shorthand skills but need review and speedbuilding.

#### Alphabetic Shorthand I

This shorthand system utilizes alphabetic characters. Students learn to read, write, and transcribe shorthand notes.

#### Forkner Shorthand I

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

#### Shorthand Speedbuilding

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

#### Typing I

Students with no prior formal typing courses are encouraged to enroll in a typing class for techniques before entering this skill area. The keyboard and basic techniques are reviewed and mechanics, letters and tabulation are taught.

#### Typing II

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

# Typing III

(Prerequisite: Typing II or placement test) This continuation of Typing II provides more complex production tasks including abstracted tables, line justification and secretarial projects.

## Keypunch (Main Campus Only)

Skill is developed on the alphanumeric keyboard and emphasis is placed on the program card.

#### Telephone Techniques

Familiarization with accepted telephone manners and practices is the objective of this mini-class.

### **Machine Transcription**

Instruction in the use of transcribing machines to prepare mailable business correspondence is provided.

# Medical Transcription

(Prerequisite: Machine Transcription) This area develops familiarity with medical terminology and transcription.

# Legal Transcription

(Prerequisite: Machine Transcription) Legal terminology, forms and transcription are included.

#### Records Management

This area provides basic principles of filing.

#### **Word Processing**

(Prerequisite: Demonstrated English and typing skills) Training is on text-editing, magnetic keyboard typewriters with emphasis on the capabilities and mechanics of the machines.

#### Proofreading

Awareness of the most common types of error in written messages and the standard marks for correcting them is the objective of this class.

# **Health Education**

### SK450: MEDICAL OFFICE ASSISTANT, **ADMINISTRATIVE**

This class provides a person with clerical skills for employment as a medical office aide. Instruction conceatrates on medical terms, greeting the patient, office management, public relations, health and hospitalization insufance, basic medical law and ethics, and credit and collection records.

#### Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

PREREQUISITES: Must have filing skills and type at least 40 wpm

TEXTS: Medical Office Assistant, Administrative and Clinical, 5th Ed. - \$23

Medical Terminology, 4th Ed.-\$16

# SK451: MEDICAL OFFICE ASSISTANT, CLINICAL

Instruction concentrates on medical terms, basic medical laws and ethics, preparing the room, preparing the patient assisting the doctor, selecting and sterilizing instruments selecting materials and supplies for the doctor and preparing medication.

#### Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

PREREQUISITE: Must type at least 40 wpm

TEXTS: Medical Office Assistant, Administrative and

Clinical, 5th Ed. - \$23

Medical Terminology, 4th Ed. -\$16



#### SK452: HOSPITAL WARD CLERK

An introduction to medical terminology, communications, the working environment, patient-centered activities and the understanding of medication orders is provided. Punctuality, dependability and personal hygiene are emphasized.

#### Fall-Winter-Summer

MW

7-9 p.m. T-VI Montoya Campus

PREREQUISITE: High School Diploma or equivalent TEXTS: Unit Clerking in Health Care Facilities-\$20.50 Medical Terminology, 4th Ed. - \$16

# SK490: EMERGENCY CARE (FIRST RESPONDER)

This class is part of the emergency medical system and follows the national D.O.T. guidelines. It prepares the student for emergency situations until help arrives. There are lectures and labs on emergency care of the sick and injured. CPR certification is included.

#### Fall

MW

7-9'p.m.

T-VI Main Campus

#### Winter

TTh

7-9 p.m.

T-VI Montoya Campus

TEXT: First Responder, Text/Workbook-\$17.75

# SK590: EMERGENCY MEDICAL TECHNICIAN

This class covers all emergency medical techniques currently used by Emergency Medical Technicians who provide emergency care with rescue squads or ambulances. The 47 class lessons include 114 hours of classroom didactics and practice sessions and nine hours of hospital rotation, observation and training with three hours of water extracation. This class will prepare students for their state and/or national certification.

#### Fall-Winter-Summer

MW or TTh

6:30-9:30 p.m. T-VI Main Campus

LAB FEE: \$14

TEXTS: Emergency Care of the Sick and Injured Text/ Workbook, 3rd Ed.-\$16 Answer Key—\$4.50

# SK591: EMERGENCY MEDICAL TECHNICIAN RECERTIFICATION

This class is designed to recertify a currently certified EMT-B with the newest and most up-to-date equipment and techniques that are covered in the state and national registry guidelines.

### Summer

8 a.m.-12 p.m. T-VI Main Campus NOTE: This class will meet for nine consecutive Saturdays.

PREREQUISITE: Current New Mexico EMT Certificate TEXTS: Emergency Care of the Sick and Injured, 3rd Ed., Text/Workbook-\$16 Answer Key-\$4.50

# **Technical Education**

### SK351: ALGEBRA I

Field properties of the real number system are applied to the algebraic structure, Emphasis is on written problems and elementary functions and their graphs, including systems of linear equations in two variables.

#### Fall-Winter

Cibola High School 7-9 p.m. MW

Highland High School

T-VI Montoya Campus

T-VI Main Campus TTh 7-9 p.m.

#### Summer

T-VI Montoya Campus 7-9 p.m. MW 7-9 p.m. T-VI Main Campus TTh

TEXT: Intermediate Algebra, 4th Ed.—\$18.50

#### SK352: ALGEBRA II

There is a strong emphasis on algebraic skills with significant amount of attention paid to understanding concepts in this class. Exponents and involution processes; quadratic equations, their solutions and graphs; conic sections; and exponential and logarithmic functions are developed. Applications of these concepts as models for solutions of physical problems are practiced.

#### Fall-Winter-Summer

T-VI Main Campus 7-9 p.m. MW T-VI Montoya Campus 7-9 p.m. TTh

PREREQUISITE: Completion of Algebra I TEXT: Intermediate Algebra, 4th Ed. -\$18.50

# SK356: TRIGONOMETRY

The necessary background in trigonometry and beginning analytic geometry for the technician is provided. Numerous applications from many fields of technology are included. Emphasis is on the trigonometric functions, identities and inverse functions, vectors and solutions of oblique triangles, graphs of the trigonometric functions and applications of the graphs, exponential and logarithmic functions and trigonometric equations. A review of basic analytic geometry, polar coordinates and applied problems help students develop a feeling for mathematical methods in problem solving.

#### Fall-Winter

T-VI Main Campus MW 7-9 p.m.

PREREQUISITE: Completion of Algebra I and II .

TEXT: Basic Technical Mathematics with Calculus, 3rd Ed.-\$22

#### SK360: ELECTRONICS I

This is a study of DC electricity applied to electronics. Units of instruction include 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-Summer

6:30-9:30 p.m. T-VI Montoya Campus MW 6:30-9:30 p.m. T-VI Main Campus TTh

PREREQUISITE: Completion of Algebra I or equivalent

LAB FEE: \$14

TEXT: Basic Electronics, 4th Ed. - \$20.50

#### SK361: ELECTRONICS II

Principles of AC covering impedance, vectors, circuit analysis, tuned circuits, transformers, polyphase currents and filters are studied. The laboratory includes the use of the oscilloscope as a tool in electronics.

#### Fall-Winter-Summer

6:30-9:30 p.m. T-VI Montoya Campus TTh

PREREQUISITE: Completion of Electronics I or equivalent

LAB FEE: \$10

TEXT: Basic Electronics, 4th Ed. - \$20.50

#### SK362: ELECTRONICS III

In this class, the basic concepts of semiconductor fundamentals and the PN function are explored and developed to achieve a thorough understanding of the transistor and diodes. Emphasis is on approximating transistor amplifying circuits from a practical standpoint. These approximating techniques are verified in the laboratory for both normal and abnormal circuit conditions.

#### Fall-Winter-Summer

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Electronics II or equivalent

LAB FEE: \$8

TEXT: Electronic Principles—\$20

# SK363A: DATA COMMUNICATIONS AND TELEPROCESSING SYSTEMS

This class addresses distributed processing, on-line systems, teleprocessing and terminal based systems. Topics will include basic computer communication techniques, components used in computer communications networks, error detection techniques, network protocols and common facilities used for computer communications. Also addressed are the problems and solutions of telephone lines' ability to carry bits of information and how computers connect to other computers and terminals.

#### Fall-Winter

6:30-9:30 p.m. T-VI Main Campus TTh

PREREQUISITE: Knowledge of a programming lan-

TEXTS: Data Communications and Teleprocessing Sys-

tems-\$24.50

Illustrated Computer Dictionary-\$7.50

# SK364: DIGITAL CIRCUITS

This is an introduction to AND, NAND, OR, NOR and INVENTER logic gates and their uses in counters, flipflops, shift registers, latches, adders and other logic circuit applications. Class time is divided between lecture and laboratory in which experiments and exercises involving the logic gates and devices are performed.

#### Winter-Summer

6:30-9:30 p.m. T-VI Main Campus TTh

PREREQUISITE: Completion of Algebra I

LABFEE: \$8

TEXT: Digital Electronics: An Introduction to Theory

and Practice, 2nd Ed.-\$19.75

#### **SK365: INTEGRATED CIRCUITS**

The study of advanced transistor theory, construction and theory of linear integrated circuits is introduced. Operational amplifiers are introduced. Approximately one-half of the class time will be spent verifying topics covered during the theory portion of the class.

#### Fall

TŢh

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Electronics III or equivalent

LABFEE: \$8

TEXT: Integrated Circuits and Semiconductor Pevices—\$19.75

# SK366: TELEVISION SERVICING

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 purty and convergence adjustments are included.

#### Fall-Winter

MW

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Electronics IV or equivalent

TEXTS: Basic Television, Theory and Servicing—\$22. TV Symptom Diagnosis—\$8

# SK368: NABER 2-WAY RADIO TECHNICIAN CERTIFICATION (Formerly FCC General Radiotelephone License Preparation)

Preparation for the NABER (National Assn. of Business and Educational Radio) technician examination is provided. NABER certification has replaced the Federal Communications Commission (FCC) Second-Class and General Radiotelephone licenses. Material covered includes AM, FM and SSB transmitters, L and Mobile service rules and regulations, mobile and microwave relays and repeaters, TDM and FDM multiplex techniques, and wireline interconnection systems. Material is updated greatly from that previously used by FCC for its examinations.

### Winter

MW

6:30-9:30 p.m. T-VI Main Campus

NOTE: This course is offered subject to NABER publishing suitable guidelines for its examinations. As of catalog press time, NABER had not released any guidelines for examination materials.

PREREQUISITE: Minimum of three years of radio communication experience or equivalent education

TEXT: To be announced when materials are available.

# SK369: THEORY OF ELECTRONIC MICROPROCESSORS

An overview of the basic architecture of a microprocessor (CPU) is provided. Attention is directed toward the additional system components (memory and I/O devices) that are required to enable a microprocessor to function as a microcomputer. Emphasis is on programming the communications technique that provides control over the processing within a microcomputer.

#### Fall-Winter

TTh.

· 6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Digital Circuits

LAB FEE: \$10

TEXTS: 8080A Software Design—\$11 8080A Bug Book—\$11

# SK369A: MICROPROCESSOR INTERFACING

This class covers many of the hardware components of a computer system, including keyboards, video interfacing, serial interfacing and interfacing to a printer. An introduction to robotics is included also.

#### Fal

MW

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITES: Completion of Theory of Electronic Microprocessors and Digital Circuits

LAB FEE: \$10

TEXT: The 8080A Bug Book-\$11

#### SK370: DRAFTING I

General drafting theory and techniques needed to produce multiview and sectional view drawings are introduced. The student also learns proper care and handling of equipment.

#### Fall

MW or TTh

6:30-9:30 p.m. T-VI Main Campus 6:30-9:30 p.m. T-VI Montoya Campus

## Winter-Summer

MW TTh

MW

6:30-9:30 p.m. T-VI Main Campus 6:30-9:30 p.m. T-VI Main Campus

NOTE: Students must purchase their own instruments.

LAB FEE: \$10

TEXT: Technical Drawing, 7th Ed. -\$23.75

#### SK371: DRAFTING II

Multiview drawings, sectional views, auxiliary views, threads and fasteners, isometric views, perspective views, intersections, development and drafting mathematics are included.

# Fall-Winter

TTh TTh 6:30-9:30 p.m. T-VI Main Campus 6:30-9:30 p.m. T-VI Montoya Campus

PREREQUISITE: Beginning drafting class or equivalent experience

LAB FEE: \$10

TEXT: Technical Drawing, 7th Ed. -\$23.75

# SK372: ARCHITECTURAL DRAFTING I

The student is introduced to the techniques and materials common in architectural drafting and solves problems in detailing and completing working drawings for residential structures.

### 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

PREREQUISITE: Beginning drafting class or equivalent experience

LAB FEE: \$10

TEXT: Architectural Drawing and Planning, 3rd Ed.—

\$20.75



#### SK373: BUILDING MATERIALS AND METHODS

Properties of building materials relating to actual methods of light construction and building design are introduced. Blueprint reading, zoning, building codes, material estimates, aspects of solar energy and financing are included.

#### Fall-Winter

TTh 6:30-9:30 p.m. T-VI Main Campus

TEXT: Materials and Methods for Contemporary Con-

struction, 2nd Ed.-\$19.50

### SK374: ARCHITECTURAL RENDERING

Use of pencils, pens and black ink to make shadings and shadows to obtain scale, depth and perspective in black-and-white architectural drawings and surrounding land-scapes is taught. After the concepts of depth and perspective are learned, heavy emphasis is on the use of brushes and colored inks to make multicolored three-dimensional renditions of interior and exterior views incorporating one or more vanishing points.

#### Winter

TTh

6:30-9:30 p.m. T-VI Main Campus

NOTE: Students must provide their own supplies with the exception of paper.

PREREQUISITE: Completion of Architectural Drafting

I or equivalent

LAB FEE: \$10

# SK376: TECHNICAL WRITING

The class consists of two interrelated parts: a skills brush-up section and a skills application section. The overall emphasis of the class is upon understanding the style and purpose of technical writing. Class objectives include: mastering the concepts of control, brevity, clarity and exactness; and the processes of descriptions, classification, documentation and interpretation. Simulated on-the-job writing exercises provide practice in practical skill applications.

### Fall-Winter

MW

7-9 p.m.

T-VI Main Campus

TEXT: Handbook of Technical Writing, 2nd Ed.—

\$10.50

#### ŠK380: INTRODUCTION TO DATA PROCESSING

Basic data processing concepts, purposes, equipment systems, procedures, organization and computer oriented approaches to automated data processing are provided.

#### Fall-Winter-Summer

MW or TTh MW or TTh 6:30-9:00 p.m. 6:30-9:00 p.m.

o,m. T-VI Main Campus o,m. T-VI Montoya Campus

LAB FEE: \$3.50

TEXT: Introduction to Data Processing, 2nd Ed.—. \$19.50

#### SK381: RPG II

This class is an application of Report Program Generator, II, featuring a variety of business and commercial applications. RPG II specification codes and their uses are covered in depth.

#### Summer

TTh

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Introduction to Data Processing or equivalent

TEXT: RPG II with Business Applications—\$18.50

# SK382: ASSEMBLY LANGUAGE CODING I

Concepts of data storage and manipulation using the IBM/360 instruction set are included. Fundamentals of binary and packed decimal arithmetic compare instruction, branching and addressing techniques. Output format and editing are also included.

#### Fall

TTh

6:30-9 p.m. T-VI Main Campus

PREREQUISITE: Completion of Introduction to Data Processing or equivalent

TEXT: 370/360 Assembler Language-\$23

#### SK383: ANSI COBOL

An introduction to the development and use of the four separate divisions of American National Standards Institute COBOL verbs, paragraphs, sentences, phrases, clauses and I/O overlapping. Programs of the proper difficulty and application will be written, debugged and executed.

# Fall-Winter-Summer

MW MW 6:30-9:30 p.m. T-VI Main Campus 6:30-9:30 p.m. TVI Montoya Campus

PREREQUISITE: Completion of Introduction to Data Processing or equivalent

TEXT: Introductory Structured COBOL Programning—\$16.50

# SK383A: ADVANCED ANSI COBOL

This class continues development of programming skills in the ANSI COBOL language with emphasis on the more complicated statements and clauses plus advanced file organization concepts.

#### Fall-Winter-Summer

TTh TTh 6:30-9:30 p.m. T-VI Main Campus 6:30-9:30 p.m. T-VI Montoya Campus

PREREQUISITE: Completion of ANSI COBOL or equivalent

TEXT: Advanced Structured COBOL—\$19.75

#### SK384: FORTRAN IV PROGRAMMING

This introduction to the FORTRAN language, through a variety of business and mathematical problems, illustrates iteration techniques, sub-routine applications, array manipulations and elementary statistical and business routines. Also included is a survey of all FORTRAN capabilities with illustration through application in programs.

### Fall-Winter-Summer

MW

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITES: Completion of Introduction to Data Processing or equivalent and a basic Algebra class

TEXT: FORTRAN IV and ANSI FORTRAN 77-\$15.50

#### SK385: DATA ENTRY (KEYPUNCH)

Persons are prepared for entry-level data entry positions with training on the keypunch as well as extensive training in data entry on microcomputers.

#### Fall-Winter-Summer

MTWTh

4:15-6:15 p.m. T-VI Main Campus

PREREQUISITE: Must be able to type at least 25 wpm

LAB FEE: \$15

TEXT: Data Entry Activities—\$5

#### SK386: BASIC LANGUAGE PROGRAMMING

This class covers the functions and uses of the BASIC programming language. Techniques for interactive program development are illustrated through application.

#### Fall-Winter-Summer

MW or TTh 6:30-9:30 p.m. T-VI Main Campus MW or TTh 6:30-9:30 p.m. TVI Montoya Campus

PREREQUISITE: Completion of Introduction to Data Processing or equivalent

TEXT: Introduction to Computer Programming Lan guage with the BASIC Language—\$15.75

# SK387: ADVANCED BASIC LANGUAGE PROGRAMMING

Emphasis is placed upon interactive programming, program structure, and format. The use of key values in sorted data directories for rapid data retrieval is introduced and used. Various search, sort and merge routines are discussed and used in problems involving inventory control, payroll and other business applications. Considerable time will be spent learning efficient use of disk for data storage and retrieval. Advanced problem solving will involve manipulation of sequential and random access data files with large data base involved.

#### Fäll-Winter-Summer

MW

6:30-9:30 p.m. TVI Main Campus

PREREQUISITE: Completion of BASIC Language Programming

TEXT: BASIC Programming: A Structured Approach— \$15.75

## SK388: JOB CONTROL LANGUAGE

The utilities, sorts and job control language for the Data General M-600 and the IBM 4331 systems are studied.

#### Fall-Winter

TTh

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Introduction to Data Processing or equivalent

LAB FEE: \$8

# SK389: PROGRAMMING MICROCOMPUTERS IN BASIC

This class uses microcomputers and covers the BASIC language for personal computers.

# Fall-Winter-Summer

MW

6:30-9:30 p.m. T-VI Montoya Campus

TTh 6:30-9:30

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Introduction to Data Processing or equivalent

LAB FEE: \$6.50

TEXT: BASIC and the Personal Computer-\$14

# SK390: PASCAL PROGRAMMING

This class teaches the PASCAL language on either the IBM main frame computer or microcomputers.

#### Fall-Winter-Summer

MW TTh 6:30-9:30 p.m. T-VI Main Campus 6:30-9:30 p.m. T-VI Montoya Campus

PREREQUISITE: Introduction to Data Processing or equivalent

**LAB FEE: \$6.50** 

TEXT: Oh! PASCAL!—\$15.75

#### SK391: DATABASE CONCEPTS

General concepts and organization of database systems are included in this class. Practical experience is gained through the use of several different DATABASE MANAGEMENT SYSTEM PACKAGES on microcomputers and an IBM main-frame.

#### Fall-Winter-Summer

TTh

.6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Job Control Language and Advanced ANSI COBOL

LAB FEE: \$6.50

TEXT: Database Processing-\$26

#### SK392: CLANGUAGE

This class covers the C Programming Language using Apple microcomputers and IBM PCs. It includes the basic data types—bytes, short integers, long integers, and single-and double-precision floating point numbers. Pointers to other data also are covered.

#### Fall-Winter-Summer

MW

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of a programming language class or work experience as a programmer

**LAB FEE: \$6.50** 

**TEXT:** The C Programming Language—\$16.50

# SK393: MICROCOMPUTER ASSEMBLER LANGUAGE PROGRAMMING

Assembler language for microcomputers is covered in this class. Students learn to write utilities and control the system of a microcomputer.

# , Summer

TTh

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Introduction to Data Processing

LAB FEE: \$6.50 '

TEXT: The 8086 Book-\$10.75

# Trades and Industrial Education

There are two special programs offered by the Evening Division evenings and weekends for which application is made through the Trades and Industrial Education Department Office:

# 0613035—CULINARY APPRENTICESHIP PROGRAM

Tuesdays 3:30-7:15 p.m. T-VI Main Campus PREREQUISITE: To be admitted, the individual must be currently employed full-time in the cooking industry.

**PREADMISSION** FEE: \$20 (paid to the Trades and Industrial Education counselor).

NOTE: This is a continuing, three-year apprenticeship program with beginning students admitted each trimester. The program combines onthe-job experience with classroom instruction and results in skill levels as a Certified Cook.

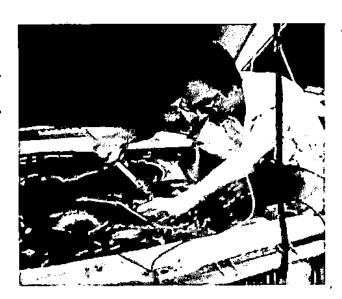
TEXT: Must be purchased through the Secretary, ACF Local Chapter.

# 0170036—POLE CLIMBING

Saturdays 8 a.m.-12 noon T-VI Main Campus NOTE: This combined laboratory/related theory class provides instruction in safety, equipment use, climbing and maneuvering techniques up to the 18-foot level on stepped and unstepped poles, and use of ladders on poles and span lines. The class meets for 15 Saturdays.

**PREADMISSION FEE:** \$20 (paid to the Trades and Industrial Education counselor).

PERSONAL EQUIPMENT FEE: \$15 (paid to the Trades and Industrial Education counselor).



# SKILL IMPROVEMENT CLASSES:

# SK350: GENERAL MATHEMATICS

Addition, subtraction, multiplication and division with whole numbers, common fractions, decimal fractions, mixed numbers and denominate numbers are reviewed. Elementary algebra and geometric constructions are also reviewed.

#### Fall-Winter .

MW 7-9 p.m. Highland High School

TEXT: General Trade Math-\$14.75

#### SK210: 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-Summer

MW or TTh 6:30-9:30 p.m. T-VI Main Campus

LAB FEE: \$15

TEXT: Auto Mechanics Fundamentals—\$13

#### SK510: AUTOMOTIVE BRAKES

This class offers basic theory and practice in brake system construction, operation and repair. Students will overhaul hydraulic brake components, machine drums and rotors on the brake drum lathe. The students will also rebuild disc and standard brakes.

#### Fall-Summer

6:30-9:30 p.m. T-VI Main Campus

LAB FEE: \$12

TTh

TŤħ

TEXT: Automotive Suspensions, Steering, Alignment and Brakes, 5th Ed.—\$12

### SK510A: AUTOMOTIVE FRONT-END ALIGNMENT

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 are also covered.

#### Winter

6:30-9:30 p.m. TVI Main Campus

TEXT: Automotive Suspensions, Steering, Alignment and Brakes, 5th Ed.—\$12

# **SK511: AUTOMOTIVE AIR CONDITIONING**

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.

Summer

6:30-9:30 p.m. T-VI Main Campus

LAB FEE: \$12

TTh

TEXT: Automotive Air Conditioning, 4th Ed.—\$10

#### SK512: AUTOMOTIVE ELECTRICITY

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 include: motor wiring diagrams and the 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

LABFEE: \$12

TEXT: Automotive Electrical Systems, Shop and Classroom Manuals—\$22,50

#### SK513: AUTOMOTIVE CARBURETION

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: \$12

**TEXT:** Basic Carburetion and Fuel Systems—\$8

#### SK514: AUTOMOTIVE TUNE-UP AND EMISSIONS I

The basic principles of automotive carburetion and tune up and their relationship to automobile exhaust emissions basic emissions system diagnosis, component-analysis, testing and servicing procedures are stressed with the use of infrared and electronic scope equipment.

Fall-Winter-Summer

MW

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Automotive Carbure tion

LAB FEE: \$12

TEXTS: The Automotive Oscilloscope—\$5.75

Automotive Emission Control, 3rd Ed.—\$15

#### SK515: AUTOMOTIVE TUNE-UP AND EMISSIONS I

This class covers basic principles of feedback sensors adjusting carburetion and ignition timing, component test ing, computer testing and calibration, and scope and infra red operation. Testing and servicing procedures with the use of infrared and electronic equipment are stressed.

Winter

TTh

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Automotive Tune-Up and Emissions I

LABFEE: \$12

TEXTS: The Automotive Oscilloscope—\$5.75

Automotive Emission Control, 3rd Ed.—\$15

#### SK520: AUTOMOTIVE BODY REPAIR

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

MW or TTh 6:30-9:30 p.m. T-VI Main Campus

NOTE: Students may not work on their own cars

LAB FEE: \$30

TEXT: The Principles of Auto Body Repairing and Repainting, 3rd Ed. -\$18

NOTE: Students must purchase painting supplies

#### SK530: 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-shoot-

Fall-Winter-Summer

МW

6:30-9:30 p.m. T-VI Main Campus

**TEXT:** Small Gas Engines 2- and 4-Cycle—\$9

#### SK540: ARC WELDING

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 MW or TTh 6:30-9:30 p.m. T-VI Main Campus

6:30-9:30 p.m. T-VI Montoya Campus

LAB FEE: \$65

TEXTS: Welding Skills and Practices, 5th Ed.—\$12.25

Study Guide—\$4.50

#### SK541: OXYACETYLENE WELDING

Welding safety, identification of metals, types of joints, cutting procedures, tubing welding, welding alloys, brazing and fusion welding are stressed in this class.

#### Fall-Winter

T or Th

6:30-10:30 p.m. T-VI Main Campus

6:30-10:30 p.m. T-VI Main Campus

**LAB FEE: \$65** 

TEXTS: Welding Skills and Practices, 5th Ed.—\$12.25

Study Guide-\$4.50

### **SK542: INERT GAS WELDING**

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.

#### Fall-Summer

MW

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Must have completed an arc and a gas welding class

LAB FEE: \$75

TEXTS: Welding Skills and Practices, 5th Ed.—\$12.25

Study Guide—\$4.50

# SK543: PIPE WELDING '

Commonly used types of pipe welding are emphasized. Units of instruction include welding safety, position butt welds on horizontal and vertical pipe, 90° branch connection pipe and forged fittings for welding and lateral pipe connections,

Winter

MW

6:30-9:30 p.m. T-VI Main Campus

Summer

MW

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Arc Welding

LAB FEE: \$65

TEXT: Pipe Welding Techniques, 2nd Ed.—\$7

#### **SK225: 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.

### Winter-Summer

MW or TTh

6:30-9:30 p.m. T-VI Main Campus

LABFEE: \$18

TEXTS: Technology of Machine Tool, 2nd Ed.—\$20.50 Workbook, 2nd Ed.—\$9.25

#### SK226: MACHINE TOOL NUMERICAL CONTROL

The history of numerical control, TAB sequential, fixed block and word address formats, as well as the programming and tape preparation necessary for numerical control machining, are included.

Fall

MW

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Machine Tool

LAB FEE: \$10

TEXT: Programming for Numerical Control Machines,

2nd Ed.—\$16.50

### SK233: SOLAR ENERGY AND HOME HEATING THEORY

This class covers various passive, active and hybrid solar heating systems. Energy conservation, maintenance of systems, and pros and cons of each approach—based on configurations, materials, performance characteristics and construction aspects—are included.

Fall-Winter

MW

7-9 p.m.

T-VI Main Campus

TEXT: The Passive Solar Energy Book-\$16

# SK235: REFRIGERATION I

Students learn shop safety, basic tools and equipment, mechanical refrigeration components and basic refrigeration cycle. Maintenance and servicing, including soldering and brazing, are also covered. Electrical circuits are analyzed, and correct methods for wiring basic circuits are included.

Fall-Winter-Summer

TTh

6:30-9:30 p.m. T-V1 Main Campus

**LAB FEE: \$10** 

TEXT: Refrigeration and Air Conditioning Technology—\$14.50

#### SK236: REFRIGERATION II

More complex refrigeration systems are introduced. Lab work in diagnosing and servicing small systems is emphasized. Instruction is designed to meet the student's individual needs and interests.

Winter-Summer

MW

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Refrigeration I

LAB FEE: \$10

TEXT: Refrigeration and Air Conditioning Technology—\$14.50

#### SK238; ELECTRICAL CONTROL CIRCUITRY

This class provides additional study in diagnosis and service of environmental equipment for electricians, service mechanics and maintenance persons. It covers electrical control circuitry, use of symbols, circuit protection and test and measurement equipment.

#### Fall-Winter

MW

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: A knowledge of electricity as related to alternating current

LAB FEE: \$7

TEXT: Electrical Controls for Refrigeration and Air Conditioning—\$14.75

#### SK239: ELECTRICAL MOTORS AND CONTROLS

This class examines the working parts and problem areas in the systems of motor design. Basic single-phase 120-230 volt motors theory and applications are covered and some three-phase motor systems will be examined. This class is concerned with basic working theory, parts application, trouble shooting and working knowledge of both AC and DC electrical motors.

Winter

TTh

7-9 p.m.

T-V1 Main Campus

TEXT: Electrical Motors-\$22

#### SK241: FREE HAND ILLUSTRATION

The basic fundamentals of freehand drawing, perspective drawing and their application to the graphic arts are covered.

#### Fall-Winter

MW

6:30-9:30 p.m. T-VI Montoya Campus

NOTE: Students must provide their own supplies with the exception of paper.

**LAB FEE: \$12** 

#### SK242: PASTE-UP AND LAYOUT

This class includes typesetting, dummy layouts, pasteup, art, the use of stripping tools, explanation of stripping terms and the actual stripping for various jobs.

Fall-Winter

M.

6:30-9:30 p.m. T-VI Montoya Campus

NOTE: Students must provide their own supplies with the exception of paper..

LAB FEE: \$12

# SK243: ILLUSTRATION PROJECTS AND TECHNIQUES

Producing camera-ready art for commercial printing is the goal of this class. Techniques for both line and halftone 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.

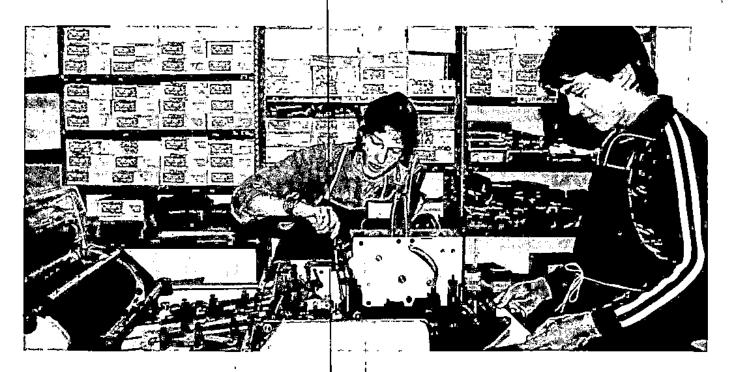
### Fall-Winter

Th

6:30-9:30 p.m. T-VI Montoya Campus

NOTE: Students must provide their own supplies with the exception of paper.

**LAB FEE: \$12** 



# SK244: OFFSET DUPLICATOR OPERATION AND MAINTENANCE

This class is designed to introduce the trainee to the basic operation of the offset duplicator and to acquire a basic proficiency with operations and maintenance. In addition, this class will allow the student to advance in press operation techniques and to log additional hours in make-ready, run and wash-up.

#### Winter

Γ 6:30-9:30 p.m. T-VI Montoya Campus

LAB FEE: \$17

TEXT: Graphic Reproduction-\$18,25

#### SK246; FUNDAMENTALS OF MICROGRAPHICS

This class covers theory and principles of microform technologies from an introductory level through computer output microfilm and computer-assisted retrieval systems. Some hands-on experience in the operation of microfilm equipment is also provided.

# Fall-Winter-Summer

TTh 7-9 p.m.

T-VI Main Campus

TEXTS: Micrographic Systems—\$17

Micrographic Film Technology-\$10

#### SK250: SECURITY OFFICER TRAINING

This is an introduction to such areas as personal defense, report writing, first aid, mob control, civil legal liabilities, criminal law, patrol procedures, rules of evidence and emergency procedures:

#### Fall-Winter

TTh 6:30-9:30 p.:

6:30-9:30 p.m. T-VI Main Campus

LAB FEE: \$12

#### SK255: GLASS BLOWING

Students learn the basic techniques of glass blowing and make small objects such as laboratory glassware and miniature novelties from plain glass tubing.

#### Fall

MW , 6:30-9:30 p.m.

6:30-9:30 p.m. T-VI Main Campus

LAB FEE: \$45

#### SK260: BASIC DIESEL

Introduction units in this beginning class are 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-Summer

MW

7-9:30 p.m.

T-VI Main Campus 3

LABFEE: \$8

TEXT: Diesel Mechanics-\$20.50

#### SK581: DIESEL TROUBLESHOOTING AND TUNE-UP

Emphasis is on the use of the test equipment, repair practices, corrective actions, tune-up procedures on twoand four-stroke engines and engine support systems. Operating principles of major brands of fuel systems are also covered.

#### Fall

TTh

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Basic Diesel or equivalent

LAB FEE: \$8

TEXT: Diesel Mechanics, 2nd Ed.—\$20.50

#### SK582: DIESEL TRANSMISSION, DRIVE TRAIN AND BRAKES

This is a theory and laboratory practice class which provides an introduction to service, repair and troubleshooting of manual transmissions, final drives, third members, clutches and air-over-hydraulic brakes. Service specifications and power dividers are covered.

#### Winter

TTh

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Completion of Basic Diesel or equivalent

LAB FEE: \$8

TEXT: Power Trains, John Deere Manual, 4th Ed.—\$8



#### SK265: SHEET METAL FABRICATION

In this introductory class, beginning 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 will be custom designed for the needs of those in the class who are already working in the field and want to up-grade their skills.

#### \* Fall

TTh

6:30-9:30 p.m. T-VI Main Campus

NOTE: Students must purchase their own instruments.

TEXT: Sheet Metal Pattern Drafting and Shop Prob-

lems—\$11

# SK560: CABINETMAKING

Proper use of basic hand tools and power woodworking machines are taught for persons with jobs 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

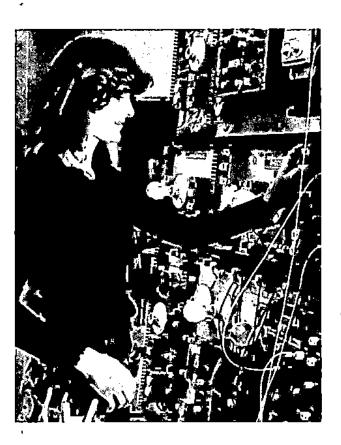
NOTE: Students must provide their own project materials.

LAB FEE: \$15

**TEXT:** Woodworking for Industry—\$18.50

### SK570: 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 floorplans, scaling and dimensioning practice, structural information, drawings, plot plans, codes, reading a set of blueprints and simple detail sketching.



Fall

MW

7-9 p.m.

T-V1 Main Campus

Winter-Summer

 $\dot{M}W$ 

7-9 p.m. T-VI Montoya Campus

TEXTS: Building Trades Blueprint Reading, Part 1-\$8.25

Building Trades Blueprint Reading, Part 2-

\$10.25

#### SK571: PLUMBING THEORY

15 The theory of the safe and proper use of tools and equipment; elements of plumbing; identification of plumbing fittings and pipes; basic hydraulies and pneumatics; and. layout, assembly, installation, alteration and repair of piping systems is taught.

# Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

TEXT: Uniform Plumbing Code, 1982 Ed.—\$16

### SK575: ELECTRICAL TRADES THEORY I

. This class is for the beginning apprentice or helper in an entry-level residential electrical position and is limited to the basic electrical systems in a typical home. Instruction is in working safety, electrical codes and utility regulations, basic electrical principles and measurements, wiring materials and devices, residential wiring circuits, installing outlets, switch boxes, non-metallic sheathed cable, overcurrent devices, low voltage equipment, branch circuits' and service entrances.

#### Fall-Winter

MW

7-9 p.m.

T-VI Montoya Campus

ŢTh ¹7-9 р.т. T-VI Main Campus

TEXT: Electric Wiring: Residential-Utility Building-

Service Areas -\$10.50

# SK576: ELECTRICAL TRADES THEORY II

This more technical class concentrates on the semi- and totally-custom home. The scope of the total electrical home is shown in depth with a concentration on electrical heating and cooling and their control system. The larger residential service entrance systems are examined in addition to electrical wiring design. An introduction to estimating electrical wiring and supplies for the job and modernization of existing electrical systems are also included.

#### Fall-Winter

TTh 7-9 p.m.

T-VI Main Campus

PREREQUISITE: Completion of Electrical Trades The-

ory I or equivalent

TEXT: National Electric Code Handbook, 1984 Ed.—

\$28

### SK577: ELECTRICAL TRADES THEORY III

This is an introduction to the light commercial aspect of the electrical industry. Wiring with both electrical metallic tubing and rigid metal conduit, poly-vinyl-chloride conduit wiring, commercial codes, apartment building and small office building wiring, high voltage transformation in both single-phase and three-phase systems, direct burial and aerial wiring design, and estimating are included.

#### Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

PREREQUISITE: Completion of Electrical Trades The-

ory II or equivalent

TEXT: National Electrical Code Handbook, 1984 Ed.-

\$28

# SK579: CONSTRUCTION ESTIMATING

Actual determination of probable costs of a construction project are emphasized in this introductory class. Job scheduling, subcontracts, insurance, bonds and bidding procedures are discussed.

#### Fall-Summer

TTh

7-9 p.m.

7-9 p.m.

T-VI Montoya Campus'

# Winter

TTh

T-VI Main Campus

PREREQUISITES: Completion of Blueprint Reading for

Construction Trades or equivalent

TEXT: Estimating in Building Construction, 2nd Ed.— \$18.75

# SK586: GENERAL CONTRACTORS LICENSING PREPARATION

This class is for the student interested in obtaining a Contractors License in New Mexico. Units of instruction include making application, rules and regulations, business and law, the Uniform Building Code, methods of construction, licensing act, rules, regulations and examination practices.

#### Fall-Winter

MW

7-9 p.m.:

T-VI Main Campus

PREREQUISITE: Completion of two years of verifiable

work experience in the construction industry

TEXT: Uniform Building Code, 1982 Ed. -\$46



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