

# **RICHLAND COLLEGE**

DCCCD

## **1977-78**



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Cover Photo by John Neal



# **RICHLAND COLLEGE**

**DALLAS COUNTY COMMUNITY COLLEGE DISTRICT**

**12800 ABRAMS ROAD, DALLAS, TEXAS 75243**

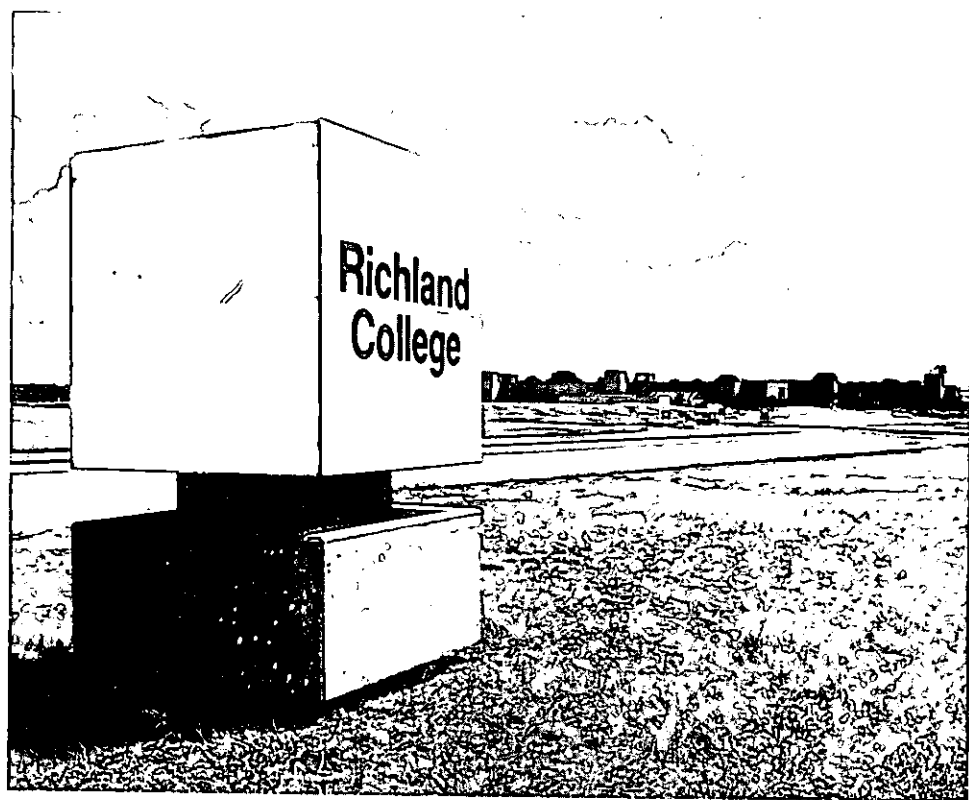
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This catalog contains policies, regulations and procedures which were in existence as the publication went to press. The college reserves the right to make changes at any time to reflect current board policies and administrative regulations and procedures.

**This bulletin is for informational purposes and  
does not constitute a contract.**





**GENERAL INFORMATION**



# ACADEMIC CALENDAR 1977-78

## SUMMER SEMESTER, 1977

### First Semester

May 30	Memorial Day Holiday
May 31	Registration
June 1	Classes Begin, 7 a.m.
June 2	Last Day for Tuition Refund, 8:30 p.m.
June 28	Last Day to Withdraw with a Grade of "W", 8:30 p.m.
July 4	Independence Day Holiday
July 6	Final Examinations
July 6	Semester Closes, 8:30 p.m.

### Second Semester

July 8	Registration
July 11	Classes Begin, 7 a.m.
July 12	Last Day for Tuition Refund, 8:30 p.m.
August 5	Last Day to Withdraw with a Grade of "W", 4 p.m.
August 12	Final Examinations
August 12	Semester Closes, 4 p.m.

## FALL SEMESTER, 1977

August 22	Faculty Reports
August 23-25	Registration
August 26	Faculty Professional Development
August 27	Saturday Classes Begin
August 29	Classes Begin, 7 a.m.
September 2	Last Day for Tuition Refund, 4 p.m.
September 5	Labor Day Holiday
September 14	Twelfth Class Day
November 11	Veteran's Day Holiday (No Classes 11-12)
November 23	Thanksgiving Day Holidays Begin, 10:30 p.m.
November 28	Classes Resume, 7 a.m.
December 9	Last Day to Withdraw With a Grade of "W", 4 p.m.
December 17	Final Examinations for Saturday Classes
December 19	Last Day of Classes
December 20-23	Final Examinations
December 23	Semester Closes, 4 p.m.

## SPRING SEMESTER, 1978

January 9	Faculty Reports
January 10-12	Registration
January 13	Faculty Professional Development
January 14	Saturday Classes Begin
January 16	Classes Begin, 7 a.m.
January 20	Last Day for Tuition Refund, 4 p.m.
January 31	Twelfth Class Day
February 17	Faculty Professional Development (no classes)
March 18	Spring Break Begins, 12 Noon
March 27	Classes Resume, 7 a.m.
May 2	Last Day to Withdraw with a Grade of "W", 8:30 p.m.
May 10	Last Day of Classes
May 11-16	Final Examinations
May 13	Final Examinations for Saturday Classes
May 16	Graduation, 7:30 p.m.
May 16	Semester Closes, 8:30 p.m.

SUMMER SEMESTER, 1978

First Session

May 29

May 30

June 1

June 2

June 28

July 4

July 6

July 6

Memorial Day Holiday  
Registration  
Classes Begin, 7 a.m.  
Last Day for Tuition Refund, 4:00 p.m.  
Last Day to Withdraw with a Grade of "W", 8:30 p.m.  
Independence Day Holiday  
Final Examinations  
Semester Closes, 8:30 p.m.

Second Session

July 10

July 12

July 13

August 8

August 15

August 15

Registration  
Classes Begin, 7 a.m.  
Last Day for Tuition Refund, 8:30 p.m.  
Last Day to Withdraw with a Grade of "W", 8:30 p.m.  
Final Examinations  
Semester Closes, 8:30 p.m.

1977

JANUARY	FEBRUARY	MARCH
SMTWTFS	SMTWTFS	SMTWTFS
1	1 2 3 4 5	1 2 3 4 5
2 3 4 5 6 7 8	6 7 8 9 10 11 12	6 7 8 9 10 11 12
9 10 11 12 13 14 15	13 14 15 16 17 18 19	13 14 15 16 17 18 19
16 17 18 19 20 21 22	20 21 22 23 24 25 26	20 21 22 23 24 25 26
23 24 25 26 27 28 29	27 28	27 28 29 30 31
APRIL	MAY	JUNE
1 2	1 2 3 4 5 6 7	1 2 3 4
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10 11 12 13 14 15 16	15 16 17 18 19 20 21	12 13 14 15 16 17 18
17 18 19 20 21 22 23	22 23 24 25 26 27 28	19 20 21 22 23 24 25
24 25 26 27 28 29 30	29 30 31	26 27 28 29 30
JULY	AUGUST	SEPTEMBER
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1978

JANUARY	FEBRUARY	MARCH
SMTWTFS	SMTWTFS	SMTWTFS
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JULY	AUGUST	SEPTEMBER
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16 17 18 19 20 21 22	20 21 22 23 24 25 26	17 18 19 20 21 22 23
23 24 25 26 27 28 29	27 28 29 30 31	24 25 26 27 28 29 30
OCTOBER	NOVEMBER	DECEMBER
1 2 3 4 5 6 7	1 2 3 4	1 2
8 9 10 11 12 13 14	5 6 7 8 9 10 11	3 4 5 6 7 8 9
15 16 17 18 19 20 21	12 13 14 15 16 17 18	10 11 12 13 14 15 16
22 23 24 25 26 27 28	19 20 21 22 23 24 25	17 18 19 20 21 22 23
29 30 31	26 27 28 29 30	24 25 26 27 28 29 30

# ADMINISTRATION

## Richland College Staff

President .....	Ed Biggerstaff
Dean of Instruction .....	Dick Lodewick
Dean of Student Services .....	Jean Sharon Griffith
Dean of Business Services .....	Holland B. Evans
Associate Dean of Instruction Technical and Occupational Programs.....	Ken Permenter
Associate Dean of Instruction Extended Day Programs .....	Rodger A. Pool
Associate Dean of Instructional Services .....	Dick Smith
Administrative Assistant .....	Linda Catlin
Director of Admissions and Registrar .....	Jackie Claunch
Director of Student Development .....	Jay Freeman
Director of Community Service .....	Vicky Bishop
Director of Financial Aids .....	Pat Durst
Public Information Assistant .....	Pam Quinn

## Instructional Division Chairpersons

Business .....	Jay L. Todes
Communications .....	Ed Garcia
Developmental Studies .....	Allan Calkin
Humanities .....	Jack Stone
Human Potential .....	Jim Horton
Math Technology .....	Georgia Sims
Physical Education .....	Tom McLaughlin
Science/Horticulture .....	Floyd T. King, Jr.
Social Science .....	Roger Davis



**Board of Trustees — DCCC District**

*Seated:* Mrs. Eugene McDermott, Vice-Chairman; R. L. Thornton, Jr., Chairman; Dr. Bill J. Priest, Chancellor and Secretary to the Board; and Mrs. William J. (Pattie) Powell.  
*Standing:* Robert H. Power, Durwood A. Sutton, Carie E. Welch, and Jerry Gilmore.

**Dallas County Community College District**

Chancellor .....	Bill J. Priest
Vice-Chancellor of Academic Affairs .....	R. Jan LeCroy
Vice-Chancellor of Business Affairs .....	Walter L. Pike
Vice-Chancellor of Planning .....	H. Deon Holt
Director of Computer Services .....	James R. Hill
Director of Program Development .....	Dexter L. Betts
Director of Public Information .....	Claudia Robinson
Director of Personnel .....	Quincy Ellis
Director of Technical Occupational Education .....	John S. Owens
Assistant to the Chancellor .....	Stephen K. Mittelstet
Special Assistant to the Chancellor .....	John Pickelman

## Dallas County Community College District — History and Purpose

The Dallas County Community College District's six innovative educational communities are dedicated to a common goal: serving in the best possible way the complex, varied and ever-changing educational requirements of a growing metropolitan community.

Each of the district's six colleges — Cedar Valley, Eastfield, El Centro, Mountain View, North Lake and Richland — is therefore committed to providing every person in Dallas County a quality educational experience, whether the person is a youth setting forth toward a degree in medicine, or an adult wanting to enrich his leisure hours with an interesting hobby.

There is a place for a student who wishes to spend a year or two preparing himself to enter a trade or profession, and a place for an employed person who wants to further his training in his occupational field.

There is a place for the very bright high school student who is ready to undertake college-level training in advance of his graduation from secondary school, and a place for the high school drop-out who has changed his mind about the necessity of education in today's complex, demanding society.

There is, simply stated, a place for **everyone**.

Of primary importance to the district's goal is making certain that a student's educational program is tailored to his needs, abilities and ambitions. The philosophy of the district is to create an educational program for an individual, rather than to try to squeeze or stretch an individual to fit an "educational mold."

Every student is offered competent, intensive counseling to help discover his goals and special abilities. Continued guidance is available to update a student's educational program if his goals change during his college experience. This emphasis on counseling, rare for some institutions, is routine procedure at all district colleges.

The district officially became the Dallas County Community College District in 1972, when its philosophy, function, and breadth outgrew the traditional "junior" college label. The new name more closely states the district's mission — to meet the educa-

tional needs of the entire metropolitan community.

How do the district's colleges serve the educational requirement's of such a complex family? The answer is found in educational offerings in four broad categories:

— For the student seeking the first two years of work toward the goal of a bachelor's or higher degree, the colleges offer a wide range of courses which are transferable to senior colleges and universities.

— For the student wishing to enter an occupation at a level above the bottom rung of the ladder, the colleges offer one-year and two-year programs of credit courses covering specific technical-occupational fields.

— For the employed person wishing to improve his knowledge of his field or train for a move into a new occupational field — the colleges offer a broad range of credit and non-credit adult education courses.

— For the person who simply wants to make life a little more interesting, there are community service programs offering a myriad of courses in cultural, civic and avocational subjects.

Dallas County voters created the district in May 1965 and approved a \$41.5 million bond issue.

The following year the district's first college, El Centro, opened its doors for the fall semester in the heart of downtown Dallas. In August 1970, Eastfield College and Mountain View College enrolled their first students and the multi-campus district envisioned by the district planners became a reality. Richland College became the district's fourth college in the fall of 1972.

In September of 1972, the voters of Dallas County approved the sale of an additional \$85 million in bonds, thereby paving the way for expansion of existing campuses as needed and the planning and construction of three more colleges. The first priority in the expansion program was the remodeling and enlarging of El Centro College. The first phase of that program was completed in time for the 1976-77 academic year.

In 1977, Dallas County Community College District opened two new campuses, Cedar Valley College in Lancaster, and North Lake College in Irving. Brookhaven College, the final campus in the seven-

college master plan, is now under construction in Farmers Branch and is scheduled to open for enrollment in 1978.

## Richland College

A fresh, new educational experience awaits prospective students of Richland College, a sparkling campus which opened in the fall of 1972.

Here a vital and dedicated faculty interacts with nature's primitive architecture and contemporary campus design to create an exciting learning environment for students of all ages.

The campus plan enhances the natural beauty of the site, which includes a meandering, spring-fed creek interrupted by dams to form two picturesque lakes. Campus facilities extend along both sides of the lakes, linked by open and closed pedestrian bridges. Extensive landscaping augments the many natural trees which exist on the site.

Richland College is located on a 259-acre site at 12800 Abrams Road, with convenient access routes from Richardson, Garland and other areas of north and northeast Dallas County.

The land occupied by the college was previously used for agricultural purposes, with a history of ownership dating back to the early settlement days of Dallas County in the early to mid-1800's.

Official action acquiring the site was taken by the Board of Trustees on August 30, 1966. The name, Richland College, was approved by the Board the following month on September 20, 1966, to suggest a link between the two major adjacent communities of Richardson and Garland.

Planning for the college began in the spring of 1967, with the selection of architects on March 21, 1967. The long-range master plan and the design for the first phase of construction were prepared by The Oglesby Group Architects of Dallas with The Perkins and Will Partnership of Chicago as associated architects.

Construction on Richland College began in the fall of 1969 with the awarding of an advanced site work and paving contract. Work on the general contract for building construction began in July of 1970.

The campus plan makes extensive use of pre-cast concrete both as a structural and a design feature. Exterior walls are typically of masonry, with frequent use of glass to provide vistas of the exterior areas.

Structures on the east side include the Learning Resources Center, Fine Arts and Physical Education complexes. A swimming pool complements the latter. The west side units include the Campus Center, Science/Occupations and Administration buildings. The bridge-like structure which links the two sides provides open and closed pedestrian circulation across the lakes, and houses recreation, college store and student activity spaces.

Richland College has the district's only planetarium, a 100-seat facility with a 40-ft. dome. The planetarium has provision for lowering the projection instrument into a floor pit, permitting the space to double as a lecture classroom. The Cosmic Theatre and Planetarium, featuring a quadrophonic sound system, produces several "plays for planetarium" each year for the public, civic, religious, and community groups.

Another "Richland only" feature is the horticulture unit located near the main entrance to the campus, housing occupational programs in landscape and nursery areas.

## Accreditation and Affiliation

Richland College is a member of the Southern Association of Colleges and Schools. Accreditation by the Southern Association serves several purposes. It encourages an institution to improve its program by providing standards established by competent educators. In accomplishing this, accreditation provides assistance to students as they select a college; it facilitates the transfer of students from one institution to another, it helps to inform prospective employers about the overall quality of education received by a graduate of the institution; and it serves the general public by protecting it against institutional misrepresentation.

Inherent in the strength of the Southern Association is the protection of the rights of an institution to fulfill its purposes, the rights of teachers to investigate and to teach, and in the right of students to acquire opportunities for learning.

The college is also recognized and sanctioned by the Coordinating Board of the Texas College and University System and the Texas Education Agency. In addition, memberships are held in the American Association of Community and Junior Colleges, Southern Association of Junior Colleges, Association of Texas Colleges and Universities, and The League for Innovation in the Community College.

## Housing

Richland is designed as a "commuter college," and does not operate residence halls nor maintain listings of available housing for students. Students who do not reside in the area must make their own arrangements for housing.





# ADMISSIONS and REGISTRATION



## General Admissions Policy

Applications will be accepted anytime prior to registration. Since registration priorities are assigned according to the date an application is received, applicants should plan to submit an application at least three weeks before registration. Applications received after this date will receive a low priority and the applicants may be limited in their selection of available classes at registration.

## Standards of Conduct

All students at Richland College are considered adults and are responsible for their own behavior. All students are expected to conform to all local, state and federal laws and all duly constituted college standards of conduct. A copy of the student code of conduct can be secured from the Office of Admissions.

## Admission Requirements

### 1. Beginning Freshmen

Students enrolling in college for the first time will be considered for admission if they are:

a. A graduate from an accredited high school, or

b. A graduate from an unaccredited high school who is eighteen years of age, or

c. A non-high school graduate who is eighteen years of age whose high school class has graduated, or

d. A high school student recommended by the high school principal. In the case, a limited number of high school seniors may be concurrently enrolled for special study, but not for more than six hours per semester, providing the student is making normal progress toward high school graduation.

### 2. Transfer Students

a. College transfer applicants will be considered for admission based on their previous college record. Academic standings for transfer applicants will be determined by the Office of Admissions based on standards established by Richland College.

b. Students on scholastic or disciplinary suspension from another institution must apply via the Admissions Office to the

Committee on Admissions and Retention at Richland College.

### 3. Former Students

Former students of Cedar Valley, El Centro, Eastfield, Mountain View, or Northlake College must submit an application for readmission to Richland College. Former Richland students who have not attended school for the preceding long semester should also file an application for readmission.

A student will not be readmitted to any college within the district if he or she has unsettled financial debts at any of the district campuses.

### 4. Non-credit Students

Students seeking enrollment in non-credit courses should contact the Office of Community Services.

## Admission Procedures

The following material must be submitted to the Office of Admissions before a student's entrance file is considered complete.

1. An application for admission.

2. An official transcript from the last school (high school or college) attended. Transcripts are required by Richland's accrediting agency and are important for program advising in the counseling office. Students who are seeking a certificate or associate degree are required to submit transcripts of all previous college work prior to the end of the first semester.

3. Written proof from a medical office of:

a. A negative tuberculin skin test or chest x-ray (required every two years).

b. A polio immunization if the applicant is under 19 years of age.

c. A diphtheria/tetanus injection within the last ten years.

This medical proof is required by state law (Senate Bill 27).

## Transfer Credit

Transfer credit will be given for all passing work completed at accredited colleges and universities. The Office of Admissions will be responsible for the evaluation of all transfer credits.

Students who are admitted with a grade point deficiency will not be graduated from Richland College until deficiency hours are

cleared by means of earning additional grade points.

Credits earned in military service connected schools or through the U.S. Armed Forces Institute will be reviewed by the Office of Admissions and credit granted if applicable.

## **Foreign Students**

Richland College is authorized under federal law to enroll non-immigrant alien students. However, under present conditions, no foreign students are admitted without the special permission of the President of the college.

All application materials must be on file in the Admissions Office at least 30 days prior to registration.

## **Servicemen's Opportunity College**

Richland College, along with the other colleges in the Dallas County Community College District and in cooperation with other community colleges in the United States, participates in the Servicemen's Opportunity College Program. This program enables an institution to plan with the serviceman an educational experience regardless of his mobility pattern.

For further information concerning this program, contact the Veterans' Affairs Office, Richland College.

## **Student Diversity**

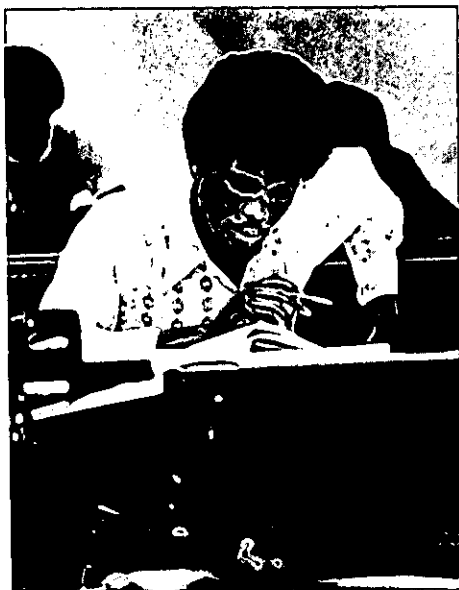
Richland College encourages the attendance of mature students of all ages and from all ethnic backgrounds and fully complies with the provisions of Title VI of the Civil Rights Act of 1964 (P.L. 88-352).

## **Equal Educational Opportunity Policy**

Richland College is committed to providing equal educational and employment opportunity regardless of sex, marital or parental status, race, color, religion, age, or national origin. Title IX of the Educational Amendments of 1972 prohibits dis-

crimination on the basis of sex in any educational program or activity receiving federal financial assistance by way of grant, contract, or loan. Title VI of the Civil Rights Act of 1964 is similar in its prohibition of discrimination on the basis of race, color, or national origin. Equal educational opportunity includes: admission, recruitment, extracurricular programs and activities, housing, facilities, access to course offerings, counseling and testing, financial assistance, employment, health and insurance services, and athletics. Richland College also is committed to equal opportunities for the physically or mentally handicapped in compliance with federal regulations.

Student grievances shall be handled in accordance with the existing administrative channels of the college. When a student believes a condition of the college to be unfair, unjust, inequitable, or discriminatory, an appeal can be made to the administrator in charge of that area. Appeals to higher administrative authority shall be considered based on the merits of the case.



## **Tuition**

Tuition is charged on a sliding scale according to the number of credit hours in which a student is enrolled and his place of legal residence.

Tuition for credit courses will be charged according to the following schedule:

### **Tuition — Fall or Spring Term**

Residents of Dallas County	\$6 per credit hour through 10 credit hours and \$4 per credit hour in excess of 10 credit hours; Minimum \$25.
Residents of Other Texas Counties	\$20 per credit hour through 10 credit hours and \$4 per credit hour in excess of 10 credit hours; Minimum \$25.
Non-Texas Residents*	\$40 per credit hour.
Out-of-Country	\$40 per credit hour; Minimum \$200.

If a student believes his residence status has changed at any time during his enrollment, it will be the student's responsibility to complete a written request for change of status in the Registrar's Office.

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### **Tuition — Summer Session**

Residents of Dallas County		
	1-6 Credit Hours	\$10 per credit hour, with a minimum of \$25.
	7 Credit Hours	\$64.
Residents of Other Texas Counties		
	1-6 Credit Hours	\$30 per credit hour
	7 Credit Hours	\$184.
Non-Texas Residents*		
	1-6 Credit Hours	\$45 per credit hour
	7 Credit Hours	\$310
Out-of-Country		
	1-6 Credit Hours	\$45 per credit hour with a minimum of \$100
	7 Credit Hours	\$310

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\*A non-resident student is hereby defined to be a student less than eighteen (18) years of age, living away from his family and whose family resides in another state or whose family has not resided in Texas for the twelve (12) months immediately preceding the date of registration, or a student eighteen (18) years of age or older who resides out of the state or who has not been a resident of the state twelve (12) months, immediately preceding the date of registration.

## Special Fees and Charges

### Student Service Fee

12 or more credit hours	\$7 a semester
6 to 11 credit hours	\$4 a semester

Laboratory Fee (per lab) \$2 to \$8 a semester

Physical Education Activity Fee \$5 a semester

Bowling Class Fee Student will pay cost of lane rental.

Private Music Lessons Fee\*\* \$35 for 1 hour per week (maximum) for one course, \$20 for ½ hour per week.

Audit Fee The charge for auditing a course is at the same rate as taking a course for credit regardless of the number of hours enrolled except that a student activity fee is not charged.

Credit by Examination \*\*\*Examination fee of \$20 per examination per course.

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\*\*Available only to music majors enrolled for 12 hours or more.

\*\*\*This fee can change without prior notice.

## Additional Fees

Additional fees may be assessed as new programs are developed with special laboratory costs. These fees will always be kept to a basic practical minimum for the program involved. A graduation fee is not assessed students receiving a degree, however, each student will pay for cap and gown rental.

## Refund Policy

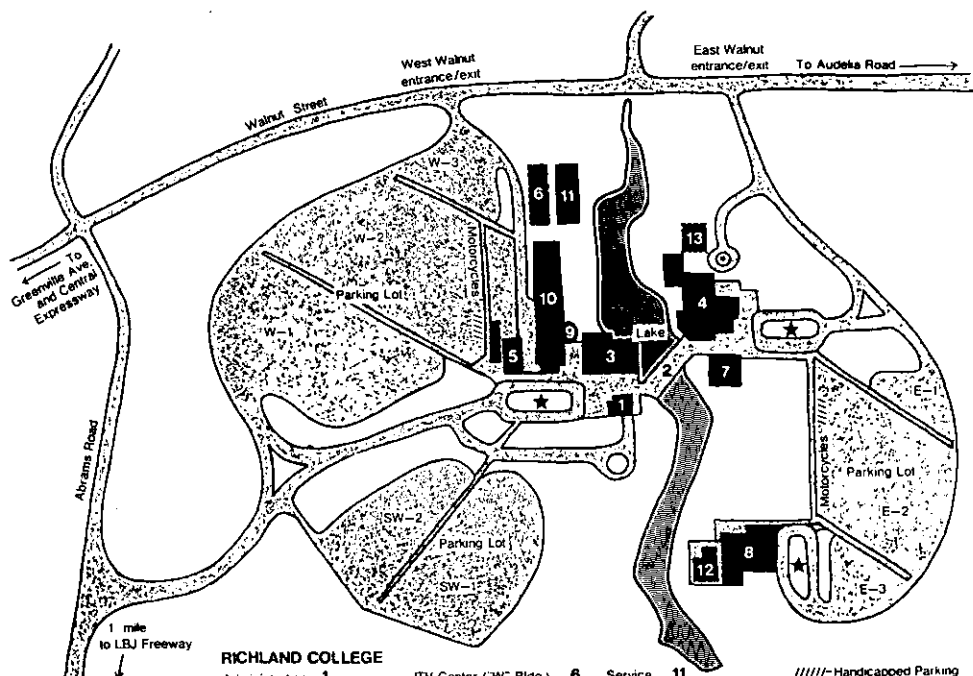
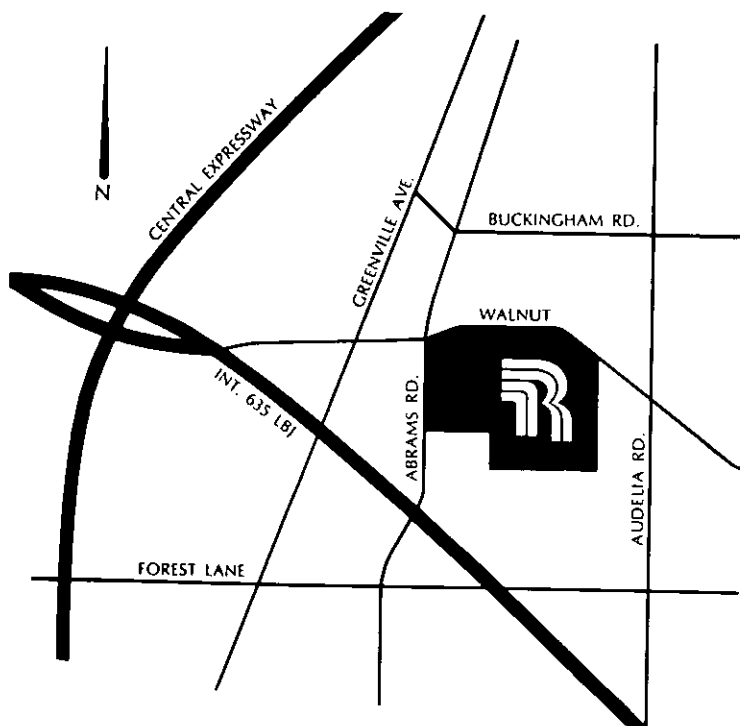
The Refund Policy for Richland College is based on the fact that student tuition and fees provide only a fraction of the cost of providing educational opportunities. When a student enrolls in a class, he reserves a place which cannot be made available to another student unless he officially drops the class during the first week of the semester. Also, a student's original enrollment represents a sizeable cost to the District whether or not he continues in that class. Therefore, a refund will be made only under the following conditions:

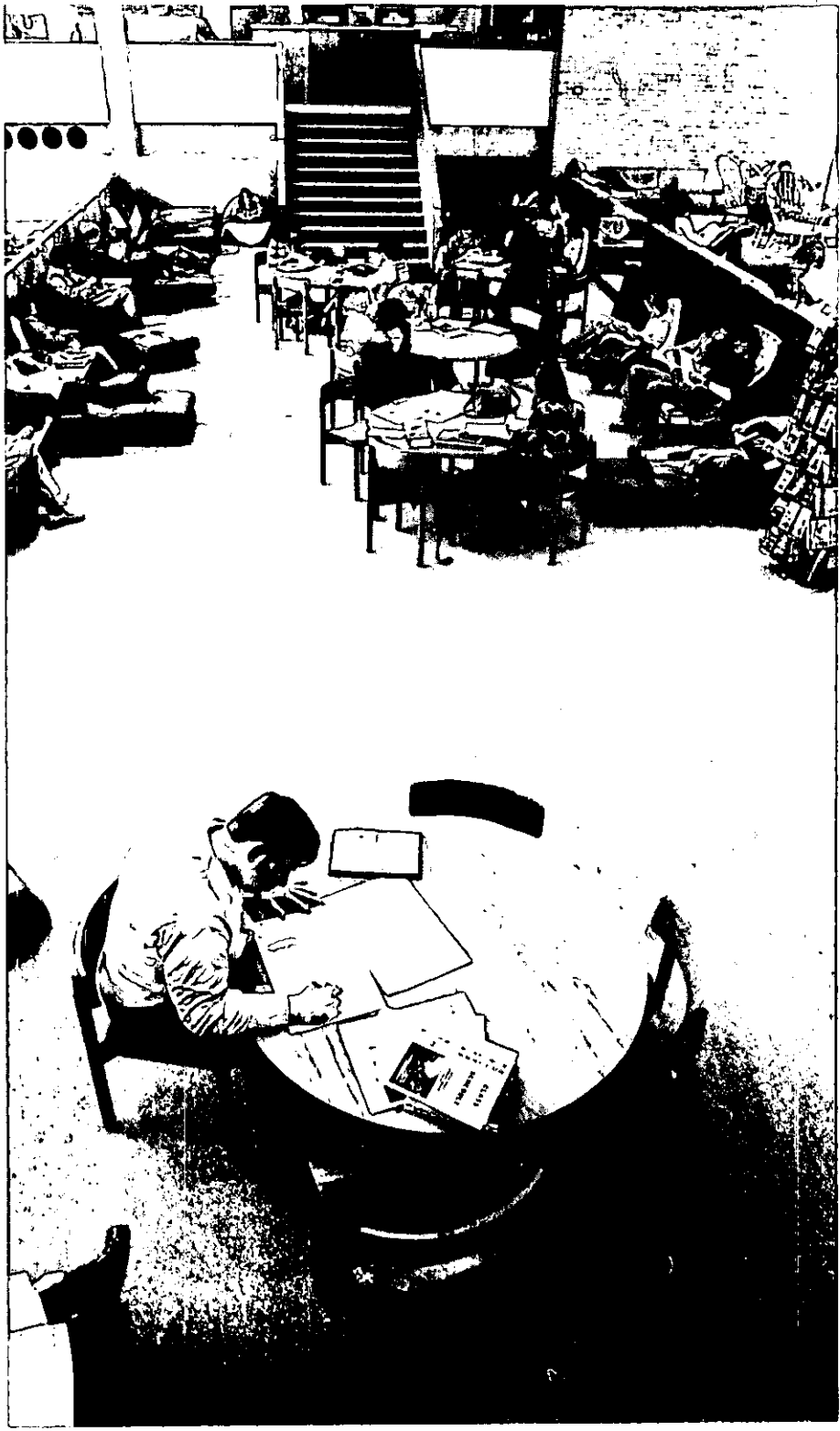
1. No 100% refund is granted unless college error is involved.
2. An 80% refund of tuition and fees may be obtained through the date noted in the college calendar. Eighty percent refunds will be given through the first two class days of

a six week summer session or a Fastrak semester. Refunds for flexible entry courses will be considered through completion of the second day of class from the date of enrollment. No refunds will be granted after the dates referred to above.

3. A physician's statement must be submitted with petitions related to medical reasons for withdrawal from college.
4. Requests for refunds must be submitted before the end of a semester or summer session for which the refund is requested.
5. A refund of less than \$4.00 for tuition and/or fees will not be made.
6. Refund Petition forms are available in the office of Financial Aid and Dean of Student Services.

A student who feels that his refund request is due to an extenuating circumstance beyond the limits of the refund policy should be explicit when completing the refund form. All requests for refund will be referred to the Refund Petition Committee. The committee's recommendations are made to the Dean of Student Services who notifies the student of action to be taken. Refund checks normally require one month from date of approval.





**ACADEMIC INFORMATION**

## Scholastic Standards: Grades and Grade Point Average

Final grades are reported for each student for every course undertaken according to the following grading system:

Grade	Interpretation	Grade Point Value
A	Excellent	4 points
B	Good	3 points
C	Average	2 points
D	Poor	1 point
P	Progress	Not Computed
F	Failing	0 points
I	Incomplete	Not Computed
W	Withdrawn	Not Computed

Grade points earned for each course are determined by multiplying the number of points for each grade by the number of credit hours the course carries. A student's grade point average is computed by adding the total grade point values for all courses for which grade point values may be computed and dividing by the appropriate number of credit hours attempted during the same period.

In computing cumulative grade-point averages, only the latest grade earned in repeated courses will be included. However, transcripts should indicate all work completed in the District. This policy shall apply, even if the latest grade is lower than the preceding grade. In cases where a student withdraws from a course which he is repeating, his cumulative grade-point average shall be calculated by using the immediately preceding grade in the same course.

Incomplete grades may be given when an unforeseen emergency prevents a student from completing the work in a course. Incomplete grades must be converted to performance grades within 90 days after the first day of classes in the subsequent regular semester. After 90 days, if the work has not been completed, the "I" will be converted to a performance grade.

## Degree Requirements Associate in Arts and Sciences Degree

A total of 60 hours must be presented with an average grade of at least "C" (2.0). Courses numbered 99 and below and Music Recital 199 may not be counted toward

the 60 hours minimum. Technical-occupational courses applicable toward the associate in applied arts and sciences degree are applicable for the associate in arts and sciences degree.

These 60 hours may be earned at any Dallas County Community College District college and must include:

English 101-102, plus an additional 6 hours of English .....12 hours

A minimum of 8 semester hours of a laboratory science. (Music majors are exempt from this requirement. Check listings under subject field.) .....8 hours

History 101-102\* and Government 201-202\* (No substitutions allowed) .....12 hours

\*Only 3 hours of history or 3 hours government credit may be earned by credit-by-examination. (CLEP credit does not qualify for this requirement).

Humanities: To be selected from Theatre 101, Art 104, Music 104 or Humanities 101 .....3 hours

In addition to the course requirements, each degree candidate must earn the last 15 hours as a resident student in the district college or accrue 45 hours in residence. The degree will be granted by the college in which the student took the last 15 hours or where the majority of hours were accrued. No more than one-fourth of the work required for any degree or certificate may be taken by correspondence. Correspondence work submitted for graduation credit must be approved by the Director of Admissions.

A maximum of two physical education activity hours may be counted as credit toward requirements for graduation. The student should check with the institution to which he desires to transfer to determine if that institution requires physical education. All students who expect to transfer to a four year institution are urged to complete their physical education requirements during their freshman and sophomore years.

The student is encouraged to consult the catalogs of the institutions to which he may transfer for their special requirements. These catalogs should be used by the student and his advisor as a basis for the program plan.

## **Associate in Applied Arts and Sciences Degree and Certificates**

A minimum of 60 hours exclusive of Music Recital 199 must be presented for the degree with an average grade of at least "C" (2.0). All of the prescribed requirements for the specific technical or occupational program for which the student is enrolled must be completed. For some programs, the semester hour total is over 60.

A maximum of two physical education activity hours may be counted as credit toward graduation. Courses numbered 99 and below cannot be included to meet degree or certificate requirements, except such courses which are specifically listed in the curriculum pattern of the specific program.

The requirements one must meet to be awarded a certificate are detailed under specific programs listed in the technical-occupational programs section of this catalog. A "C" (2.0) grade average is necessary for all courses listed in the requirements of the certificate program in which the student is enrolled.

### **Procedure for Filing Degree and Certificate Plans**

1. The student should request a degree plan from the Office of Admissions at the end of his freshman year.
2. Transcripts of all previous college work must be on file at the time of request for degree plans.
3. A student following a 1-year certificate program should request an official plan during his first semester.
4. Application for the granting of the degree or certificate should be filed in the Registrar's Office prior to the deadline to be announced by the Registrar.
5. A candidate for graduation in May will be required to attend the commencement program unless granted prior permission by the Dean of Students to graduate in absentia.
6. January and August graduates may attend the next commencement if

they desire, but are not required to do so. Should the graduating student wish to attend, the Registrar's Office should be notified of his intention.

7. Instructions concerning graduation will be mailed to all candidates 30 days prior to commencement.

Candidates for any degree or certificate will meet the requirements as set forth in the catalog for his first year of enrollment or he may elect to graduate under the requirements of a later catalog. The candidate must indicate the catalog of his choice when he files his degree plan.

### **Class Attendance**

Students are expected to attend regularly all classes in which they are enrolled. Class attendance is the responsibility of the student. It is also the responsibility of the student to consult with the instructors when he is absent from a class.

Instructors are responsible for appropriate notification of attendance policy and procedures to all students enrolled in their classes. In cases where lack of class attendance is jeopardizing a student's grade, it is the responsibility of the instructor to apprise the student of this fact. Such notice shall be given by the issuance of a letter. If the student continues to miss the class, after a notice has been mailed, the instructor will drop the student from the class.

As a general rule, the administrator in charge of student services shall receive a preliminary notice in cases where absences have become so excessive as to endanger the student's class standing. However, the primary responsibility for handling such cases rests with the instructor.

Students are encouraged to initiate withdrawal from any class in which, after conferring with the instructor, he believes he will not be successful. This action can be initiated in the Counseling Center and should be accomplished before the deadline for dropping, which is established for each semester.

Students dropped for excessive absences prior to the last two weeks of the semester will receive a grade of "W" in the class from which they are dropped.



## Classroom Dishonesty

Dishonest work on tests, term papers, and examinations is a serious offense. Plagiarism (the act of using source material of other persons without following the accepted techniques of crediting) is never acceptable behavior in an academic community.

## Change of Schedule

Request for change of schedule must be initiated through the student's counselor and will be determined on the basis of whether space is available in the class to which he wishes to change. The change action is not completed until it has been received and processed by the Registrar's Office with the instructor being notified of the change. Change action from the division chairman will be accepted by the Registrar through the first week of classes.

## Dropping a Course or Withdrawal from College

A student must drop a class or withdraw from college in the following manner:

1. Obtain a drop or withdrawal form from his counselor and follow the procedure outlined by the counselor.
2. Should circumstances prevent a student from appearing in person to withdraw from college, he may withdraw by mail by writing to the Director of Admissions. No drop or withdrawal requests are accepted by telephone.

A student who drops or withdraws from college will receive a "W" in each class from which he has withdrawn. The deadline for receiving a "W" is two weeks prior to the end of the semester. After that time, a student will receive a performance grade in the course.

## Auditing a Course

Any person 18 years of age or older may, with the consent of the instructor, enroll in the status of audit. This student may attend classes but not take the examinations or receive credit for the course unless he enrolls in the course again as a

regular student. The same fee is charged for auditing as for credit.

Procedures for auditing a course will be administered by the Registrar. No audits will be approved prior to the first day of the second week of classes in any semester. Most lab courses may not be audited. In the case of a student enrolled in collegiate level courses, the combined number of semester hours in credit courses and audit shall not exceed 18.



## Recommended Academic Load

No student will be permitted to carry more than 18 semester hours of course work or more than 5 classes plus physical education without permission of the administration. Employed students are advised to limit their academic loads in accordance with the following recommendations: If a student carries a full college load (12 semester hours or more), he should not work more than 20 hours per week. If he must work more hours, his credit hour load in college should be reduced proportionately.

The recommended load limit for day or evening students who are employed full-time is 6 semester hours of course work.

The recommended load limit in a 6-week summer session is 6 semester hours of credit. A total of 14 semester hours of credit is the maximum that may be earned in any 12-week summer period.

## Classification of Students

1. **Freshman:** A student who has completed fewer than 30 semester hours.
2. **Sophomore:** A student who has completed 30 or more semester hours.
3. **Part-Time:** A student carrying fewer than 12 semester hours work.
4. **Full-Time:** A student carrying 12 or more semester hours of work

## Definition of Acceptable Scholastic Performance

College work is measured in terms of semester credit hours. The number of semester hours credit offered for each course is included with the course description.

Acceptable scholastic performance is the maintenance of a grade point average of 2.0 (on a four point scale) or better. A student may not be graduated from any degree or certificate program unless he has a cumulative grade point average of 2.0 or better. Grade points and hours earned in courses numbered 99 and below and Music Recital 199 are computed when deriving a student's scholastic standing; however, they are not computed for graduation requirements.

## Scholastic Probation and Scholastic Suspension

The policies on scholastic probation and scholastic suspension apply to full-time students (12 semester hours or more) and to part-time students when they have attempted a total of 12 semester hours.

The following criteria will be used to determine academic standing.

1. Students who have completed one or more semesters in a college will be placed on probation if they fail to maintain a 2.0 cumulative grade point average.

2. Students who have been placed on scholastic probation may be removed from probation when they earn a 2.0 cumulative grade point average.
3. Students on scholastic probation who achieve either a cumulative grade point average of 1.5 or above or a previous semester grade point average of 2.0 or above may continue on scholastic probation.
4. Students on probation who do not meet the requirements of paragraph 4 will be placed on scholastic suspension.

The periods of scholastic suspension are: 1) suspension for the first time — one regular semester and 2) subsequent suspension — two regular semesters.

## Transcripts of Credit from Richland College

The Registrar's Office will send the student's transcript upon request to any college or agency named. However, a student's official transcript may be withheld until he has settled all financial obligations to the college.

## Waiving of Scholastic Suspension

Any student pursuing an academic transfer program who wishes to transfer to a technical-occupational program may have his earned credits evaluated for the possibility of disregarding any grades below a "C" as long as the student follows the technical-occupational program. The logic of this procedure is that many students do poorly while pursuing a course of studies for which they are not suited but make rapid improvements when faced with tasks more suited to their interests and aptitudes. This procedure is contingent upon the student remaining in a technical-occupational program. A change to an academic transfer program places the student under the original conditions of the academic transfer program including the calculation of a cumulative grade point average of all college credits earned. This procedure will apply both to Richland College students and to students transferring from other institutions. The student who wishes to avail himself of this opportunity should state his intentions in writing to the Director of Admis-

sions prior to registration and should assume the responsibility of informing his counselor during the pre-registration advisement session.

## **Library Obligations**

Willful damage to library materials (or property) or actions disturbing to the other users of the library may lead to revocation of library privileges. Cases involving such damage will be referred for further action by the appropriate authorities.

All books and other library materials must be returned before the end of each semester. No transcripts of grades may be issued until the library record is cleared.

## **Honors**

A full-time student who has completed at least 12 hours of credit and who earns a grade point average of 3.00-3.49 will be listed on the college honor roll. Full-time students who complete at least 12 hours of credit and who average 3.50-4.00 will be placed on the dean's honor list. In addition, students who have completed at least 6 and not more than 11 hours of credit in a semester, earning a grade point average of 3.50-4.00, will be placed on an academic recognition roll. The honor roll, dean's honor list and academic recognition roll will be published each semester.

## **Credit by Examination**

A person who believes he is qualified by experience or previous training may take a special examination to establish credit in a particular course. Depending upon the course, the examination may be a section

of the College Level Examination Program or a teacher-made test. Not all courses offered at Richland are approved for credit by examination. A list of those credits which may be established through this method is available in the Counseling Center.

Students will be allowed to earn as many credits through the credit by examination procedure, from the list of acceptable courses, as their needs require and ability permits. The last fifteen semester hours required for graduation in any degree or certificate program must be earned in residence and may not be earned through credit by examination.

Credit by examination may be attempted only one time in any given course and a grade of "C" or better on the examination is required in order to receive credit. Only currently enrolled students will have the semester hours earned through examination become part of their permanent record. A student can use no more than 3 credit hours earned by credit by examination for the degree requirement in government.

Request for examination should be made to the Admissions Office which will provide the student with the necessary petition forms and procedural information. A student, whether part-time or full-time, will pay an examination fee of \$20.00 per examination. There is no refund of this fee. Though great effort has been made to interrelate the credit by examination program with transferring four-year institutions, final acceptance of credit by examination achieved for specific degree purposes is determined by that institution.

For further information concerning graduation requirements, consult the degree requirements section of this catalog.



**STUDENT SERVICES**

## Counseling

Richland's staff of professional counselors and counselor aides is available to devote personal attention to everyone in the college community. Office hours are 8:00 a.m. to 9:00 p.m. Monday through Thursday, 8:00 a.m. to 4:30 p.m. on Friday, and 8:30 a.m. to 1:30 p.m. on Saturday. Appointments may be scheduled by calling 746-4406, or by stopping at the receptionist's desk in the Counseling Center which is located in the Campus Center. Counselors or counselor aides are also available for the student who wishes to "drop-in" with a quick question.

Individuals may find the counseling services helpful as they make plans and decisions in various phases of their development. For example, counselors can assist students with such areas as selecting courses of study, determining transferability of courses, choosing or changing careers, gaining independence, and problems associated with dating or marriage.

Specific services offered include:

1. Career counseling regarding possible vocational directions to explore occupational information, and self-appraisals of interests, personality, and abilities.
2. Academic advisement regarding appropriate choices of courses, educational plans, study skills, and transferability of courses.
3. Confidential personal counseling regarding adjustment and life decisions in such areas as relating to peers, relating to instructors, marriage, drugs, or other personal concerns which hamper personal growth.
4. Small group discussions led by counselors and focusing on such areas as interpersonal relationships, reducing test anxiety and increasing assertiveness. Counselors will consider forming any type of group for which there is a demand.
5. Standardized testing to provide additional information about interests, personality, and abilities when needed in planning and making decisions.

6. Referral sources to provide in-depth assistance, if necessary, for such matters as legal assistance, financial aid, tutoring, job placement, medical or psychological problems.

Affiliated with the Counseling Center are the following:

1. **The Center for Choice** is just that ... a place where you can receive assistance in the process of making choices. This is not to be confused with a one stop supply of easy answers. Instead it is an accumulation of resources that will be helpful as one plans his or her career, life and education. The resources at one's disposal include: Counseling, Faculty Consultation, Financial Aid, Technical / Occupational Education, Cooperative Education, Placement, Job Information, Veterans' Counseling, and Testing (including vocational personality). There are many ways a student can use the Center for Choice.

For example:

*Just drop in...* You do not need an appointment. The staff is always available for informal discussion.

*Sign up for a group...* Many short groups are offered in vocational exploration, assertive training, how to interview for a job, etc.

*Take a class...* You can actually receive credit for your effort in career decision making.

*Peruse the career information...* A large number of printed brochures are available for information about specific jobs.

Find the Center for Choice on the first floor of the Campus Center, open from the hours of 8:30 a.m. to 8:30 p.m. Monday through Thursday and 8:30 a.m. to 4:30 p.m. on Friday. The staff is there to do whatever they can to help... **THE CHOICE IS YOURS.**

2. **Career Information Area.** A library of career related literature is also housed in the Center For Choice.

Most of this literature is descriptive, designed to provide general information about definite career fields. The library is cataloged by career areas and is continually updated.

3. **The Comprehensive Test Center** which is staffed from 9:00 a.m. to 8:45 p.m., Monday through Thursday, 9:00 a.m. to 3:30 p.m. on Friday, and 10:00 a.m. to 3:00 p.m. on Saturday. Services of the center include testing as recommended by a counselor to determine a student's academic preparation, learning style, interests, aptitudes, and personality characteristics. The center also administers testing for alternative modes of instruction such as tests for the self-paced courses, tests for courses on television, and make-up exams. The center is located in the Campus Center, Rooms G139 and F140.
4. **The Human Resources Development Center** which also offers an additional dimension to the Community Service program. Its main function is to offer counseling and referral services to non-students. The services offered depend upon the needs of the community. The center is located in the Campus Center, Room H136. Phone 746-4477.

## Financial Aid

The Office of Financial Aid exists to assist students who without financial assistance would not be able to complete their education at Richland. Applications may be picked up in the Financial Aid Office, Campus Center, Center for Choice. Phone 746-4488. Office hours are 8:00 a.m. to 8:00 p.m., Monday through Thursday, and from 8:00 a.m. to 4:30 p.m. on Friday.

Students seeking financial aid should complete and submit all forms by July 1 preceding the academic year for which aid is requested.

**Basic Educational Opportunity Grant.** The Basic Educational Opportunity Grant Program is a federal aid program designed to provide financial assistance to those who need it to attend post-high school educational institutions.

You may be eligible for a grant if you meet two important criteria:

1. You plan to enroll in a post-high school program at an eligible college, university, or technical school.
2. You are a U.S. citizen, or are in the United States for other than a temporary purpose and intend to be a resident.

B.E.O.G. is the foundation of a student financial aid packet. All other aid will be given in addition to the grant.

**Supplemental Educational Opportunity GRANTS.** A student must demonstrate financial need and be enrolled for 6 or more semester hours to be eligible.

**Texas Public Educational Grant (T.P.E.G.).** A student must demonstrate financial need.

**Texas Public Educational State Student Incentive Grant (T.P.E.-S.S.I.G.).** This is a grant for public institutions. Awards are based on financial need. The student must be enrolled for 12 or more semester hours to be eligible.

**College Work Study.** A student must demonstrate financial need and be enrolled for 6 or more semester hours to be eligible for the federal work-study program. He will be referred to a division chairman or to an off-campus supervisor for an interview to determine his ability to perform the task.

**Regular Campus Employment.** A student will be allowed to work a maximum of 15 hours per week at an on-campus position.

**Hinson-Hazelwood College Student Loan.** A student must demonstrate financial need. The maximum loan is \$1,500 per academic year.

**Short Term Loans.** These loans are for tuition, fees, book purchases, and personal needs. Each student is required to apply at least ten days prior to needing these funds.

**Edwin L. Biggerstaff, Sr. Memorial Scholarship.** This is a scholarship in memory of Edwin L. Biggerstaff, Sr. It is available to students with a high grade point average. This scholarship is based on contributions.

**Mary Ellen Mittelstet Memorial Loan Fund.** This is a short-term loan available to students who demonstrate a financial need.

This loan has been established by friends and acquaintances of the family in memory of Mary Ellen Mittelstet.

**Wayne Yancey Memorial Scholarship.** This is a scholarship in memory of Wayne Yancey, a freshman at Richland College. Wayne had a keen interest in education, particularly in engineering, architecture, and the construction management curriculum. It is the intent of this scholarship to assist students who demonstrate financial need and share the same educational interests as Wayne Yancey.

**Several divisions** on campus offer scholarships in certain fields of study. If you are interested in knowing whether your major offers a scholarship, please contact the appropriate division chairman.



## Placement

From the Placement Office, located in the Center for Choice, Campus Center, students can obtain needed employment information on off-campus employment and can discuss career plans and job opportunities. To aid students in finding a suitable job or in exploring a variety of occupations, the Placement Office provides full-time and summer job listings; spring recruiting sessions; and various seminars dealing with occupational possibilities.

Students who combine college study with outside employment must plan a realistic proportion of work and study in order to remain in good academic standing.

## Veterans' Services

The Veterans' Administration provides a valuable program of financial assistance for the education and training of eligible veterans and dependents. To support the program Richland College maintains a full-time Veterans' Services Office and the Veterans' Administration has assigned two independent full-time representatives to work on the campus.

Richland's Veterans' Service Office serves as a contact point for veterans who need information and assistance by referring the veterans to appropriate areas, both on campus and within the community where their needs may be met. Services include: counseling the student veteran in areas of concern such as educational planning, career planning, financial aid, remedial courses, tutoring, and part-time job placement assistance.

The Veterans' Services Office in the Center for Choice is responsible for informing veterans in the community of their educational benefits and for encouraging Vietnam-era veterans to take advantage of a rare educational opportunity. A veteran having served honorably at least 181 days continuous active duty after June 1, 1966, is eligible for educational benefits. Every eligible veteran is entitled to 1½ months of benefits for each month of active duty, or part thereof, for a maximum of 45 months. In expending this entitlement a veteran has 10 years from the date of separation (or discharge) from active duty in which to complete his program.

Veterans' records are maintained in the Veterans' Office by the Registrar. Students who plan to attend Richland under the VA program may obtain necessary forms from the Veterans' Office in the Campus Center. For initial application the veteran should provide two copies of DD214 (Report of Transfer or Discharge) and if divorced and remarried, a copy of his present marriage license, birth certificate for each child, and a copy of each court action for previous marriages of both the veteran and spouse.

A student may not take courses just for the experience and receive VA educational benefits. Required educational planning must be accomplished by contact with a Richland counselor. VA requires that all previous college courses taken by a vet-

eran be evaluated and the student and VA be notified of credit hours accepted for previous training. Transcripts of previous college work are therefore mandatory.

New student veterans and dependents must complete a self-assessment packet at the Richland Test Center before registration. The self-assessment packet will be evaluated by a counselor to determine the veteran's need for remedial courses in Developmental Reading, Writing and/or Mathematics. A copy of a Certificate of Need will be provided by the evaluating counselor to each veteran and to the Veterans' Office for each veteran tested. This certificate will assist the new student veteran in obtaining his remedial class at registration and will be the basis for the Registrar's certifying each remedial course taken by a veteran to the VA Regional Office. Remedial courses qualify for the same monthly benefits as other courses but are not normally charged against a veteran's total months of entitlement unless taken more than one time.

Students under the VA program have the responsibility of furnishing correct and accurate information for records and ALL CHANGES OF STATUS to the Veterans' Office.

The following table lists the rates payable to student veterans effective October 1, 1976:

	Single	1 Dep.	2 Deps.	Each Add. Dep.
Full-Time (12+ Credit Hrs.)	\$292.	\$347.	\$396.	\$24.
¾-Time (9-11 Credit Hrs.)	219.	260.	297.	18.
½-Time (6-8 Credit Hrs.)	146.	174.	198.	12.

For Summer Sessions, 4 semester hours are considered full time; 3 hours, three-fourths time; 2 hours, one-half time. Rates remain the same.

A veteran taking six (6) hours or more may receive VA reimbursement not to exceed \$65 per month or \$780 for a full program, for tutorial assistance in required subjects currently being taken by a veteran.

The Veterans' Service Office, located in the Center for Choice, is open from 8:30 a.m. to 6:00 p.m., Monday through Thursday, and from 8:30 a.m. to 4:30 p.m. on Friday. Phone 746-4427; 746-4428.

The Veterans' Office located in the Campus Center, is open from 8:00 a.m. to 8:00 p.m., Monday through Thursday, and from 8:00 a.m. to 4:30 p.m. on Friday. Phone 746-4566.

The VA representatives on campus are located in the Veterans' Office. These representatives are available to assist with problems concerning the VA monthly benefits, and assist veterans with VA programs other than education. They are available from 8:00 a.m. to 4:30 p.m. daily, and until 8:00 p.m. on Monday through Wednesday. Phone 746-4581; 746-4588. Hours of Vet Reps are subject to change.

## Student Development

Student Development is that coordinating department dealing with students' extra and co-curricular needs and involvement. It is funded through student activity fees and profits from campus auxiliary services.

Offerings include: entertainment, films, speakers, video tape, and creative involvement programs. Services including: working with student groups, constructing campus signs, and maintaining a storage area for "lost and found" items.

The department is operated by student employees working with advisors, volunteer students, and other Richland faculty and staff members. Student Development encourages students and faculty with ideas and suggestions to become involved in its programming. The Office of Student Development is located in the lower level of the bridge, Room M 41. Phone 746-4430, 746-4431, or 746-4432.

## Athletics

The college is a member of the Metro Athletic Conference and competes in basketball, tennis( baseball, golf, and soccer. A wrestling club has also been formed.

A campus intramural program for students and faculty is provided and emphasized. The intramural program is officed in the Physical Education Building, Room S 175. Phone 746-4560.



## Health Center

Health is the most fundamental of human needs and a high standard of physical and mental health is a fundamental right of every human being. Therefore, the Health Center of Richland College is available to help maintain and promote the health of students, faculty and staff.

Some of the services provided by the Health Center are:

1. Health education and counseling about physical and emotional health.
2. Emergency first aid treatment.
3. Referral service to community agencies and physicians.
4. Various screening programs, including free tuberculin skin tests.
5. Programs of interest in the area of health to students and faculty.

The Health Center is open from 8 a.m. until 10 p.m. daily, Monday through Thursday, and from 8 a.m. until 4:30 p.m. on Friday. All students are encouraged to complete the health history form as fully as possible so that the Health Center can best serve their needs.

## Campus Security

The Office of Campus Security is required by state law to "protect and police buildings and grounds of state institutions of higher learning." Since all of the general and criminal laws of the state are in full force and effect within the campus community, specially trained and educated personnel are commissioned to protect not only the physical property of the campus community but also to protect the person and the property of campus citizens. The security officers are responsible for enforcing rules, regulations, and Board policies

of the college, including a code of conduct for students. The department seeks to operate a student-oriented program which encourages face-to-face contact between students and security officers to facilitate the open exchange of ideas and to develop a tolerance for individual points of view.

## Family Educational Rights and Privacy Act of 1974

In compliance with the Family Educational Rights and Privacy Act of 1974, Federal Law 93-380, information classified as "directory information" may be released to the general public without the written consent of the student.

Directory information is defined as:

1. Student name
2. Student address
3. Telephone listing
4. Dates of attendance
5. Most recent previous educational institution attended
6. Other information including major field of study and degrees and awards received

A student may request that all or part of the directory information be withheld from the public by completing a form available in the registrar's office. If no request is filed, information will be released upon inquiry. No telephone inquiries will be acknowledged, all requests must be made in person.

Directory information is the only part of a student record that may be released without written consent from the student. No transcript or inquiries concerning an academic record will be released under any circumstances without WRITTEN CONSENT from the student specifying the information to be given out.

## Campus Safety Regulations

1. Children who are 13 years and younger are expected to be accompanied by an adult when visting the campus. College personnel will ask under age individuals to leave. Security officers are always prepared to contact parents in classrooms, if necessary, or to retain the children in the security office while making telephone contact with parents off-campus.
2. Fishing will not be permitted from the bridge or the concrete areas, but it is allowable from the banks of the lake. Signs are posted in areas where fishing is permitted.
3. Dogs on campus must be on a leash, and they are not allowed in any of the buildings.







# **EDUCATIONAL PROGRAMS and SERVICES**

## **Lower Division Transfer Studies**

Students whose educational objective is the bachelor's degree may complete their first two years at Richland College before transferring to a four-year institution.

The academic transfer curriculum is coordinated with senior colleges and universities to facilitate the transfer of credits to these schools.

## **Technical-Occupational Programs**

Richland College offers a variety of technical-occupational programs designed to enable a student to enter his chosen field as a skilled employee after one or two years of college work.

These programs are established only after studies verify that employment opportunities will exist at the time the student completes his training, matching the community's manpower requirements with the ambitions and goals of the student.

This realistic approach to occupational education is made possible by the excellent cooperation of local industry, business and public agencies who more and more are looking to the district's colleges for skilled personnel.

Continuous liaison is maintained with prospective employers to assist in placement of graduates and to keep the training programs up-to-date with the current job requirements.

Recommendations for adding new programs to the college offerings will be made periodically based on community studies which identify additional training needs that can be met by Richland College.

Technical-occupational courses carry college credit leading to a certificate of completion (1-year programs) or an associate in applied arts and sciences degree (2-year programs).

## **Evening and Saturday Programs**

Richland College offers an evening program for the benefit of persons who are unable or do not desire to attend coursework during daytime hours. Most lower division transfer courses and certain technical-occupational courses are available during evening hours.

Instructors for the evening courses are selected from Richland's full-time staff and from among outstanding Dallas area educators and other professionals.

The evening program offers the same high quality instruction and excellent facilities found in the day schedule. Evening students have available the services of the Learning Resources Center, Counseling Center, Health Center and College Store, as well as recreation and dining facilities.

The college also provides a Saturday program for those students who cannot attend classes during the week.

## **Learning Resources Services**

The Learning Resources Center houses a multi-media library for student use. Professional reference assistance is available during all times that the LRC is open. The following are examples of materials and services available:

1. Over 30,000 volumes, over 300 periodicals
2. Microfilm copies of all major back periodicals
3. College credit courses on video-cassettes
4. Audio cassettes, phonograph recordings
5. Stereo listening stations
6. Sound filmstrips
7. Computer terminals
8. Photocopy machines
9. Typewriters

General hours of operation are 8 a.m. to 9:30 p.m. weekdays and shorter periods on Saturdays and Sundays .

On the second level of the LRC near the end of the stack area is the Student Production Lab. A consultant and a lab assistant are available to help students in the production of classroom related projects such as slide/tapes, 8mm films, posters, recordings, etc. A fully equipped lab is available for "in-house" use. Cameras and recorders are available for check-out. Typical lab hours are weekdays from 8 a.m. to 4:30 p.m.

A multi-media orientation on how to use the LRC is available for student viewing. Special orientations are also given in

response to instructors' requests. For information concerning any of the above listed services, phone 746-4460.

## **Community Service Programs**

Short-term, non-credit Community Service courses, seminars, workshops, institutes, and other activities are part of Richland's answer to the community's challenge to provide educational opportunity to everyone.

These classes and activities, designed for all age groups, take place on the campus and in more than 30 community locations, during the evening and daytime, during the week and on weekends. The program is offered in connection with local school districts and numerous other community agencies.

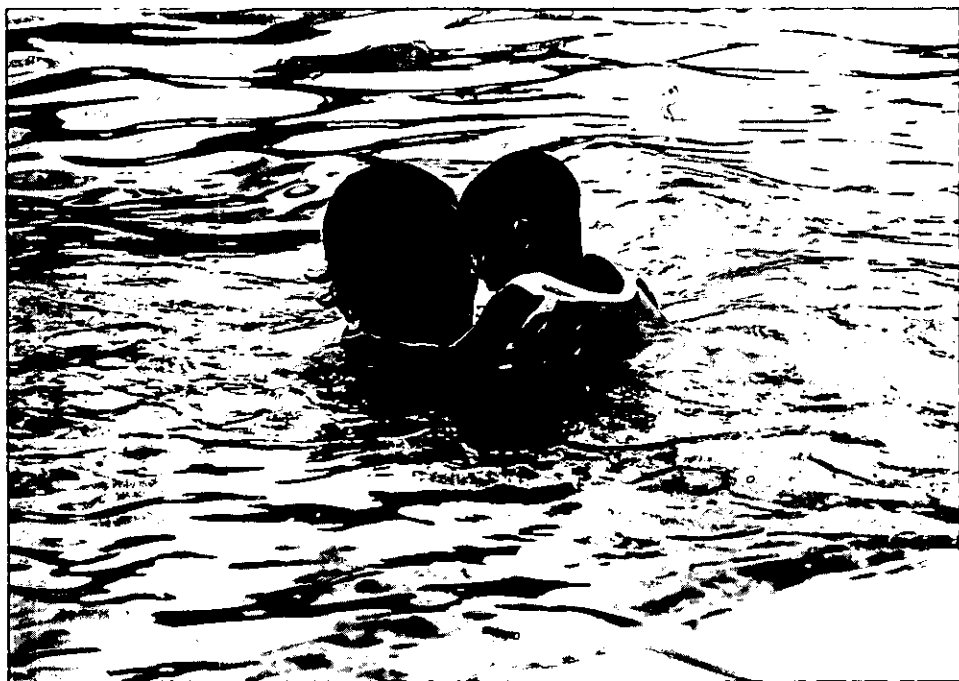
Community Service operates eight district program centers —

**The Continuing Education Center** is designed to help persons upgrade professional skills and abilities and to help them acquire new ones. For persons considering new occupational possibilities, the center gives helpful insight to a number of alternatives. This program center is also concerned with one's personal financial management and certain other elements essential to one's enjoyment of leisure time.

Program areas include —

- Real Estate
- Personal Money Management and Investments
- Management Development
- Office Occupations
- Occupations, Vocations, and Trades
- Horticulture
- Health and Recreation
- Special Interests

**The Cultural Enrichment Center** offers persons the opportunity to increase their sensitivity to beauty and to re-introduce them to the excitement of ideas, the power



of the imagination, and the unsuspected energies of the creative spirit, in the following areas:

Religion, Philosophy, and Culture  
Languages and Guided Studies  
Music, Dance, and Theatre  
Photography and Film  
Visual Arts and Crafts  
Cooking, Sewing, and Interior  
Decoration

**The Human Resources Development Center**, a joint project of the Richland Counseling Center and Community Service, offers services, training, growth, and evaluation in the areas of growth, behavioral change, and career development, through individual and group counseling, as well as through courses, workshops, and seminars. This center also serves as a clearing-house for referring individuals to other agencies whose personnel may be better able to meet their needs.

**The Everywoman Center** offers a program of services, educational opportunities, and referrals that will meet the continuing educational needs of the community's **everywoman** in today's society—whether she be a homemaker, mother, career woman, single or married woman, or a combination of any of these. An active, community-based advisory committee, representing a wide range of women's interests, serves as a valuable resource to the Everywoman Center.

**The Center for Older Texans** is designed to meet the educational needs of persons 55 years of age or older. This center complements the resources of numerous other agencies and organizations that also provide direct service to older Texans. Programs, classes, and presentations are developed and delivered both on- and off-campus, as needed in such areas as: retirement, pre-retirement, how to make ends meet on a retirement check, health and recreation, nutrition, security, community services, volunteer work, preparation for part-time employment, hobbies, social security, death as a part of life, human potential, and other areas of human resources.

**Center for Children and Youth.** Although the major thrust of the Richland Community Service Program is aimed toward meeting continuing educational needs of persons 18 years of age and older, Community Service feels a special mission to provide, on a smaller scale, a program especially for children and youth. The Cen-

ter for Children and Youth offers programs that complement, rather than compete with, those programs offered in public and private schools and by recreational agencies that cater directly to children and youth, programs that capitalize on the unique resources at Richland College and its personnel, and programs that meet otherwise unmet educational needs of children and youth in the Richland service area.

**The Richland Cosmic Theatre and Planetarium** is a space-age environment for multimedia adventures in space and time. It features a Spitz System 512 projector and numerous special effects projectors and sound equipment in a 40-foot hemispherical dome. The Cosmic Theatre and Planetarium is host to college credit classes, numerous Community Service courses, public shows on a continuing basis, and shows for school children and other special large groups by special arrangements.

**The Staff Development Resources Center.** The services of this center are designed to augment the staff development and job skill training programs of business, industrial, labor, governmental, and professional groups. Training programs are tailor-made and offered "in house" to meet specific job upgrading and mobility needs of individual organizations. Community Service staff members meet with firms who have such needs to work out these programs.

**Instructors** are not only educators from Richland College and other institutions of higher learning but also professional men and women from businesses, government, and the community, all of whom share with students the benefits of the knowledge and practical insight gained from years of experience in successful careers and avocations.

**Continuing Education Units (CEU'S).** Although no college credit is awarded for Community Service class participation, Continuing Service class participation, Continuing Education Units are transcribed for successful completion of most courses. The CEU, by nation-wide definition, is "ten contact hours of participation in an organized continuing education adult or extension experience under responsible sponsorship, capable direction, and qualified instruction." The CEU is a means of recording and accounting for the various continuing education activities that one accumulates over a period of year in transcript form.

## **Educational Opportunity Center**

The Educational Opportunity Center is sponsored by the Dallas County Community College District and the Special Services Branch of the U.S. Office of Education. This project is designed to offer extensive counseling and information services to the economically disadvantaged who may profit from further secondary or post-secondary education. This is accomplished through the use of a Mobile Counseling Center, satellite centers located throughout the community, and a computer terminal network. The Center's staff realizes its objectives through such activities as one-to-one counseling, disseminating educational information, acquiring financial aid for needy students, bringing the counseling service to the target communities, referring students to appropriate social help agencies, and assisting in the placement of individuals either in schools and/or on-the-job training programs. For further information, contact the EOC, Room 307, Main Bank Building, Main and Lamar, or telephone 746-2197 or 746-2258.

### **Telecourses**

Richland College is offering several courses via television, including courses in English composition and literature, government, history, psychology, anthropology, ecology, business, earth sciences, and humanities. Content and credit for these courses is the same as for similar courses taken on campus.

Telecourses include the viewing of television programs on KERA Channel 13 each

week, plus reading, study guide and writing assignments. Students come to the Richland College campus for an orientation session at the beginning of the semester, for one or two discussion meetings, and for three or four tests during the semester. These visits to the campus are normally scheduled so that they may be attended at a time convenient to the student.

Telecourses may be taken in conjunction with on-campus courses or by persons who are taking non on-campus instruction. Registration for telecourses may be accomplished by mail or through the normal on-campus registration procedures.

### **Center for Independent Study**

The Center for Independent Study is the open learning lab adjacent to the Reading and Writing Labs, Developmental Studies Division. The CIS is a free service to students needing help in reading, writing, and study skills. Also, free tutoring in many subjects is available. Tutors for all subjects can be hired through the CIS. It is a good place to go for information on solutions to academic problems, and students may elect to get college credit for skills improvement. Various methods of diagnosis are used, resulting in CIS instructor evaluation and recommendations. Hopefully, students will not get far behind in class work nor drop a course without first seeking specific help through the CIS. A student needs simply to stop by or call in order to get help; he does not need a referral, recommendation or appointment.







# CURRICULUM

## **Divisions of the College**

### **Business Division**

- Business
  - Accounting
  - General Business
  - Mid-Management
  - Secretarial Careers
    - Administrative
    - Educational
    - General
    - Professional
  - Office Skills and Systems
  - Computer Science
  - Economics
  - Real Estate

### **Communications Division**

- Communications
- English
- French
- German
- Journalism
- Spanish
- Speech

### **Developmental Studies Division**

- Center for Independent Study
- Developmental Mathematics
- Developmental Reading
- Developmental Writing
- Human Development
- Human Services
  - Mental Health Assistant
  - Social Worker Assistant
- Reading
- Teacher Aide

### **Human Potential Division**

- Human Development

### **Learning Resources Division**

- Resources for Learning

### **Mathematic-Technology Division**

- Construction Management and Technology
- Engineering
- Engineering Technology
- Mathematics

### **Humanities Division**

- Art
- Humanities
- Music
- Philosophy
- Theatre

### **Physical Education Division**

- Health Education
- Physical Education Theory
- Physical Education Activity
- Recreation

### **Science-Horticulture Division**

- Astronomy
- Biology
- Chemistry
- Geology
- Ornamental Horticulture Technology
- Physical Science
- Physics

### **Social Science Division**

- Anthropology
- Geography
- Government
- History
- Psychology
- Religion
- Social Science
- Sociology

In the following list of courses, the credit value in semester units is indicated in parenthesis following the course number.

Courses numbered 100 or above are applicable to the associate degrees.

Courses numbered 100 or below are developmental in nature. The student is urged to consult his counselor or specific college catalogs for information regarding transferability of courses.

Course prerequisites may only be waived by the appropriate division chairperson.

All courses listed in this catalog may not be offered during the 1977-78 year.

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## **Accounting**

(see Business 201, 202, 203, 204, 238, 239)

## **Anthropology 100**

### **Introduction to Anthropology**

3 hrs. Lec.

A survey of the origin of mankind involving the processes of physical and cultural evolution; ancient man; preliterate man today. Attention is centered on fossil evidence, physiology and family/group roles and status.

## **Anthropology 101**

### **Cultural Anthropology**

3 hrs. Lec.

A survey of the cultures of the world with an emphasis on those of North America. The concept of culture, social and political organization, language, religion and magic; elementary anthropological theory. (This course is offered on campus and via television.)

## **Anthropology 104**

### **American Indian Culture**

3 hrs. Lec.

This course attempts to lead to a better understanding of native Americans from three perspectives: native American history and prehistory; traditional Indian cultures; and native Americans today. The latter theme stresses current topics such as discrimination, poverty, employment, reservations, the Bureau of Indian Affairs, self-discrimination, health care, etc.

## **Anthropology 110**

### **The Heritage of Mexico**

3 hrs. Lec.

This course presents major historical developments and personalities which have shaped the Mexican nation, with emphasis on cultures and customs. Beginning with the peoples who inhabited the country before the Spanish conquest, the course leads to modern Mexico, emphasizing the historical relations between Mexico and the United States and the role of the Mexican-American in the contemporary United States. The student may register for either Anthropology 110 or History 110.

## **Anthropology 231**

### **Introduction to Archeology**

3 hrs. Lec.

The anthropological approach to archeology. An introduction to the study of humanity's past. How archeologists retrieve, process, analyze and interpret surviving prehistoric materials. A survey of world prehistory through neolithic times.

## **Art 103**

### **Introduction to Art**

3 hrs. Lec.

An introduction to materials and techniques of studio art for the non-major, with emphasis on basic compositional concepts and traditional media. Laboratory fee required.

- Art 104** (3)  
**Art Appreciation**  
**3 hrs. Lec.**  
 Films, lectures, slides, and discussions on the theoretical, cultural, and historical aspects of the visual arts. Attempts to develop visual and aesthetic awareness, thus relating art to the student as an individual.
- Art 105** (3)  
**Survey of Art History**  
**3 hrs. Lec.**  
 This course covers the chronological sequence of art from the pre-historic through the Renaissance. Explores the cultural, geophysical, and personal influences on art styles, offering the student a broader range of ideas which will enable him to relate the past to his own work and provide stimuli for his future works.
- Art 106** (3)  
**Survey of Art History**  
**3 hrs. Lec.**  
 This course covers the chronological sequence of art from the Baroque through the present. Explores the cultural, geophysical, and personal influences on art styles offering the student a broader range of ideas which will enable him to relate to his own work and provide stimuli for his future work.
- Art 110** (3)  
**Design I**  
**2 hrs. Lec.**  
**4 hrs. Lab.**  
 A study of basic concepts of design, using two-dimensional materials. Use of line, color, illusion of space or mass, texture, value, shape and size in composition. Required of all art majors. Open to all interested students.
- Art 111** (3)  
**Design II**  
**2 hrs. Lec.**  
**4 hrs. Lab.**  
 A study of basic concepts of design with three-dimensional materials, using mass, space, movement and texture. Required of all art majors. Open to all interested students. Laboratory fee required.
- Art 114** (3)  
**Drawing I**  
**2 hrs. Lec.**  
**4 hrs. Lab.**  
 A beginning course investigates a variety of media, techniques and subjects. Exploring perceptual and descriptive possibilities with consideration of drawing as a developmental process as well as an end in itself. Required of all art majors. Open to others who are interested.
- Art 115** (3)  
**Drawing II**  
**2 hrs. Lec.**  
**4 hrs. Lab.**  
*Prerequisite:* Art 114. Expansion of Drawing I stressing the expressive and conceptual aspects of drawing including the human figure within a spatial environment. Required of all art majors. Open to others who are interested.
- Art 116** (3)  
**Introduction to Jewelry**  
**2 hrs. Lec.**  
**4 hrs. Lab.**  
*Prerequisites:* Art 110, Art 111, or permission of instructor. The basic techniques of fabrication and casting of metals, with emphasis on original design. Laboratory fee required.
- Art 199** (1)  
**Art Seminar**  
**3 hr. Lec.**  
 A one hour weekly lecture and seminar where area artists, critics, and art educators speak with students about the work exhibited in the gallery and discuss current art styles, movements, as well as the specifics of being artists in our contemporary society.
- Art 201** (3)  
**Drawing III**  
**2 hrs. Lec.**  
**4 hrs. Lab.**  
*Prerequisites:* Art 110, Art 111, and Art 115, sophomore standing and/or permission of the division chairperson. Analytic and expressive drawing of the human figure, stressing study of movement and volume. Laboratory fee required.

- Art 202** (3)  
**Drawing IV**  
 2 hrs. Lec.  
 4 hrs. Lab.  
*Prerequisite:* Art 201, sophomore standing and/or permission of the division chairperson. A continuation of Art 201 with emphasis on individual expression. Laboratory fee required.
- Art 203** (3)  
**Art History**  
 3 hrs. Lec.  
*Prerequisites:* Art 105 and Art 106. A chronological study of the development of the art of Western man during the Renaissance period. Emphasis on development of Renaissance art in Northern and Southern Europe.
- Art 204** (3)  
**Art History**  
 3 hrs. Lec.  
*Prerequisites:* Art 105 and Art 106. A chronological study of the development of the art of Western man from late 19th century through today. Emphasis on development of modern art in Europe and America.
- Art 205** (3)  
**Painting I**  
 2 hrs. Lec.  
 4 hrs. Lab.  
*Prerequisites:* Art 101, Art 111, Art 115, or permission of the instructor. A studio course stressing fundamental concepts of painting with acrylics and/or oils. Emphasis on painting from still life, models and the imagination.
- Art 206** (3)  
**Painting II**  
 2 hrs. Lec.  
 4 hrs. Lab.  
*Prerequisite:* Art 205. Continuation of Painting I with emphasis on individual expression.
- Art 208** (3)  
**Sculpture I**  
 2 hrs. Lec.  
 4 hrs. Lab.  
*Prerequisites:* Art 110, Art 111, Art 115, or permission of the instructor. An exploration of various sculptural approaches in a variety of media and using different techniques. Laboratory fee required.
- Art 209** (3)  
**Sculpture II**  
 2 hrs. Lec.  
 4 hrs. Lab.  
*Prerequisite:* Art 208. A continuation of Sculpture I with emphasis on individual expression. Laboratory fee required.
- Art 210** (3)  
**Commercial Art I**  
 2 hrs. Lec.  
 4 hrs. Lab.  
*Prerequisites:* Art 110, Art 111, Art 115 or consent of instructor. An introduction to the working world of commercial art with emphasis on the acquisition of professional attitudes and basic studio skills through the working out of typical commercial assignments. Laboratory fee required.
- Art 211** (3)  
**Commercial Art II**  
 2 hrs. Lec.  
 4 hrs. Lab.  
*Prerequisite:* Art 210. A continuation of Art 210 with added emphasis on layout and design concepts through increased individual assignments, work with simple art for reproduction techniques, and the development of a professional portfolio. Laboratory fee required.
- Art 215** (3)  
**Ceramics I**  
 2 hrs. Lec.  
 4 hrs. Lab.  
*Prerequisites:* Art 110, Art 111, Art 115 or permission of instructor. Building of pottery forms by coil, slab and use of wheel; glazing and firing. Laboratory fee required.
- Art 216** (3)  
**Ceramics II**  
 2 hrs. Lec.  
 4 hrs. Lab.  
*Prerequisite:* Art 215 or permission of instructor. A study of glaze technology and advanced problems in the creation of sculptural and utilitarian ceramic ware. Laboratory fee required.
- Art 228** (3)  
**Three Dimensional Design**  
 2 hrs. Lec.  
 4 hrs. Lab.  
*Prerequisites:* Art majors.—Art 110, Art 111, and Art 114. Drafting technology majors —Drafting 183 and Engineering 186. De-

velopment of three-dimensional projects in metal, plastic, and wood through the stages of design: idea, sketches, research, working drawing, model and finished product. Emphasis is on function, material and aesthetic forms. Laboratory fee required.

### **Astronomy 101 (3)**

#### **Descriptive Astronomy**

**3 hrs. Lec.**

A descriptive course consisting of a survey of the fundamentals of astronomy. Emphasis on the solar system, including a study of the celestial sphere, the earth's motions, the moon, planets, asteroids, comets, meteors, and meteorites.

### **Astronomy 102 (3)**

#### **General Astronomy**

**3 hrs. Lec.**

A course emphasizing stellar astronomy which includes a study of the sun, the properties of stars, star clusters, nebulae, interstellar gas and dust, the Milky Way galaxy, and external galaxies.

### **Biology 101 (4)**

#### **General Biology**

**3 hrs. Lec.**

**3 hrs. Lab.**

This course is a prerequisite for all higher level Biology courses and should be taken in sequence. Recommended for science majors. Emphasis is structure and function at the cell, tissue, and organ system levels of organization in both plant and animal. Laboratory fee required.

### **Biology 102 (4)**

#### **General Biology**

**3 hrs. Lec.**

**3 hrs. Lab.**

This course is a continuation of Biology 101. Emphasis is Mendelian and molecular genetics, evolutionary mechanisms, plant and animal development, and the energetics and regulation of ecological communities. Laboratory fee required.

### **Biology 110 (4)**

#### **Introductory Botany**

**3 hrs. Lec.**

**3 Lab.**

An introduction to plant form and function from cell through organismic levels of organization with emphasis on the vascular plants, including taxonomy and life cycles of major plant divisions. Recommended for horticulture, agronomy, forestry, wildlife management and botany majors. Laboratory fee required.

### **Biology 115 (4)**

#### **Biological Science**

**3 hrs. Lec.**

**3 hrs. Lab.**

A presentation of selected topics in biological science for the non-science major including the cell concept, basic chemistry as it relates to biology, an introduction to genetics, cellular processes such as mitosis, meiosis, respiration, photosynthesis, and plan and animal reproduction. Laboratory fee required.

### **Biology 116 (4)**

#### **Biological Science**

**3 hrs. Lec.**

**3 hrs. Lab.**

*No Prerequisite:* A study of selected topics of biological science for the non-science major including all systems of the human body, disease, drug abuse and aging, evolution, ecology and man in relation to his environment. Laboratory fee required.

### **Biology 203 (4)**

#### **Intermediate Botany**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisites: Biology 101 and 102.* A survey of the major plant groups with emphasis placed on morphology, physiology, classification, life cycles, and evolutionary relationships to each other and their economic importance to man. Recommended for science majors. Laboratory fee required.

### **Biology 211 (4)**

#### **Invertebrate Zoology**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite: Eight hours of biological science.* An intermediate level course surveying the major groups of animals below the level of chordates. Consideration is given to the phylogeny, taxonomy, morphology, physiology, and biology of the groups involved. Relationships and importance to higher animals and man are stressed. Recommended for science majors. Laboratory fee required.

### **Biology 216 (4)**

#### **General Microbiology**

**3 hrs. Lec.**

**4 hrs. Lab.**

*Prerequisites: Biology 102 or consent of instructor.* A study of microbes with emphasis on growth, reproduction, nutrition, genetics, and ecology of microorganisms. Laboratory activities will constitute a major

part of the course. Recommended for science majors and science-related programs. Laboratory fee required.

### **Biology 217 (4)**

#### **Field Biology**

**3 hrs. Lec.**

**4 hrs. Lab.**

*Prerequisite:* Eight hours of biological science. Survey of local plant and animal life in relationship to their environment. Aquatic and terrestrial communities will be studied with reference to basic ecological principles and techniques. Emphasis will be placed upon classification, identification, and collection of specimens in the field. Laboratory fee required.

### **Biology 221 (4)**

#### **Anatomy and Physiology I**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Biology 102 or approval of instructor. Recommended for science majors. First course of a two course sequence. Structure and function as related to the human skeletal, muscular and circulatory system. Emphasis placed on the inter-relationships of these systems. Laboratory fee required.

### **Biology 222 (4)**

#### **Anatomy and Physiology II**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Biology 221 or approval of instructor. Second course of a two-course sequence. Structure and function as related to the human digestive, nervous, respiratory, reproductive and endocrine systems. Emphasis placed on the inter-relationships of these systems. Laboratory fee required.

### **Biology 235 (4)**

#### **Comparative Anatomy of the Vertebrates**

**3 hrs. Lec.**

**4 hrs. Lab.**

*Prerequisites:* Biology 101 and 102. A survey of the major groups of vertebrates from a comparative point of view. The lectures will involve an intensive study of each vertebrate class, with emphasis on morphology and evolutionary relationships. Representatives of each vertebrate class will be dissected and compared to sequence during laboratory sessions. For science majors, pre-medical and pre-dental students. Laboratory fee required.

### **Biology 290**

(See Ecology 290)

### **Bookkeeping**

(See Business 131, 132)

### **Business Mathematics 130**

(See Mathematics 130)

### **Business 105 (3)**

#### **Introduction to Business**

**3 hrs. Lec.**

Provides overall picture of business operation; includes analysis of specialized fields within business organizations; identifies role of business in modern society. (This course is offered on campus and via television).

### **Business 131 (3)**

#### **Bookkeeping I**

**3 hrs. Lec.**

The fundamental principles of double-entry bookkeeping as applied to practical business situations. Emphasis is given to the following: financial statements, trial balances, work sheets, special journals, adjusting and closing entries. A practice set covering the entire business cycle will be completed.

### **Business 132 (3)**

#### **Bookkeeping II**

**3 hrs. Lec.**

*Prerequisite:* Business 131. Attention will be given to accruals, bad debts, taxes, depreciation, controlling accounts, and business vouchers. Bookkeeping for partnerships and corporations will be introduced.

### **Business 136 (3)**

#### **Principles of Management**

**3 hrs. Lec.**

A study of the process of management including the functions of planning, organizing, leading, and controlling. Particular emphasis on policy formulation, decision-making processes, operating problems, communications theory, and motivation techniques.

### **Business 137 (3)**

#### **Principles of Retailing**

**3 hrs. Lec.**

The operation of the retail system of distribution. The inter-relationship of consumer demand, inventory control, the buying sequence, personnel requirements, use of computer in retailing, store location and layout, and credit policies.



**Business 140 (3)**

**Educational Processes**

**3 hrs. Lec.**

An overview of the educational processes (public and private) from pre-school through college. Emphasis is placed on the contribution and influence made by education on our culture and our economy.

**Business 141 (3)**

**Current Practical Problems**

**3 hrs. Lec.**

Orientation to school organization, procedures, and staff utilization via the problem solving approach.

**Business 143 (3)**

**Personal Finance**

**3 hrs. Lec.**

A study of everyday financial problems encountered in managing personal affairs. Includes financial planning, insurance, budgeting, use of credit, home ownership, savings, investment, and tax problems.

**Business 150 (4)**

**Management Training**

**20 hrs. Lab.**

*Prerequisite:* Concurrent enrollment in approved mid-management program. Supervised employment in the student's chosen field. Intended to provide practical experience for students preparing for careers in business management. Business 150 will be offered the first semester.

**Business 151 (4)**

**Management Training**

**20 hrs. Lab.**

*Prerequisite:* Concurrent enrollment in approved mid-management program. A continuation of Business 150. Business 151 will be offered the second semester.

**Business 153 (3)**

**Small Business Management**

**3 hrs. Lec.**

The student will be studying the fundamental approaches to planning, establishing and operating a small business. The day-to-day operation of the business and reporting procedures will be studied as well as exploring the concepts of general management.

**Business 154 (2)**

**Management Seminar — Role of Supervision**

**2 hrs. Lec.**

*Prerequisites:* Concurrent enrollment in Business 154 and preliminary interview by mid-management faculty. Problem analysis

and project development for students majoring in mid-management. Special emphasis is placed upon the development of management, goal setting and planning, leadership, communication and motivation as applied to the student's work experience.

**Business 155 (2)**

**Management Seminar — Personnel Management**

**2 hrs. Lec.**

*Prerequisites:* Business 150, Business 154 and concurrent enrollment in Business 151. A study of the principles, policies, and practices relating to the personnel functions of business as applied to the student's work experiences.

**Business 159 (4)**

**Beginning Shorthand**

**3 hrs. Lec.**

**2 hrs. Lab.**

*Prerequisite:* Credit in or concurrent enrollment in Business 172 or one year of typing in high school. Introduction of fundamental principles of Gregg shorthand, Diamond Jubilee series. Includes development of ability to read, write and transcribe shorthand outlines. Development of knowledge of mechanics of English.

**Business 160 (3)**

**Office Machines**

**3 hrs. Lec.**

Office Machines is designed to provide the student with a skill in the operation of such machines as adding machines, printing calculators, and electronic calculators. Emphasis is placed on using the touch system in both speed and accuracy for performing the basic functions, solving problems that require the use of special keys and controls, and solving application problems.

**Business 162 (3)**

**Office Procedures**

**3 hrs. Lec.**

Duties, responsibilities, and personal qualifications of the office worker are emphasized, units of work include filing, reprographics, mail telephone, financial transactions, and job applications.

**Business 165 (3)**

**Introduction to Word Processing**

**3 hrs. Lec.**

*Prerequisites:* Business 172 or one year of high school typing. Provides an overall picture of word processing and its effect on traditional office operations. A study of

word processing terminology and word processing centers which combine up-to-date equipment with streamlined paper handling procedures. Training in the transcription and distribution of business communications. Reinforcement of English skills and English mechanics.

### **Business 166 (4)**

#### **Intermediate Shorthand**

**3 hrs. Lec.**

**2 hrs. Lab.**

*Prerequisites:* Credit in Business 159 or one year of shorthand in high school, credit in Business 172 or one year of typing in high school. Application of the principles of Gregg Shorthand to develop the following; increased speed dictation, accuracy in typing from shorthand notes, and emphasis on the beginning techniques of transcription skills. Included will be oral reading of shorthand outlines, speed building dictation, and mailable copy. Special attention will be given to English fundamentals such as grammar, punctuation, etc.

### **Business 172 (3)**

#### **Beginning Typing**

**2 hrs. Lec.**

**3 hrs. Lab.**

Fundamental techniques in typewriting are developed. The skills involved in typing manuscripts, business letters and tabulation are introduced. This course is for students with no previous training in typewriting.

### **Business 174 (2)**

#### **Intermediate Typing**

**1 hr. Lec.**

**2 hrs. Lab.**

*Prerequisite:* Credit in Business 172 or one year of typing in high school. Further development of techniques. Emphasis will be placed on problem solving, increasing speed and accuracy in typing business forms, correspondence and manuscripts.

### **Business 201 (3)**

#### **Principles of Accounting I**

**3 hrs. Lec.**

Theory and practice of measuring and interpreting financial data for business units; study of problems of income measurements, such as depreciation, inventory valuation, and credit losses; the operating cycle and the preparation of financial statements.

### **Business 202 (3)**

#### **Principles of Accounting II**

**3 hrs. Lec.**

*Prerequisite:* Business 201. Accounting pro-

cedures and practices applicable to partnerships and corporations; the use of cost data, budgetary controls, analysis and interpretation of financial reports for use by creditors, investors, and management.

### **Business 203 (3)**

#### **Intermediate Accounting**

**3 hrs. Lec.**

*Prerequisite:* Business 202. An intensive study of the concepts, principles, and practice of modern financial accounting. Included is a complete study of the purposes and procedures underlying the financial statements.

### **Business 204 (3)**

#### **Managerial Accounting**

**3 hrs. Lec.**

*Prerequisite:* Business 202. A study of accounting practices and procedures in providing information for business management. Emphasis is placed on the preparation and internal use of financial statements and budgets, types of accounting systems, and other accounting information and procedures used in management planning and control.

### **Business 205 (3)**

#### **Business Finance**

**3 hrs. Lec.**

*Prerequisites:* Economics 201 or 202. This course is designed to give the students a working knowledge of the financial system in the free enterprise system. Interest rates, value analysis, financing of business firms and government, security markets, analysis of financial requirements for decision making and capital requirements.

### **Business 206 (3)**

#### **Principles of Marketing**

**3 hrs. Lec.**

A study of the scope and structure of marketing institutions in the marketplace today. Analysis of the marketing functions, consumer behavior, market research, sales forecasting and relevant state and federal laws.

### **Business 230 (3)**

#### **Salesmanship**

**3 hrs. Lec.**

A course in general salesmanship involving the factors of successful selling of goods and ideas. Buying motives, sales psychology, customer approach, and sales techniques are studied.

- Business 231** (3)  
**Business Correspondence**  
 3 hrs. Lec.  
*Prerequisites:* Credit in Business 172 or one year of typing in high school. A practical course that includes a study of letter forms, the mechanics of writing, and composing various types of communications. A critical analysis of the appearance and content of representative business correspondence is made.
- Business 233** (3)  
**Advertising and Sales Promotion**  
 3 hrs. Lec.  
 Introduces the fundamental principles, practices and common media used in persuasive communication. Includes an insight into buyer behavior, use of advertising media to motivate consumer, and methods of stimulating salespeople and retailers. Familiarizes the student with the management of promotion programs with respect to goals, strategies, evaluation and control of promotional activities.
- Business 234** (3)  
**Business Law**  
 3 hrs. Lec.  
 This course is designed to acquaint the student with the historical and ethical background of the law and to familiarize him with present day principles of law. Particular emphasis on contracts, property (bailments, sales, leases, wills, and estates), and torts.
- Business 237** (3)  
**Organizational Behavior**  
 3 hrs. Lec.  
 This course endeavors to focus on the persisting human problems of administration in modern organizations as they relate to the theory and methods of behavioral science.
- Business 238** (3)  
**Cost Accounting**  
 3 hrs. Lec.  
*Prerequisite:* Business 202. The theory and practice of accounting for a manufacturing concern. Detailed study of the measurement and control of material, labor and factory overhead for the job order and process cost system. Budgets, variance analysis, standard costs, joint and by products costing will be discussed.
- Business 239** (3)  
**Income Tax Accounting**  
 3 hrs. Lec.  
*Prerequisites:* Business 202 or consent of instructor. Provides an understanding of basic income tax laws applicable to individuals and sole proprietorships. Subjects treated include personal exemption, gross income, business expenses, non-business deductions, capital gains and losses. Emphasis is on those problems commonly encountered in the preparation of income tax returns.
- Business 242** (3)  
**Personnel Administration**  
 3 hrs. Lec.  
 Personnel Administration is a business course designed to provide a solid foundation in the fundamentals, theories, principles and practices of people management. Emphasis will be on people and the factors that are relevant to employment of people; i.e. recruitment, selection, training, job development, interactions with others, labor management relations, government regulations, etc. The managerial functions of planning, organizing, staffing, directing, and controlling will provide the framework for applying the principles which are significant in personnel interactions and management.
- Business 250** (4)  
**Management Training**  
 20 hrs. Lab.  
*Prerequisites:* Business 150-151; concurrent enrollment in Business 254. Continuation of supervised employment in the student's chosen field. Intended to provide increased supervisory responsibility for students preparing for careers in business management. Business 250 will be offered the first semester.
- Business 251** (4)  
**Management Training**  
 20 hrs. Lab.  
*Prerequisites:* Business 150-151; concurrent enrollment in Business 255. A continuation of Business 250. Business 251 will be offered the second semester.
- Business 254** (2)  
**Management Seminar—Organizational Development**  
 2 hrs. Lec.  
*Prerequisites:* Business 151, 155 and concurrent enrollment in Business 250. A study of the organizational objectives and man-

agement of human resources including the various approaches to organizational theory as applied to the student's work experiences.

## **Business 255 (2)**

**Management Seminar —  
Business Strategy, The Decision  
Process and Problem Solving**  
2 hrs. Lec.

*Prerequisites:* Business 250, Business 254 and concurrent enrollment in Business 251. Business strategy and the decision-making process applied to the first line supervisor and middle-management positions. Specific emphasis will be placed upon the application of the student's course knowledge and work experiences.

## **Business 265 (3)**

**Word Processing Practices  
and Procedures**  
3 hrs. Lec.

*Prerequisites:* Successful completion of Business 165. Theory and practice of translating ideas into words, putting those words on paper and turning that paper into communication. Emphasis on training in composing and dictating business communications, developing teamwork skills, setting priorities, scheduling, understanding procedures, researching, storing and retrieving documents, and managing word processing systems. Further development of transcribing and magnetic keyboarding skills. Reinforcement of typing skills and English mechanics. Goal is development of employable skills in an office or word processing center.

## **Business 266 (4)**

**Advanced Shorthand**  
3 hrs. Lec.  
2 hrs. Lab.

*Prerequisites:* Credit in Business 166 or two years of shorthand in high school, credit in Business 273 or two years of typing in high school. Emphasis is on specialized speed building dictation, timed typewritten mailable transcriptions, additional vocabulary building, and extensive production work capabilities, continued development of this high level skill enables the student to meet the challenges presented in any office situation.

## **Business 273 (2)**

**Advanced Typing**  
1 hr. Lec.  
2 hrs. Lab.

*Prerequisite:* Credit in Business 174 or two years of typing in high school. Decision

making and timed production of all types of business material are emphasized. A continuation of skill development and a review of typing techniques are also stressed. This course will demand accuracy at advanced speeds.

## **Business 275 (3)**

**Secretarial Procedures**  
3 hrs. Lec.

*Prerequisites:* Completion or concurrent enrollment in Business 174 and completion of/ or concurrent enrollment either in Business 166 or Business 265. This course is designed primarily to make the student think in terms of initiative, creative thinking, and follow-through within these units of work: in-basket exercises, decision-making problems, utilization of the shorthand/transcription skills, units on public and personal relations, supervisory principles, business ethics, and organizing time and work.

## **Business 703, 803, 713, 813 (3)**

**Work Experience**  
15 hrs. Lab.

*Prerequisite:* Completion of two courses in Accounting Associate or Secretarial Careers Associate degree program and instructor/coordinator approval. These courses constitute an on-the-job application of theory and laboratory instruction received in the formal courses of the student's major curricula. The student will be placed in a work-study position in his technical/occupational field that will test his skill and ability to function successfully in that respective occupation. The student's learning in this course will be guided by a set of learning objectives formulated at the beginning of each semester by the student, his instructor/coordinator, and his supervisor at work. The instructor will determine if the learning objectives are valid and will give final approval for credit. The student will have a regularly scheduled meeting with his instructor and will complete appropriate assignments given to him by his instructor.

## **Business 704, 804, 714, 814 (4)**

**Work Experience**  
20 hrs. Lab.

(Same as course description above for Business 703, et al.)

## **Business Mathematics**

(See Mathematics 130)

## **Chemistry 101**

### **General Chemistry**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* *Developmental Mathematics 093 or equivalent.* Designed for science and science-related majors, the course includes the fundamental laws and theories dealing with the structure and interactions of matter, chemical bonding, chemical reactions, the physical states of matter and changes of state. The fundamental principles are applied to the solution of quantitative problems relating to chemistry. Laboratory fee required.

## **Chemistry 102**

### **General Chemistry**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* *Chemistry 101.* Designed for science and science-related majors, this course is a continuation of Chemistry 101. The fundamental concepts introduced previously, together with additional ones, are applied to a variety of topics, including solutions and colloids, chemical kinetics and equilibrium, electrochemistry, and nuclear chemistry. Qualitative inorganic analysis is included in the laboratory work. Laboratory fee required.

## **Chemistry 115**

### **General Chemistry**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* *Developmental Mathematics 091 or equivalent.* Designed for non-science majors, the course traces the development of theoretical concepts and the evolution of these concepts in explaining various observations and laws relating to chemical bonding reactions, states of matter, solutions, electrochemistry and nuclear chemistry. The descriptive chemistry of some common elements and inorganic compounds is included. Laboratory fee required.

## **Chemistry 116**

### **General Chemistry**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* *Chemistry 115.* Designed for non-science majors, this course covers organic chemistry and biochemistry. The important classes of organic compounds are surveyed with the concept of structure providing the central theme. The biochemistry section includes carbohydrates, proteins,

(4) lipids, chemistry of heredity, disease and therapy and plant biochemistry. Laboratory fee required.

## **Chemistry 201**

### **Organic Chemistry I**

**3 hrs. Lec.**

**4 hrs. Lab.**

*Prerequisite:* *Chemistry 102.* Designed for science and science-related majors. An integrated introductory course in organic chemistry dealing with the fundamental types of organic compounds, their nomenclature, classification, reactions, and application, classification, reactions, and aromatic compounds are discussed in terms of modern electronic theory with emphasis on reaction mechanisms, stereochemistry, transition state theory and technique of organic synthesis. Laboratory fee required.

## **Chemistry 202**

### **Organic Chemistry II**

**3 hrs. Lec.**

**4 hrs. Lab.**

*Prerequisite:* *Chemistry 201.* Designed for science and science-related majors, this course is a continuation of Chemistry 201. Emphasis will be given to the further development of aliphatic and aromatic systems, poly-functional compounds including amino acids, proteins, carbohydrates, sugars, heterocyclic and related compounds. Instrumental techniques will be used to identify compounds. Laboratory fee required.

## **Chemistry 203**

### **Quantitative Analysis**

**2 hrs. Lec.**

**6 hrs. Lab.**

*Prerequisites:* *Chemistry 102, Mathematics 101 or Mathematics 104 or equivalent.* This course includes the principles of chemistry as applied by the analytical chemist to quantitative determinations. Topics include gravimetry, oxidation-reduction, indicators, and acid-base theory. Laboratory experience focuses on the fundamentals of gravimetric and volumetric analysis with an introduction to colorimetry. Laboratory fee required.

## **College Learning Skills 100**

### **College Learning Skills**

The course will provide individualized study and practice in reading, study skills and/or composition. It is designed for students who wish to extend their learning skills for academic or career programs. May be repeated for a maximum of three (3) credits.

**Communications 131 (3)****Applied Composition and Speech  
3 hrs. Lec.**

The study of communication skills as a practical means of preparing for successful performance in the student's chosen vocation. Practice in writing letters, applications, resumes, and short reports.

**Communications 132 (3)****Applied Composition and Speech  
3 hrs. Lec.**

*Prerequisite:* Communications 131 or consent of instructor. The study of communication processes with emphasis on written persuasion directly related to occupational training and work experience. Use of expository techniques in business letters and documented reports. Practice in oral communications.

**Computing Sciences 175 (3)****Introduction to Computer Science  
3 hrs. Lec.**

Provides a basic understanding of the computer, cultural impact, history of computers, vocabulary, flow charts, data representation, and an introduction to procedure oriented languages with general applications.

**Computing Sciences 208 (3)****Introductory APL Programming  
3 hrs. Lec.**

*Prerequisites:* Mathematics 101 or Mathematics 104 or Mathematics 111, and Mathematics 107 or consent of instructor. A study of APL Language with emphasis on applications. This course is designed for partial fulfillment of degree requirements in computer science, but is recommended for mathematics, science, and business majors.

**Construction Management and Technology 121 (3)****Construction Materials, Methods & Equipment I  
2 hrs. Lec.  
3 hrs. Lab.**

An introductory study of construction materials, methods and equipment. The origin, nature and normal uses of materials are investigated as well as their integration into finished projects. The course is an up-to-date study of construction techniques. Laboratory fee required.

**Construction Management and Technology 122 (3)****Construction Materials, Methods & Equipment II  
2 hrs. Lec.  
3 hrs. Lab.**

*Prerequisite:* Construction Management and Technology 121 or consent of instructor. A continuing study of construction materials, methods and equipment. The origin, nature and normal uses of materials are investigated as well as their integration into finished projects. The course is an up-to-date study of construction techniques. Laboratory fee required.

**Construction Management and Technology 123 (4)****Construction Graphics  
2 hrs. Lec.  
6 hrs. Lab.**

*(No prerequisites)* Designed to introduce the student to light construction technology and construction graphic communications. The student will learn to read blueprints and understand the expressed and implied meanings of all types of symbols, conventions and drawings. The student will increase his communication skills by learning free hand sketching and basic drafting required of construction supervisors. Laboratory fee required.

**Construction Management and Technology 124 (4)****Electrical & Mechanical Equipment for Buildings  
3 hrs. Lec.  
3 hrs. Lab.**

A continuing study of the nature and use of those construction materials and equipment associated with plumbing, heating, ventilation and air conditioning systems; electrical systems; conveying systems used in building construction. The student will be introduced to the design theories and uses for the completed systems.

**Construction Management and Technology 132 (3)****The Construction Industry  
3 hrs. Lec.  
3 hrs. Lec.**

An introductory course designed to survey the growth, magnitude and economic importance of the construction industry. Em-

phasis is placed on an understanding of the interrelationship between the many trades, professions and agencies involved in construction.

### **Construction Management and Technology 136 (4)**

**Surveying and Measurements**

**2 hrs. Lec.**

**6 hrs. Lab.**

*Prerequisites:* Mathematics 195 or equivalent. Beginning course designed for students with little or no training in surveying. It combines lectures, laboratory, and field work in theory, methods, equipment and problems involved in surveying and measurement and their application.

### **Construction Management and Technology 138 (4)**

**Construction Management I**

**3 hrs. Lec.**

**3 hrs. Lab.**

An introductory course covering the total responsibilities of a supervisor, such as organization, duties and responsibilities, human relations, grievances, training, rating, promotion, quality and quantity control, management-employee relations, scheduling of work, job and safety instructions. Study of roles played by labor and management in the development of American industry. Analysis is made of forces affecting labor supply, employment, and industrial relations under the democratic system of government. A major part of the course is on safety and its value to economic operations and employee morale.

### **Construction Management and Technology 230 (4)**

**Quality Control and Cost Control**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisites:* Construction Management and Technology 231, 233; concurrent enrollment or equivalent. A course designed to study standard quality control procedures utilized in the construction industry including laboratory and field testing. The student will also learn to separate, analyze and evaluate construction costs and methods to control them. Laboratory fee required.

### **Construction Management and Technology 231 (3)**

**Construction Contracts and Specifications**

**2 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisites:* Construction Management and

Technology 121, 122, and 123 or equivalent. A basic course in written construction communications. The course includes the study of construction contracts and specifications, their preparations, implementation, modification, administration and legal pitfalls. Laboratory fee required.

### **Construction Management and Technology 234 (4)**

**Estimating**

**2 hrs. Lec.**

**6 hrs. Lab.**

*Prerequisites:* Construction Management and Technology 123 and 231; concurrent enrollment or their equivalent. A basic course for construction estimators. The student studies quantity surveying, interpretation and uses of bid documents. He learns to compute and assemble labor and material costs, unit and lump sum costs and preliminary and final estimates. Laboratory fee required.

### **Construction Management and Technology 236 (4)**

**Building Codes and Safety**

**3 hrs. Lec.**

**3 hrs. Lab.**

Studies various construction methods and procedures in relation to zoning/building codes and occupational safety standards and regulations. The inter-relationships between federal, state and municipal authorities and construction operations are examined in detail. Emphasis will be placed on the development and implementation of effective loss and accident prevention planning.

### **Construction Management and Technology 237 (4)**

**Soils, Foundations, and Reinforced Concrete**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisites:* Construction Management and Technology 121, 122, and 230; concurrent enrollment or equivalent. This is a basic study of soil characteristics and qualities required for a good foundation. It includes soil sampling and testing. The course is also a study in concrete design, placement and testing. Some study of asphaltic pavements will be included. Laboratory fee required.

## **Construction Management and Technology 238 (4)**

### **Construction Management II**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Construction Management and Technology 138. A course in project planning and development in construction which involves feasibility studies, financing, planning, programming, design and construction. Office engineering techniques are investigated through the solutions of problems related to construction projects.

## **Developmental Mathematics**

Developmental Mathematics courses are offered on a self-paced, individualized basis. These courses may be taken for review of mathematics skills. Developmental Mathematics 093 satisfies prerequisites for Mathematics 101, 104, and 111. Developmental Mathematics 091 satisfies prerequisites for Mathematics 115, 130, 139, and 195.

## **Developmental Mathematics 090 (3)**

### **Pre-Algebra Mathematics**

**3 hrs. Lec.**

This course is designed to develop an understanding of fundamental operations using whole numbers, fractions, decimals and percentages and to strengthen basic skills in mathematics. The course is planned primarily for students who need to review basic mathematical processes. It is the first step in the math sequence and includes an introduction to algebra.

## **Developmental Mathematics 091 (3)**

### **Elementary Algebra**

**3 hrs. Lec.**

*Prerequisite:* Developmental Mathematics 090 or equivalent. The course is designed to develop an understanding of first year algebra. It includes special products and factoring, fractions, equations, graphs, functions, and an introduction to geometry. The sequence Developmental Mathematics 090-091 and Developmental Mathematics 093 is preparatory to Mathematics 101 or Mathematics 104 as well as a foundation for technical mathematics.

## **Developmental Mathematics 093 (3)**

### **Intermediate Algebra**

**3 hrs. Lec.**

*Prerequisite:* One year high school algebra or Developmental Mathematics 091. Includes the terminology of sets, properties of real

numbers, fundamental operations on polynomials and fractions, products, factoring, radicals, and rational exponents. Also covered are solutions of linear, fractional, quadratic, and systems of linear equations, coordinate systems, and graphing.

## **Developmental Reading**

Students can improve and refine their performance in the English sequence by enrolling in Developmental Reading courses. Developmental Reading 090, and 091 are valuable skill development courses for English 101. Reading 101 is especially helpful in English 102 and the sophomore level literature courses. See catalog description in reading for full course content.

## **Developmental Reading 090 (3)**

### **Techniques of Reading/Learning**

**3 hrs. Lec.**

Developmental Reading 090 is designed to meet individual needs for proficiency in reading comprehension, vocabulary development, study skills, and reading for success in academic areas and career advancement. It emphasizes learning how to learn and includes reading/learning experiences developed to strengthen the total educational background of each student. Developmental Reading 090 and Developmental Reading 091 are offered in a laboratory setting employing varied instructional methods.

## **Developmental Reading 091 (3)**

### **Techniques of Reading/Learning**

**3 hrs. Lec.**

Developmental Reading 091 is designed to meet individual needs for proficiency in reading comprehension, vocabulary development, study skills, and reading for success in academic areas and career advancement. It emphasizes learning how to learn and includes reading/learning experiences developed to strengthen the total educational background of each student. Developmental Reading 090 and Developmental Reading 091 are offered in a laboratory setting employing varied instructional methods.

## **Developmental Writing**

Students can improve their level of success in all courses requiring writing assignments by registering for Developmental Writing. These courses, offered for one to three hours credit, consider organization skills, and research paper styles, as well as individual writing weaknesses.



## **Developmental Writing 090 (3)**

### **Writing**

**3 hrs. Lec.**

Writing 090 emphasizes the diagnosis and correction of deficiencies in basic writing skills. Spelling, grammar, vocabulary improvement, and principles of sentence and paragraph structure (as well as experience in organization for composition) are taught in a laboratory utilizing individualized instruction techniques.

## **Developmental Writing 091 (3)**

### **Writing**

**3 hrs. Lec.**

Writing 091 is a sequel to Writing 090 and concentrates on the composition process; therefore, it is important to develop the student's skills of organization, transition and revision. His program of composition will vary according to his individual needs, which may include brief, simple forms as well as more complex critical and research writing.

## **Developmental Writing 092 (1)**

### **Writing Lab**

**3 hrs. Lab.**

Writing Lab 092 is a workshop to facilitate writing success for course work and other individual interests. Students are given instruction and supervision in written assignments, including the research paper, and in editing for mechanical effectiveness.

## **Drafting 182 (2)**

### **Technician Drafting**

**1 hr. Lec.**

**3 hrs. Lab.**

A beginning drafting course to enable students to read and interpret engineering drawings. Topics covered include multi-view drawings, pictorial drawings, dimensioning, measurement with scales, schematic diagrams and printed circuit boards.

## **Drafting 183 (4)**

### **Basic Drafting**

**2 hrs. Lec.**

**6 hrs. Lab.**

A beginning course for students who have had little or no previous experience in drafting. The principal objectives are basic understanding of orthographic projection; skill in orthographic, axonometric, and oblique sketching and drawing; lettering fundamentals; applied geometry; fasteners; sectioning; tolerancing; auxiliaries; experience in using handbooks and other

resource materials and development of design skills. U.S.A.S.I., government, and industrial standards are used. Emphasis is placed on both mechanical skills and graphic theory.

## **Drafting 184 (3)**

### **Intermediate Drafting**

**2 hrs. Lec.**

**4 hrs. Lab.**

*Prerequisite: Drafting 183 or equivalent.* The instructional units provide additional understanding of drafting problems, place emphasis on the design function, and introduce several specialized drafting areas that are valuable for the designer. This course includes the detailing and assembling of machine parts, gears and cams, jigs and fixtures, a study of metals and metal forming processes, drawing room standards and reproduction of drawings. The student is assigned to work that requires him to make complete and accurate detail and assembly drawings. Laboratory fee required. (\*Equivalent is based on high school drafting courses or on student's work experience. Sample of drawings and/or high school transcript must be presented.)

## **Earth Science 117 (4)**

### **Earth Science**

**3 hrs. Lec.**

The course encompasses the interaction of the earth's sciences and man's physical world. Geology, astronomy, meteorology, and space science are emphasized through the application of selected principles and concepts of the applied sciences. The course is directed toward the non-science major. Laboratory fee required. This course can be offered on campus and via television.)

## **Ecology 290 (3)**

### **Man and His Environment**

**3 hrs. Lec.**

Selected topic affecting man and his environment will be treated through seminars, field studies, and special lectures. Recognized authorities and specialists from the many academic disciplines will be used as guest lecturers and resource persons. Man's responsibility to his environment, both biological and physical, will be the thesis of this course and its presentation will be interdisciplinary. This course is directed to all students interested in the environmental problems of today. (This course is offered via television.)

## **Ecology 291**

### **Man and His Environment**

**3 hrs. Lec.**

A course designed to increase environmental awareness and knowledge. Areas of study include pollution, erosion, land use, energy resources depletion, overpopulation, and the effects of unguided technological development. Through documentaries and interviews with experts, an emphasis is placed on proper planning of societal and individual action in order to protect the natural environment. (This course is offered via television.)

## **Economics 201**

### **Principles of Economics I**

**3 hrs. Lec.**

The fundamental principles of macroeconomics. Economic organization, national income determination, money and banking, monetary and fiscal policy, economic fluctuations and growth. Sophomore standing recommended. (This course is offered on campus and may be offered via television.)

## **Economics 202**

### **Principles of Economics II**

**3 hrs. Lec.**

*Prerequisite: Economics 201 or the consent of the instructor.* The fundamental principles of microeconomics. Theory of demand, supply, and price of factors; income distribution; theory of the firm. Emphasis also on international economics and contemporary economic problems.

## **Electric Power Technology 241 (3)**

### **Advanced Electrical Machinery and Transformers**

**2 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite: Electro-Mechanical Technology 233.* This course is a continuation of Electro-Mechanical Technology 233 with emphasis on three phase power, poly phase machines and transformers. The characteristics and applications of alternators, synchronous motors and poly phase induction motors are studied. Single phase and poly phase transformer fundamentals, construction, markings and polarity, connections, efficiency and ratings are also studied. The laboratory provides hands-on experience in the operation and evaluation of the electrical machines and transformers. Laboratory fee required.

## **(3) Electric Power Technology 244 (4)**

### **Advanced Electric Power Systems**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite: Electro-Mechanical Technology 233.* This course is devoted to a study of modern power distribution systems. This will include generating equipment, transmission lines, plant distribution and protective devices. The fundamental principles, characteristics and philosophy of protective relaying will be emphasized. The laboratory provides hands-on experience in the operation and testing of the various types of protective relays and power distribution equipment. Laboratory fee required.

## **Electric Power Technology 703,**

**803, 713, 813**

**(3)**

### **Work Experience**

**15 hrs. Lab.**

*Prerequisite: Two courses in the student's major and instructor/coordinator approval.* (The description for these courses is the same as that listed for Business 703 and also under Work Experience.)

## **Electric Power Technology 704,**

**804, 714, 814**

**(4)**

### **Work Experience**

**20 hrs. Lab.**

(Same as course description above for Electric-Power Technology 703, et al.)

## **Electro-Mechanical**

### **Technology 229**

**(4)**

### **Analog and Digital Circuits**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite: Electronics Technology 193 or equivalent.* This course treats more advanced electronic devices and circuits with primary emphasis on semiconductors. Both analog and digital circuit fundamentals are discussed. The use of these circuits in controls, sensing, and testing is stressed. Attention in the laboratory shifts to the application and characteristics of these circuits. Emphasis is placed on the application and analysis of solid state circuits in electro-mechanical devices with increased reliance on pre-assembled or commercially available units. Laboratory fee required.

## **Electro-Mechanical Technology 232 (4)**

### **Mechanisms and Drives**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Mathematics 195 or equivalent. This course is devoted to the study of mechanisms and drive elements of electro-mechanical systems. Individual linkage and drive mechanisms are studied in terms of their function and operating characteristics in integrated electro-mechanical systems. Laboratory work in the construction, testing and analysis of linkage and drive elements used in electro-mechanical systems is coordinated with supporting lecture material on the related concepts in mechanics.

## **Electro-Mechanical Technology 233 (3)**

### **Electrical Machinery**

**2 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Electronics Technology 191 or concurrent enrollment in Electronics Technology 191. This course is designed to provide both theoretical and functional knowledge of power electricity, including AC and DC machines. Both electrical and mechanical aspects of electrical machinery and controls are stressed. The laboratory provides hands-on experience in operation of electrical machinery, quantitative analysis of performance characteristics, electrical measurements on power circuits and equipment as well as experimental demonstration of principles discussed in class. Safety practices for the protection of equipment and personnel are stressed. Laboratory fee required.

## **Electro-Mechanical Technology 237 (3)**

### **Electro-Mechanical Systems**

**2 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Electronics Technology 191. An integrated course which ties together all aspects of the curriculum. This laboratory emphasizes analysis and troubleshooting of operational electro-mechanical systems and processes in which faults are intentionally introduced. Systems studied are derived from a wide range of multi-discipline industrial applications. The student is required to demonstrate a substantial degree of independence in problem identification, problem solving, and reporting techniques. There is

continued emphasis on safety in both written and oral communication. Laboratory fee required.

## **Electro-Mechanical Technology 239 (3)**

### **Principles of Digital Control**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Electro-Mechanical Technology 229. Study of the control of automated systems. The functions of the various control elements and subsystems. The functions of various control elements and their interface with other components in an automated system will be discussed. The conversion of control information between analog and binary forms will be considered. The use and implementation of logical decision elements are studied. The operation and function of microprocessors in modern control systems will be emphasized. The lab will provide hands-on experience closely coordinated with lecture material. Laboratory fee required.

## **Electro-Mechanical Technology 703, 803, 713, 813 (3)**

### **Work Experience**

**15 hrs. Lab.**

*Prerequisite:* Two courses in the student's major and instructor/coordinator approval. (The description for these courses is the same as that listed for Business 703 and also under Work Experience.)

## **Electro-Mechanical Technology 704, 804, 714, 814 (4)**

### **Work Experience**

**20 hrs. Lab.**

(Same as course description above for Electro Mechanical Technology 703, et al.)

## **Electronics Technology 190 (4)**

### **D.C. Circuits and Electrical Measurements**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Credit or concurrent enrollment in Mathematics 195 or equivalent. Combines mathematical theory and laboratory fundamentals in direct current circuits. Elementary principles of magnetism, electric concepts and units, diagrams, resistance, series and parallel circuits, simple meter circuits, conductors, and insulators will be emphasized. Laboratory fee required.

## **Electronics Technology 191 (4)**

### **A.C. Circuits**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisites:* *Electronics Technology 190 and Mathematics 195.* Devoted to the study of fundamental theories of alternating current and their applications in various circuits. Laboratory experiments will include power factors, sine wave analysis, resonant circuits, capacitance, inductance,  $Q$  of coils, electromagnetism, and resistance. Laboratory fee required.

## **Electronics Technology 193 (4)**

### **Active Devices**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisites:* *Electronics Technology 190 and credit in or taken concurrently with Electronics Technology 191.* This is a course in semiconductors (active devices). This course will cover topics such as the physical structure, parameters, linear and non-linear characteristics, and operation action as applied to amplifier, rectifiers, and electronic switching devices.

## **Engineering 101 (2)**

### **Engineering Analysis**

**2 hrs. Lec.**

*Prerequisite:* *Two years of high school algebra or Developmental Mathematics 093 or consent of instructor.* The role of the engineer in society; branches and specialties in engineering introduction to engineering analysis affording practice in analyzing and solving engineering problems; computational methods and devices with an introduction to computer programming.

## **Engineering 105 (3)**

### **Engineering Design Graphics**

**2 hrs. Lec.**

**4 hrs. Lab.**

Provides the basic graphic fundamentals necessary for engineering communications and engineering design. Teaches standard engineering graphical techniques, auxiliaries, sections, graphical analysis, pictorial and working drawings in a framework which introduces the student to rational processes of creative engineering. Laboratory fee required.

## **Engineering 106 (3)**

### **Descriptive Geometry**

**2 hrs. Lec.**

**4 hrs. Lab.**

*Prerequisite:* *Drafting 183 or Engineering 105.* Provides training in the visualization

of three-dimensional structures, and in accurately representing these structures in drawings by analyzing the true relationship between points, lines, and planes. Attention is given to the generation and classification of lines and surfaces, as well as intersections, developments, auxiliaries and revolutions. Laboratory fee required.

## **Engineering 107 (3)**

### **Engineering Mechanics I**

**3 hrs. Lec.**

*Prerequisite:* *Mathematics 126 or registration therein.* A study of the statics of particles and rigid bodies with vector mathematics in three-dimensional space. Principles of the equilibrium of forces and force systems, resultants, free body diagrams, friction, centroids and moments of inertia, virtual work and potential energy are used. Distributed forces, centers of gravity, analysis of structures, beams and cables are treated.

## **Engineering 186 (2)**

### **Manufacturing Processes**

**1 hr. Lec.**

**2 hrs. Lab.**

Introduces the student enrolled in technical programs to the many steps involved in manufacturing a product. This is accomplished by involving the class in producing a device with precision. The student gains practical experience with working drawings, a variety of machine tools, and the assembly of components. The student is made aware of the factors involved in selecting materials and economical utilization of materials. Laboratory fee required.

## **Engineering 187 (2)**

### **Manufacturing Processes**

**1 hr. Lec.**

**2 hrs. Lab.**

*Prerequisite:* *Engineering 186 or acceptable industrial experience.* A continuing study of metal working processes, chipless machining, threads, gears, jigs, fixtures, surface treatments, automation and operations planning. Laboratory fee required.

**Engineering 201 (3)**  
**Engineering Mechanics II**  
3 hrs. Lec.

*Prerequisite: Engineering 107, Mathematics 227, or registration therein.* Dynamics — the study of constrained and general motions of particles and rigid bodies interacting with applied forces; space, time, mass, velocity, acceleration, work and energy, impulse and momentum.

**Engineering 202 (3)**  
**Engineering Mechanics of Materials**  
3 hrs. Lec.

*Prerequisites: Engineering 107, Mathematics 227 or registration therein.* A study of forces, deformation and material properties of simple structural elements. Concepts of stress, strain and elastic properties are presented. Analysis of thin-walled vessels, members loaded in tension, torsion, bending and shear, combined loadings and stability conditions are included. Behavioral phenomena such as fracture, fatigue and creep are introduced.

**Engineering 203 (3)**  
**Engineering Production Techniques**  
1 hr. Lec.  
5 hrs. Lab.

*Prerequisite: Engineering 105 or consent of instructor.* Standard machining of metals, layout, turning, boring, shaping, drilling, threading, milling and grinding. Manufacturing of interchangeable parts, fixtures and jigs with theoretical applications. Laboratory fee required.

**Engineering 204 (3)**  
**Electrical Systems Analysis**  
3 hrs. Lec.

*Prerequisite: Mathematics 227 or registration therein.* Introduction to electrical science; fundamental electrical systems and signals; basic concepts of electricity and magnetism with mathematical representation and computation.

**Engineering 289 (3)**  
**Mechanics of Structures**  
3 hrs. Lec.

*Prerequisite: Mathematics 195.* A basic course in engineering mechanics for the technology student; to include forces and force systems, equilibrium, moments, centroids, stresses and strains. Methods analysis and design of bolted and welded joints, trusses, beams and columns are introduced.

**Engineering Technology 124 (2)**  
**Industrial Organizations**  
2 hrs. Lec.

Gives the student an overall view of the manufacturing company. Topics are from such areas as process planning, costs and budgets, contracts, marketing, economics and personnel.

**Engineering Technology 141 (4)**  
**Basic Hydraulics and Fluid Mechanics**  
3 hrs. Lec.  
3 hrs. Lab.

This course is designed to give the student a sound knowledge and understanding of hydraulic and fluid mechanics principles. Hydraulic pumps, motors, cylinders and valves are studied. The application of formulas related to the properties of fluids and the laws which govern fluid flow are stressed. Laboratories are conducted to test the various hydraulic components and to set up and evaluate basic hydraulic circuits.

**Engineering Technology 142 (3)**  
**Instrumentation and Testing**  
2 hrs. Lec.  
3 hrs. Lab.

*Prerequisite: Electronics Technology 191 or concurrent enrollment in Electronics Technology 191.* In the course the student will be introduced to the various aspects of industrial instrumentation and testing. The characteristics of various instruments used in instrumentation and testing will be investigated both in theory and in practical laboratory applications. The static and dynamic characteristics of measuring devices used in such areas as heat flow, liquid flow, electronic control, pressure and related areas in instrumentation, control, and materials handling will be studied. Laboratory fee required.

**Engineering Technology 143 (4)**  
**Interpretation of Technical Data**  
3 hrs. Lec.  
2 hrs. Lab.

*Prerequisite: Mathematics 195 or consent of instructor.* This course introduces the student to the interpretation of data obtained from product experiments, measurements, and tests. An understanding of empirical data in graphical, algebraic and statistical form will be developed. An emphasis will

be placed on applied examples from the fields of electronic, mechanical, fluid and quality control technology. Significant use will be made of the computer and electronic calculator as analytical aids.

### **Engineering Technology 240 (3)**

#### **Automatic Control Systems**

**2 hrs. Lec.**

**3 hrs. Lab.**

This course is designed to provide both a theoretical and a functional knowledge of electro-mechanical and electro-hydraulic control systems. The response and stability characteristics of feedback control systems and servo-mechanisms are studied. Laboratory sessions involve the setup and evaluation of electro-mechanical and electro-hydraulic control systems and the use of the analog computer to analyze these systems. Laboratory fee required.

### **English**

(Also see Developmental Reading and Developmental Writing.)

### **English 101 (3)**

#### **Composition and Expository Reading**

**3 hrs. Lec.**

A course designed to develop the student's skills in writing and in the critical analysis of prose. (This course is offered on campus and via television.)

### **English 102 (3)**

#### **Composition and Literature**

**3 hrs. Lec.**

*Prerequisite: English 101.* Writing and reading activities in poetry, drama, the short story, and the novel designed to increase the student's understanding and enjoyment of good literature. (This course is offered on campus and via television.)

### **English in the Sophomore Year**

(English 201, 202, 203, 204, 205, 206, 215, and 216 are independent units of three credit hours each, from which any combination of two will be selected to satisfy degree requirements in sophomore English. Student should consult catalog of the senior college he expects to attend for requirements in his major before choosing English courses.)

### **English 201 (3)**

#### **British Literature**

**3 hrs. Lec.**

*Prerequisite: English 102.* A study of significant works of British literature from the Old English Period through the eighteenth century.

### **English 202 (3)**

#### **British Literature**

**3 hrs. Lec.**

*Prerequisite: English 102.* Study of important works from the Romantic Period to the present.

### **English 203 (3)**

#### **World Literature**

**3 hrs. Lec.**

*Prerequisite: English 102.* Reading and analysis of significant continental European works from the Greek Classical Period through the Renaissance.

### **English 204 (3)**

#### **World Literature**

**3 hrs. Lec.**

*Prerequisite: English 102.* Study of ten to twelve important post-Renaissance works of continental Europe, England, and America.

### **English 205 (3)**

#### **American Literature**

**3 hrs. Lec.**

*Prerequisite: English 102.* Study of the works of the important writers before Whitman in the context of their times.

### **English 206 (3)**

#### **American Literature**

**3 hrs. Lec.**

*Prerequisite: English 102.* Reading and analysis of representative works from Whitman to the present.

### **English 209 (3)**

#### **Creative Writing**

**3 hrs. Lec.**

*Prerequisite: English 102.* Writing of fiction: short story, poetry and short drama.

### **English 215 (3)**

#### **Studies in Literature**

**3 hrs. Lec.**

*Prerequisite: English 102.* The student will read, analyze and discuss selections in literature organized by genre, period, or geographical region. Course titles and descriptions will be available each semester prior to registration.

### **English 216 (3)**

#### **Studies in Literature**

**3 hrs. Lec.**

*Prerequisite: English 102.* Student will read, analyze and discuss selections in literature organized by theme, interdisciplinary content, or major author. Course titles and descriptions will be available each semester prior to registration.

**Fluid Power Technology 222 (3)****Fundamentals of Pneumatics****2 hrs. Lec.****3 hrs. Lab.**

Instruction is designed to give the student a sound understanding of the constructional features and principles of operation of pneumatic power units, pneumatic controls, and pneumatic cylinders. In addition, he becomes familiar with the layout and operation of pneumatic circuits including power-operated holding devices, safety circuits, and remote-controlled circuits. Circuits studied are those which are manually, mechanically, pilot, and solenoid-operated. Laboratory fee required.

**Fluid Power Technology 225 (4)****Advanced Fluid Power Systems****3 hrs. Lec.****3 hrs. Lab.**

This course is devoted to a study of standard industrial fluid power systems and the design of hydraulic and pneumatic systems to meet given requirements. The student will make circuit calculations related to force, torque, power, speed, fluid pressure, flow rate and velocity. Special emphasis is placed on the selection of pumps, cylinders, valves, motors, compressors, filters and other fluid power components. The laboratory provides hands-on experience in the set-up, operation and testing of the various types of fluid power circuits. Laboratory fee required.

**Fluid Power Technology 229 (3)****Fluid Logics and Digital Controls****2 hrs. Lec.****3 hrs. Lab.**

*Prerequisite:* Engineering Technology 141. This course is designed to give the student experience in the design, analysis and testing of fluid logic and digital control circuits. An introduction to logic design and the application of fluidics and moving part logic for the control of fluid power systems are stressed. Laboratory experiments will include the layout and operation of holding devices, safety circuits, remote-controlled circuits, and fluidic and moving part logic control circuits. Laboratory fee required.

**Fluid Power Technology****703, 803, 713, 813 (3)****Work Experience****15 hrs. Lab.**

*Prerequisite:* Two courses in the student's major and instructor/coordinator approval.

(The description for these courses is the same as that listed for Business 703 and also under Work Experience.)

**Fluid Power Technology****704, 804, 714, 814 (4)****Work Experience****20 hrs. Lab.**

(Same as course description above for Fluid Power Technology 703, et al.)

**French 101 (4)****Beginning French****3 hrs. Lec.****2 hrs. Lab.**

Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension, and oral expression. Laboratory fee required.

**French 102 (4)****Beginning French****3 hrs. Lec.****2 hrs. Lab.**

*Prerequisite:* French 101 or equivalent. Continuation of French 101 with emphasis on idiomatic language and complicated syntax. Laboratory fee required.

**French 201 (3)****Intermediate French****3 hrs. Lec.**

*Prerequisite:* French 102 or consent of instructor. Reading, composition, grammar, review and intense oral practice.

**French 202 (3)****Intermediate French****3 hrs. Lec.**

*Prerequisite:* French 201 or equivalent. Continuation of French 201 with reading selections drawn more directly from contemporary literary sources. Composition.

**French 203 (3)****Introduction to French Literature****3 hrs. Lec.**

*Prerequisite:* French 202 or consent of the instructor. Reading in French literature, history, culture, art and civilization.

**French 204 (3)****Introduction to French Literature****3 hrs. Lec.**

*Prerequisite:* French 202 or consent of the instructor. Readings in French literature, history, culture and civilization.

- Geography 101** (3)  
**Geography (Physical)**  
 3 hrs. Lec.  
 A survey of the physical makeup of the earth: weather and climate, topography, plant and animal life, land and sea. Attention is directed toward the earth in space, use of maps and charts and place geography.
- Geography 102** (3)  
**World Geography (Economics)**  
 3 hrs. Lec.  
 A study of the relation of man to his environment and his utilization of natural resources, dealing with problems of production, manufacture, and distribution of goods throughout the world. The aspects of primitive subsistence and degrees of commercialism are considered.
- Geography 103** (3)  
**World Geography (Cultural)**  
 3 hrs. Lec.  
 Development of regional variations of culture, including the distribution of races, religions, languages, and aspects of material culture, with emphasis on origins and diffusion.
- Geology 101** (4)  
**General Geology (Physical)**  
 3 hrs. Lec.  
 3 hrs. Lab.  
 Study of earth materials and processes for science and non-science majors. Includes introduction to geochemistry, geophysics, examination of the earth's interior, magnetism, setting in space, minerals, rocks, structure and geologic processes. Laboratory fee required.
- Geology 102** (4)  
**Historical Geology**  
 3 hrs. Lec.  
 3 hrs. Lab.  
*Prerequisite: Geology 101 or permission of the instructor.* Study of earth materials and processes within a time perspective. For science and non-science majors. Utilizes fossils, geologic maps, and field studies to interpret geologic history. Laboratory fee required.
- German 101** (4)  
**Beginning German**  
 3 hrs. Lec.  
 2 hrs. Lab.  
 Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension, and oral expression. Laboratory fee required.
- German 102** (4)  
**Beginning German**  
 3 hrs. Lec.  
 2 hrs. Lab.  
*Prerequisite: German 101 or equivalent.* Continuation of German 101 with emphasis on idiomatic language and complicated syntax. Laboratory fee required.
- German 201** (3)  
**Intermediate German**  
 3 hrs. Lec.  
*Prerequisite: German 102 or equivalent or consent of instructor.* Reading, composition, grammar review and intense oral practice.
- German 202** (3)  
**Intermediate German**  
 3 hrs. Lec.  
*Prerequisite: German 201 or equivalent.* Continuation of German 201 with reading selections drawn more directly from contemporary literary sources. Composition.
- Government 201** (3)  
**American Government**  
 3 hrs. Lec.  
*Prerequisite: Sophomore standing recommended.* An introduction to the study of political science; origin and development of constitutional democracy (United States and Texas); federalism and intergovernmental relations; local government; parties, politics and political behavior. Satisfies requirements for Texas State Teacher Certification. (This course is offered on campus and via television.)
- Government 202** (3)  
**American Government**  
 3 hrs. Lec.  
*Prerequisite: Government 201 and sophomore standing recommended.* A study of the United States and Texas legislative process; the executive and the bureau structure; the judicial process, civil rights and liberties, domestic policies. Other topics include foreign relations and national defense. Satisfies requirements for Texas State Teacher Certification.
- Government 205** (3)  
**Studies in Government**  
 3 hrs. Lec.  
*Prerequisites: Sophomore standing and six hours of history or government.* A treatment of selected topics in government.



- Government 231 (3)**  
**Municipal and County Government**  
**3 hrs. Lec.**  
 A study of the government structure of the municipality and county including organs of government, administration, court system, taxation, utilities and public works, education, welfare and other public services. Presentations by local officials and surveys of area problems are stressed.
- History 101 (3)**  
**History of the United States**  
**3 hrs. Lec.**  
 general presentation of United States history, commencing with the European background and first discoveries. The pattern of exploration, settlement and development of institutions is followed throughout the colonial period and the early national experience to 1877.
- History 102 (3)**  
**History of the United States**  
**3 hrs. Lec.**  
*Prerequisite: History 101 recommended.* A survey of the unfolding of United States history from the Reconstruction Era to the present day. The study includes social, economic and political aspects of American life and follows the development of the United States as a world power.
- History 105 (3)**  
**Western Civilization**  
**3 hrs. Lec.**  
 A survey of the background for development of civilization in the West from ancient time through the Enlightenment; the Mediterranean world including Greece and Rome; the Middle Ages and the beginnings of modern history. Particular attention is paid to Renaissance, Reformation, the rise of the national state, the development of parliamentary government and the influences of European colonization.
- History 106 (3)**  
**Western Civilization**  
**3 hrs. Lec.**  
 The unfolding of the pattern of modern western civilization from the Enlightenment to current times. A study of the Age of Revolution and the beginnings of industrialism, the nineteenth century and the social, economic, and political factors of recent world history.
- History 110 (3)**  
**The Heritage of Mexico**  
**3 hrs. Lec.**  
 This course presents major historical developments and personalities which have shaped the Mexican nation, with emphasis on cultures and customs. Beginning with the peoples who inhabited the country before the Spanish conquest, the course leads to modern Mexico, emphasizing the historical relations between Mexico and the United States and the role of the Mexican-American in the contemporary United States. The student may register for either Anthropology 110 or History 110.
- History 112 (3)**  
**Latin American History**  
**3 hrs. Lec.**  
 This course presents major historical developments and personalities which have influenced the course of Latin American history, with examination of Indian cultures, the conquistadors. Spanish administration, the wars of independence, relations with the United States and concludes with a brief survey of relevant contemporary problems.
- History 120 (3)**  
**Afro-American History**  
**3 hrs. Lec.**  
 A study of the role of the Negro in American history; overview of the slave trade and slavery in the United States; focus on contributions of the Negro in the U. S. from colonial times. Emphasis on political, economic and sociological factors of the twentieth century.
- History 204 (3)**  
**American Minorities**  
**3 hrs. Lec.**  
*Prerequisites: Sociology 101 and/or six hours of U.S. history recommended.* The principal minority groups in American society; their sociological significance and historic contributions. An emphasis will be placed on problems of intergroup relations, social movements and related social changes occurring on the contemporary American scene. The student may register for either History 204 or Sociology 204.
- History 205 (3)**  
**Studies in U.S. History**  
**3 hrs. Lec.**  
*Prerequisites: Sophomore standing and six hours of American History.* A treatment of selected topics in the history of the United States.

**Horticulture Technology 131 (4)****Horticulture Science****3 hrs. Lec.****3 hrs. Lab.**

This course covers the science and practices underlying ornamental horticulture, stressing the culture and growth of plants as well as skills used in landscaping, plant production, and nursery propagation. Laboratory fee required.

**Horticulture Technology 132 (2)****Landscape Plant Materials I****1 hr. Lec.****3 hrs. Lab.**

This course covers the identification and classification of landscape trees and the study of their characteristics and landscape uses.

**Horticulture Technology 133 (2)****Landscape Plant Materials II****1 hr. Lec.****3 hrs. Lab.**

Emphasis in this course is on the identification and classification of landscape shrubs, vines and ground covers and the study of their characteristics and landscape uses.

**Horticulture Technology 140 (3)****Herbaceous and Exotic Plants****2 hrs. Lec.****3 hrs. Lab.**

This course is concerned with identification, culture, and use of ornamental herbaceous plants grown in homes, gardens and conservatories. Laboratory fee required.

**Horticulture Technology 141 (4)****Floral Design****2 hrs. Lec.****6 hrs. Lab.**

A study of the basic principles of floral art, flowers and other design materials, and special and unusual floral designs. Laboratory fee required.

**Horticulture Technology 145 (3)****Landscape Development****1 hr. Lec.****6 hrs. Lab.**

*Prerequisite:* Horticulture Technology 131 or approval of instructor. This course covers the planning of landscape operations, the proper care of landscape plants, preparation of garden soil, and construction of landscape structures. It includes pruning and training of trees and shrubs, the culture of turf grass and installation of drainage and irrigation systems. Laboratory fee required.

**Horticulture Technology 146 (3)****Fundamentals of Landscaping****1 hr. Lec.****6 hrs. Lab.**

This course provides instruction in the basic concepts and practices used in preparing landscape plans and in constructing and improving landscapes. Laboratory fee required.

**Horticulture Technology 226 (3)****Greenhouse Horticulture****2 hrs. Lec.****3 hrs. Lab.**

*Prerequisite:* Horticulture Technology 131 and either Chemistry 115 or Physical Science 118. This course covers the construction and operation of such ornamental horticulture production structures as greenhouses, plastic houses, lath houses, hotbeds, and coldframes. Emphasis is given to effective environmental control and efficiency in production operations. Laboratory fee required.

**Horticulture Technology 231 (4)****Landscape Design****2 hrs. Lec.****6 hrs. Lab.**

*Prerequisites:* Horticulture Technology 132, 133 and 146 and Mathematics 195 or equivalent is desirable. This course gives basic principles of landscape design and plant selection as used in relation to residential landscapes. Laboratory fee required.

**Horticulture Technology 232 (4)****Landscape Planning and Management****2 hrs. Lec.****6 hrs. Lab.**

*Prerequisites:* Horticulture Technology 145 and 231. This course provides advanced study in landscape business operations and in the application of landscape principles. It is a study of the structure of the landscape horticulture industry, management practices, marketing methods and advanced skills in landscape planning. Laboratory fee required.

**Horticulture Technology 233 (3)****Nursery Operations****2 hr. Lec.****3 hrs. Lab.**

*Prerequisite:* Horticulture Technology 131 and either Chemistry 115 or Physical Science 118. In this course emphasis is placed on the propagation of landscape plants, transplanting and proper care in the nursery row. Laboratory fee required.

## **Horticulture Technology 234 (3)**

### **Ornamental Crop Production**

**2 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Horticulture Technology 226 and 233. The course stresses advanced methods in nursery and greenhouse crop production. Emphasis is given to container nursery production, turf grass production, cut flower and pot plant production and the field propagation and production of nursery stock. Laboratory fee required.

## **Horticulture Technology 236 (4)**

### **Florist Management**

**2 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Horticulture Technology 141. This course is an advanced study of business operations and design skills in the retail florist business. It is a study of the structure of the florist industry, management practices, marketing methods and advanced techniques in flora art. Laboratory fee required.

## **Horticulture Technology 239 (2)**

### **Applied Horticulture Training**

**10 hrs. Lab.**

*Prerequisites:* Concurrent enrollment in Horticulture Technology 240 and approval of instructor. This course gives the student firsthand experiences in the occupational aspects of ornamental horticulture. An internship in ornamental horticulture in such areas as park maintenance, landscape, construction, landscape maintenance, florist operations, and wholesale and retail sales is provided each student. An activity is selected by the student that will meet his future employment goals. All experiences are closely supervised and directed toward the attainment of significant occupational goals.

## **Horticulture Technology 240 (2)**

### **Seminar in Horticulture Occupations**

**2 hrs. Lec.**

*Prerequisite:* Concurrent enrollment in Horticulture Technology 239. This course presents the student with problems and problem-solving methods used in the performance of supervisory jobs in various fields of ornamental horticulture. Emphasis is placed on analysis of skill and the supervision and training of ornamental horticulture workers.

## **Human Development 102 (1)**

### **Orientation**

**1 hr. Lec.**

This is a course to help the student be successful in college. The student will make an individual contract with the instructor. Student experiences will include appropriate subject "packages" such as "Improving Your Vocabulary," "How to Take Notes," "Study Skills," and "Listening Skills." Also, an evaluation session with a counselor is included. A "package" may be made up of programmed materials, filmstrips, tapes, slides, seminars, learning activities, or other appropriate materials.

## **Human Development 104 (3)**

### **Educational and Career Planning**

**3 hrs. Lec.**

A course in human development designed to identify problem areas of concern to the student who is entering college for the first time and to develop approaches to problem solving in relation to educational and career decisions through the process of group counseling. Activities are planned to promote mature interpersonal involvement within the group, the college and the community through an understanding of the causes and effects of one's own behavior in relation to himself and others.

## **Human Development 105 (3)**

### **Basic Processes of Interpersonal Relationships**

**3 hrs. Lec.**

A course in human development designed to explore interpersonal relations through a study of theory and concepts of small group processes and actual participation in the human experiences. Students will be given an opportunity to participate in experiences planned to increase one's sensitivity to self and to others. A variety of activities is planned, partly by each class, designed to meet certain specific human needs of the students in the class.

## **Human Development 106 (3)**

### **Personal and Social Growth**

**3 hrs. Lec.**

A course which deals with human development from the standpoint of the interaction between a person and his society. Understanding of self, the influences of society contributing to the development of self, and the success of the individual

within a society are investigated. Adjustment to family, school and society is developed.

### **Human Development 107 (3)**

#### **Developing Leadership Behavior**

**3 hrs. Lec.**

A course in human development designed to meet specific needs of students through participation in activities. The focus of this course will be on the development of group dynamics, leadership, and human relations skills. Students will be required to participate in the management experience of planning, execution, and evaluation of activities. The theoretical body of knowledge regarding leadership development and growth in group dynamics and management skills will be emphasized.

### **Humanities 101 (3)**

#### **Introduction to the Humanities**

**3 hrs. Lec.**

Through an examination of interrelated examples of man's creative achievements, the humanities course attempts to enlarge awareness and increase understanding of the nature of man and the values of human life.

### **Humanities 102 (3)**

#### **Advanced Humanities**

**3 hrs. Lec.**

*Prerequisites: Humanities 101 and/or permission of instructor.* Humanities 101 is an in-depth and critical clarification of human value choices through the context of the humanities. It is designed to explore universal concerns such as man's relationship to himself and to others, the search for meaning, and man as a loving, believing and hating being as revealed by artists, playwrights, film makers, musicians, dancers, philosophers and theologians. The intent is to provide a sense of the commonality of human experience across cultures and civilizations and an understanding of the premises on which value choices are made.

### **Human Services 131 (3)**

#### **Orientation to Human Services**

**3 hrs. Lec.**

A brief survey of historical development of social services in our society. Emphasis is on current needs, practices and projected changes. Will involve contact with com-

munity agencies and give the student the opportunity to test his interest in people-to-people occupations.

### **Human Services 134 (3)**

#### **Human Services Seminar**

**3 hrs. Lec.**

A continuation of Human Services 131 with an emphasis on class discussion, sharing of experiences. A problem-solving approach to individual, family, and community problems.

### **Human Services 231 (3)**

#### **Procedures in Social Work**

**3 hrs. Lec.**

*Prerequisites: Sociology 101, Sociology 204, concurrent enrollment in Human Services 242 — field work.* The processes of social treatment used by social workers with individuals, groups, or communities. Concepts, principles, and ethics utilized by social service workers and questions of motivation, acceptance, and attitude. Techniques of listening, observing, and recording which aid the student in integrating his classroom and work experience.

### **Human Services 233 (3)**

#### **Counseling for the Paraprofessional**

**3 hrs. Lec.**

*Prerequisites: Permission of the coordinator, or concurrent enrollment in Human Services 242 — field works.* Introduction to the principles and practices of interviewing and counseling. Exploration of the effectiveness of these techniques as applied to paraprofessional experiences of counselors and group counselor aides, mental health or social worker associates, and other 'new careers' in people-to-people services.

### **Human Services 235 (3)**

#### **Introduction to Mental Health**

**3 hrs. Lec.**

*Prerequisites: Psychology 105 or consent of coordinator, concurrent enrollment in Human Services 240 — field work.* Orientation to mental health, history, terminology, current concepts, ethical considerations. Analysis of behavior and environmental factors promoting mental health. Developments of skills for identifying symptoms of maladjustment. Consideration of methods providing for emotional outlets and emotional control.

- Human Services 240** (2)  
**Work Experience in Human Services (Field Work)**  
 10 hrs. Lab.  
*Prerequisites:* Permission of coordinator of human services program and concurrent enrollment in Human Services 141 or 243. Practical occupational experience in a social agency. Ten hours per week on-job-experience is required during second year of the program. Human Services 240 will be offered first semester; Human Services 242 will be offered second semester.
- Human Services 241** (2)  
**Work Experience Seminar**  
 2 hrs. Lec.  
*Prerequisites:* Concurrent enrollment in Human Services 240 or 242. Problem analysis and discussion of on-job experiences in a seminar with other students working in human services program, meeting two hours per week with program coordinator on campus. Human Services 241 will be offered first semester; Human Services 243 will be offered second semester.
- Human Services 242** (2)  
**Work Experience in Human Services (Field Work)**  
 10 hrs. Lab.  
*Prerequisites:* Permission of coordinator of human services program and concurrent enrollment in Human Services 241 or 243. Practical occupational experience in a social agency. Ten hours per week on-job-experience is required during second year of the program. Human Services 240 will be offered first semester; Human Services 242 will be offered second semester.
- Human Services 243** (2)  
**Work Experience Seminar**  
 2 hrs. Lec.  
*Prerequisites:* Concurrent enrollment in Human Services 240 or 242. Problem analysis and discussion of on-job experiences in a seminar with other students working in human services program, meeting two hours per week with program coordinator on campus. Human Services 241 will be offered first semester; Human Services 243 will be offered second semester.
- Human Services 803, 813** (3)  
**Work Experience**  
 15 hrs. Lab.  
*Prerequisite:* Two courses in the student's major and instructor/coordinator approval. (The description for these courses is the same as that listed for Business 703 and also under Work Experience.)
- Human Services 804, 814** (4)  
**Work Experience**  
 20 hrs. Lab.  
 (Same as course description above for Human Services 803, et al.)
- Journalism 101** (3)  
**Introduction to Mass Communications**  
 3 hrs. Lec.  
 A survey course designed to provide students with a panoramic view of the field of mass communications and an understanding of the role of mass media in modern society. Not restricted to journalism majors.
- Journalism 102** (3)  
**News Gathering and Writing**  
 2 hrs. Lec.  
 3 hrs. Lab.  
*Prerequisite:* Typing ability. Beginning reporting, study of types of news, leads, body treatment of story, feature in lead, facts, background, and practice in writing straight news story. Required for all journalism majors.
- Journalism 103** (3)  
**News Gathering and Writing**  
 2 hrs. Lec.  
 3 hrs. Lab.  
*Prerequisite:* Journalism 102. Required for all journalism majors. A continuation of Journalism 102. The writing of more complex types of news stories. Specialized writing in the fields of sports, police news, markets, finance, society, amusements, government, and news of interest to women. Additional laboratory work on the student newspaper.
- Journalism 104** (1)  
**Student Publications**  
 3 hrs. Lab.  
 Individual staff assignments on the student newspaper in one of the following journalistic fields: writing, advertising, photography, cartooning, editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may not be taken for credit concurrently with Journalism 102 or 103. Credit limited to one unit per semester. MAY BE REPEATED FOR A TOTAL OF THREE UNITS CREDIT.

## **Journalism 202**

### **Student Publications**

**3 hrs. Lab.**

*Prerequisite:* Permission of instructor. Individual staff assignments on the student newspaper in one of the following journalistic fields: writing, advertising, photography, cartooning, editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may not be taken for credit concurrently with journalism 102 or 103. Credit limited to one unit per semester.

## **Journalism 204**

### **News Editing and Copyreading**

**3 hrs. Lec.**

*Prerequisite:* Journalism 102. A detailed course in editing news for presentation in the newspaper and on radio and television. Special emphasis on writing headlines and laying out pages.

## **Machine Transcription**

(See Business 165)

## **Management**

(See Business)

## **Mathematics**

(See also Computing Science 208)

## **Mathematics 101**

### **College Algebra**

**3 hrs. Lec.**

*Prerequisite:* Two years of high school algebra or Developmental Mathematics 093. A study of functions and relations, absolute value, variation, quadratic equations, complex numbers, functions of two variables, systems of equations and inequalities, elementary aspects of the theory of equations, progressions, the binomial theorem and algebraic proof.

## **Mathematics 102**

### **Plane Trigonometry**

**3 hrs. Lec.**

*Prerequisites:* Mathematics 101 or equivalent. A study of angular measure, functions of angles, identities, solution of triangles, equations, inverse trigonometric functions, logarithms and complex numbers.

(1)

## **Mathematics 106**

### **Elementary Functions and Coordinate Geometry**

**5 hrs. Lec.**

*Prerequisites:* Two years of high school algebra and one semester of trigonometry. A study of the algebra of functions to include the following polynomial, rational, exponential, logarithmic and trigonometric functions, functions of two variables, complex numbers, vectors, and analytic geometry to include conics, transformation of coordinates, polar coordinates, parametric equations, and three dimensional space.

(5)

(3)

## **Mathematics 107**

### **Fundamentals of Computing**

**3 hrs. Lec.**

*Prerequisite:* Two years high school algebra or Developmental Mathematics 093. An introductory course designed primarily for students desiring credit toward a minor or major in computer science. The content of this course includes a study of algorithms and an introduction to a procedure-oriented language with general applications.

(3)

## **Mathematics 111**

### **Math for Business and Economics I**

**3 hrs. Lec.**

*Prerequisites:* Two years of high school algebra or Developmental Mathematics 093. A study of equations, inequalities, matrices, linear programming, and linear, quadratic, polynomial, rational, exponential, and logarithmic functions. Applications to business and economics are emphasized.

(3)

## **Mathematics 112**

### **Math for Business and Economics II**

**3 hrs. Lec.**

*Prerequisite:* Mathematics 111. Study of sequences and limits, differential calculus, integral calculus, optimization, and appropriate applications.

(3)

## **Mathematics 115**

### **College Mathematics I**

**3 hrs. Lec.**

*Prerequisites:* One year of high school algebra and one year of high school geometry or two years of high school algebra or Developmental Mathematics 093. A course designed for liberal arts students which includes the study of logic, mathematical patterns, mathematical recreations, systems

(3)

of numeration, mathematical systems, sets and statements and sets of numbers. Historical aspects of the above topics will also be emphasized.

### **Mathematics 116 (3)**

#### **College Mathematics II**

**3 hrs. Lec.**

*Prerequisite: Mathematics 115.* A course designed for liberal arts students which includes the study of algebra, linear programming, permutations, combinations, probability, and geometry. Historical aspects of the above topics will also be emphasized.

### **Mathematics 117 (3)**

#### **Fundamental Concepts of Mathematics for Elementary Teachers**

**3 hrs. Lec.**

A study of the structure of the real number system, geometry and mathematical analysis with emphasis on the development of basic concepts in mathematical thinking needed for elementary teachers

### **Mathematics 121 (3)**

#### **Analytic Geometry**

**3 hrs. Lec.**

*Prerequisite: Mathematics 102 or equivalent.* A study of the real numbers, distance, the straight line, conics, transformation of coordinates, polar coordinates, parametric equations, and three-dimensional space.

### **Mathematics 126 (5)**

#### **Introductory Calculus**

**5 hrs. Lec.**

*Prerequisites: Mathematics 105, 106, 121 or equivalent.* A study of limits, continuity, derivatives, slopes, tangents, chain rule, implicit differentiation, higher derivatives, differentials, integration, applications of differential and integral calculus, and trigonometric and inverse trigonometric functions.

### **Mathematics 130 (3)**

#### **Business Mathematics**

**3 hrs. Lec.**

*Prerequisite: One year of high school algebra or Developmental Mathematics 091 or the equivalent.* A study of simple and compound interest, bank discount, payrolls, taxes, insurance, markup and markdown, corporate securities, depreciation, and purchase discounts. This course is intended primarily for specialized occupational programs.

### **Mathematics 139 (3)**

#### **Applied Mathematics**

**3 hrs. Lec.**

*Prerequisite: One year of high school algebra or Developmental Mathematics 091 or equivalent.* A study of commercial, technical, and other applied uses of mathematics. An effort will be made to tailor the course to fit the needs of the students enrolled in each section.

### **Mathematics 195 (3)**

#### **Technical Mathematics**

**3 hrs. Lec.**

*Prerequisite: Developmental Mathematics 091 or the equivalent.* A course designed for technical students covering a general review of arithmetic; a treatment of the basic concepts and the fundamental facts of plane and solid geometry, computational techniques and devices, units and dimensions, a treatment of the terminology and concepts of elementary algebra, functions, coordinate systems, simultaneous equations, stated problems, determinants, progressions, and the binomial theorem.

### **Mathematics 196 (3)**

#### **Technical Mathematics**

**3 hrs. Lec.**

*Prerequisite: Mathematics 195.* A course for technical students which includes a study of the following: the trigonometric functions of angles, trigonometric identities, inverse trigonometric functions, trigonometric equations, complex numbers, logarithms, vectors, and the solution of triangles.

### **Mathematics 202 (3)**

#### **Introductory Statistics**

**3 hrs. Lec.**

*Prerequisite: Two years of high school algebra or consent of instructor.* A study of collection and tabulation of data, bar charts, graphs, sampling, measures of central tendency and variability, correlation, index numbers, statistical distributions, probability and applications to various fields.

### **Mathematics 207 (3)**

#### **FORTAN Programming with Applications**

**3 hrs. Lec.**

*Prerequisites: Mathematics 107 or equivalent and Mathematics 101 or Mathematics 111 or Mathematics 104 or its equivalent.*

Study of FORTRAN language with emphasis on applications and programming of algorithmic language to solve numerical problems. Writing, testing and executing of typical FORTRAN programs will be stressed. Emphasis on applications for majors and minors in engineering, the sciences, mathematics or business.

### **Mathematics 209 (3)**

#### **Introductory AP Programming**

3 hrs. Lec.

*Prerequisites: Mathematics 101 or Mathematics 104 or Mathematics 111 and Mathematics 104 or consent of instructor.* A study of APL language with emphasis on applications. This course is designed for partial fulfillment of degree requirements in computer science.

### **Mathematics 221 (3)**

#### **Linear Algebra**

3 hrs. Lec.

*Prerequisite: Mathematics 126 or equivalent.* A study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, N-dimensional space, and linear transformation.

### **Mathematics 227 (4)**

#### **Mathematical Analysis I**

4 hrs. Lec.

*Prerequisite: Mathematics 126 or equivalent.* A continued study of techniques of differentiation and integration. This will include logarithmic and exponential functions, parametric equations, polar coordinates, hyperbolic functions and vectors.

### **Mathematics 228 (3)**

#### **Mathematical Analysis II**

3 hrs. Lec.

*Prerequisite: Mathematics 227 or equivalent.* A continued study of vectors, functions of several variables, partial derivatives. Multiple integrals, indeterminate forms and infinite series.

### **Mathematics 230 (3)**

#### **Differential Equations**

3 hrs. Lec.

*Prerequisite: Mathematics 227 or consent of instructor.* A study of ordinary differential equations. The course treats linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems and applications.

### **Music 101 (4)**

#### **Freshman Theory**

3 hrs. Lec.

3 hrs. Lab.

Development and cultivation of musicianship skills, especially in the areas of tonal and rhythmic perception and articulation. Presentation of the essential elements of music; introduction to eight-singing, keyboard, and notation.

### **Music 102 (4)**

#### **Freshman Theory**

3 hrs. Lec.

3 hrs. Lab.

*Prerequisite Music 101 or consent of instructor.* Introduction to part-writing and harmonization with triads and their inversions; classification of chords, seventh chords, sight-singing, dictation, and keyboard harmony.

### **Music 104 (3)**

#### **Music Appreciation**

3 hrs. Lec.

A concise survey of the basic elements of music and their application in the music literature of Western civilization, particularly from the Baroque to the present. Relevant cultural influences upon the music of each era are observed.

### **Music 105 (1)**

#### **Italian Diction**

2 hrs. Lab.

A study of the phonetic sounds of the Italian language, with selected vocabulary and little or no conversation. Primarily for voice majors.

### **Music 106 (1)**

#### **French Diction**

2 hrs. Lab.

A study of the phonetic sounds of the French language, with selected vocabulary and little or no conversation. Primarily for voice majors.

### **Music 110 (3)**

#### **Music Literature**

3 hrs. Lec.

A course dealing with the characteristics of sound, the elements of music, performance media, and musical texture as seen in the music of recognized composers in the major periods of music history. Special emphasis is given to the music of the late Gothic, Renaissance, and Baroque eras.



- Music 111** (3)  
**Music Literature**  
 3 hrs. Lec.  
*Prerequisite:* Music 110. A continuation of the studies introduced in Music 110. A study of the compositional procedures and forms employed by the creators of music. Attention is focused upon the music of the Classical, Romantic, and Modern periods.
- Music 112** (3)  
**Foundations in Music I**  
 3 hrs. Lec.  
 Emphasis upon participation and the necessary skills for satisfactory performance in singing, playing an instrument, listening, creating rhythmic responses. Development of increasing ability to manage notation (music reading). Course designed specifically for the non-music major.
- Music 113** (3)  
**Foundations in Music II**  
 3 hrs. Lec.  
*Prerequisite:* Music 112. Designed to help prepare students with limited music training for Music 101 or to further their general music understanding. Course emphasis will include rhythmic and melodic training, understanding of basic chord functions, melody, textures, and basic analysis of music.
- Music 114** (1)  
**Piano Class I**  
 2 hrs. Lab.  
 Class instruction in the areas of basic musicianship and piano skills designed primarily for those with no knowledge in piano skills. Open to all students.
- Music 115** (1)  
**Piano Class II**  
 2 hrs. Lab.  
 Includes techniques, skills, harmonization, transposition, improvisation, accompanying, sightreading and performing various styles of repertoire. Open to all students.
- Music 116** (1)  
**Guitar Class I**  
 2 hrs. Lab.  
 Class instruction covering the basics of guitar skill, designed primarily for those with limited knowledge in the reading of music or playing the guitar. Open to all students.
- Music 117** (1)  
**Guitar Class II**  
 2 hrs. Lab.  
*Prerequisite:* Music 116 or the equivalent. A continuation of the skills introduced in Music 116 with emphasis on perfecting classical guitar techniques and music reading skills. May be repeated for credit.
- Applied Music** (1)  
 Subject to enrollment, students may receive private instruction in the following courses: piano, organ, voice, violin, viola, cello, double bass, flute, oboe, clarinet, bassoon, saxophone, trumpet, French horn, trombone, baritone, tuba, percussion, guitar, electric bass, and drum set. Private music may be repeated for credit.
- Music 121-143** (1)  
**Applied Music-Minor**  
 1 hr. Lec.  
 Private instruction in the student's secondary area. One half-hour lesson a week. Open to students registered in music theory, ensembles, and other music major or minor courses. Fee required.
- Music 150** (1)  
**Chorus**  
 3 hrs. Lab.  
*Prerequisite:* Consent of instructor. Open to all students of the college, the chorus studies and performs a wide variety of music representing the literature of the great eras of music history.
- Music 151** (1)  
**Voice Class I**  
 2 hrs. Lab.  
 A course teaching the principles of breathing, voice production, tone control, enunciation and phrasing. Two group lessons a week. Open to all non-voice majors.
- Music 152** (1)  
**Voice Class II**  
 2 hrs. Lab.  
 A continuation of Music 151 with emphasis on solo singing, appearance in studio recital, stage deportment, personality development. Open to all non-voice majors. Two group lessons a week.

- Music 155** (1)  
**Voice Ensemble**  
**3 hrs. Lab.**  
 A select group for mixed voices concentrating upon excellence of performance. Membership is open to any student by audition, who, in the opinion of the director, possesses special interest and skills in performance of advanced choral literature.
- Music 156** (1)  
**Madrigal Singers**  
**3 hrs. Lab.**  
 Select group of vocalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.
- Music 160** (1)  
**Band**  
**3 hrs. Lab.**  
*Prerequisite: Non-wind instrument majors, consent of the instructor.* The band studies and performs a wide variety of music in all areas of band literature. Required of all wind instrument majors.
- Music 171** (1)  
**Woodwind Ensemble**  
**3 hrs. Lab.**  
 Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.
- Music 172** (1)  
**Brass Ensemble**  
**3 hrs. Lab.**  
 Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.
- Music 173** (1)  
**Percussion Ensemble**  
**3 hrs. Lab.**  
 Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.
- Music 174** (1)  
**Keyboard Ensemble**  
**3 hrs. Lab.**  
 Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.
- Music 175** (1)  
**String Ensemble**  
**3 hrs. Lab.**  
 Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.
- Music 177** (1)  
**Chamber Ensemble**  
**3 hrs. Lab.**  
 Select group of instrumentalists or vocalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.
- Music 185** (1)  
**Stage Band**  
**3 hrs. Lab.**  
*Prerequisite: Consent of instructor.* The stage band studies and performs a wide variety of music with emphasis on the jazz oriented big-band styles of the 1960's.
- Music 199** (1)  
**Recital**  
**1 hr. Lab.**  
 One period per week designed to allow students of private lessons an opportunity to perform before an audience. Required of all music majors and open to all other students. Credit for this course does not apply to the associate degree.
- Music 201** (4)  
**Sophomore Theory**  
**3 hrs. Lec.**  
**3 hrs. Lab.**  
*Prerequisite: Music 101-102 or consent of instructor.* A continuation of freshman theory, including a study of larger forms, thematic development, chromatic chords including the neapolitan sixth and augmented sixth chords, diatonic seventh chords with advanced sight-singing, keyboard harmony and ear training.

- Music 202**  
**Sophomore Theory**  
**3 hrs. Lec.**  
**3 hrs. Lab.**  
*Prerequisite:* Music 201 or equivalent or by consent of instructor. A continuation of Music 201, including a study of sonata-allegro form, ninth, eleventh and thirteenth chords, exploration of new key schemes, impressionism, melody, harmony, tonality, and formal processes as they apply to twentieth century music with a comparable advance in sight-singing, keyboard harmony and ear training. (4)
- Music 203**  
**Composition**  
**3 hrs. Lec.**  
*Prerequisite:* Music 101 and 102. Composing in small forms for simple media in both traditional styles and styles of the student's choice. May be repeated for credit. (3)
- Music 221-241**  
**Applied Music-Concentration**  
**1 hr. Lec.**  
 Private instruction in the area of the student's concentration. Two half-hour lessons a week. Open to students registered in music theory, ensembles, and other music major or minor courses. Fee required. (2)
- Music 251-270**  
**Applied Music-Major**  
**1 hr. Lec.**  
 Private instruction in the area of the student's major instrument. Primarily for music performance majors. Two half-hour lessons a week. Open to students registered in music theory, ensembles, and other music major or minor courses. Fee required. (3)
- Office Machines**  
 (See Business 160)
- Organizational Behavior**  
 (See Business 237)
- Philosophy 102**  
**Introduction to Philosophy**  
**3 hrs. Lec.**  
 A survey course designed to acquaint the student with some of the fundamental problems in philosophy and with methods used to deal with them. Some principle views, both ancient and modern, are examined as possible solutions. (3)
- Philosophy 105**  
**Logic**  
**3 hrs. Lec.**  
 An analysis of the principles of logical thinking. An effort is made to apply logic's methods and tools to real life situations. Fallacies, definitions, analogies, syllogisms, Venn diagrams, and other topics are discussed. (3)
- Philosophy 202**  
**Introduction to Social and Political Philosophy**  
**3 hrs. Lec.**  
*Prerequisite:* Three hours of philosophy or consent of instructor. An examination of the relationships of philosophical ideas to the community with emphasis on concepts of natural rights, justice, education, freedom and responsibility. (3)
- Philosophy 203**  
**Ethics**  
**3 hrs. Lec.**  
*Prerequisite:* Three hours of philosophy or consent of instructor. A survey of the classical and modern theories of the moral nature of man, posing alternative views of his responsibilities to self and society. The course is designed to verify the ethical issues and their metaphysical and epistemological bases so as to assist the student toward sound application of ethical principles in his own life. (3)
- Philosophy 207**  
**History of Ancient Philosophy**  
**3 hrs. Lec.**  
*Prerequisite:* Three hours of philosophy or consent of instructor. This course is an historical examination of philosophy from Presocratic times to the Renaissance. Connections between the Presocratics, Plato, and Aristotle will be drawn. Stoicism, Epicureanism, and Scholasticism will be considered. (3)
- Philosophy 208**  
**History of Modern Philosophy**  
**3 hrs. Lec.**  
*Prerequisite:* Three hours of philosophy or consent of instructor. A continuation of Philosophy 207. Starting with the Renaissance, it examines Western philosophic thought through the nineteenth Century. Special emphasis will be given continental rationalism, British Empiricism, Kantian. (3)

**Philosophy 210**  
**Studies in Philosophy**  
**3 hrs. Lec.**

*Prerequisite: Three hours of philosophy and consent of the instructor.* Students will study a philosophical problem, movement, or special topic. Course topic will change each semester and may be repeated for credit.

**(3) Physical Education 110 (3)**

**Community Recreation**  
**3 hrs. Lec.**

Principles, organization, and the function of recreation in American society. Designed for students planning a major or minor in health, physical education or recreation.

**Physical Education**  
**Activity Courses**

One of the main objectives of the Physical Education Division is to provide the opportunity for each student to become skilled in at least one physical activity which will prepare him for personal enjoyment of leisure time. Students are urged to take advantage of the program by registering for a physical education activity course each semester.

**Physical Education 111 (1)**

**Beginning Wrestling**  
**2 hrs. Lab.**

Basic wrestling fundamentals, techniques, rules and strategy will be taught. Emphasis will also be placed upon spectator appreciation. Uniform required. Laboratory fee required.

**Physical Education 114 (1)**

**Beginning Badminton**

This course is designed to teach the history, rules, and beginning skills involved in the playing of badminton. Uniform required. Laboratory fee required.

**Physical Education 100 (1)**

**Lifetime Sports Activities**  
**3 hrs. Lab.**

Students are provided an opportunity for participation and instruction in various lifetime sports. Selection may be made from archery, badminton, bowling, golf, handball, racquetball, softball, swimming, tennis, and other sports. Activities may be offered singularly or in combinations. Instruction shall be presented at the beginner and advanced-beginner levels. The course is designed for male and female students and may be repeated for credit providing students select different activities. Laboratory fee required.

**Physical Education 115 (1)**

**Physical Performance**  
**3 hrs. Lab.**

This course is designed to diagnose and measure the student's physical condition and prescribe a program of exercise to carry with him through life. Much of the course work will be carried on in the physical performance laboratory. Coeducational. May be repeated for credit. Uniform required. Laboratory fee required.

**Physical Education 117 (1)**

**Beginning Archery**  
**2 hrs. Lab.**

A co-educational class in beginning archery. Equipment furnished. No uniform required. Laboratory fee required.

**Physical Education 118 (1)**

**Beginning Golf**  
**2 hrs. Lab.**

A co-educational class in beginning golf. Equipment furnished. No uniform required. Laboratory fee required.

**Physical Education 119 (1)**

**Beginning Tennis**  
**2 hrs. Lab.**

A co-educational class designed for the beginner. Basic tennis fundamentals will be stressed. Uniform required. Laboratory fee required.

**Physical Education 104 (1)**

**Touch Football/Soccer**  
**2 hrs. Lab.**

A course designed for those students desiring instruction and skill development in touch football and soccer. Uniform required. Laboratory fee required.

**Physical Education 101 (3)**

**Fundamentals of Health**  
**3 hrs. Lec.**

A study of personal and community health. Emphasis is placed on causative factors of mental and physical health and the means of disease transmission and prevention. For majors, minors, and students with specific interest.

- Physical Education 120** (1)  
**Beginning Bowling**  
 2 hrs. Lab.  
 A co-educational class in beginning bowling. Equipment furnished. No uniform required. Student will pay cost of lane rental.
- Physical Education 121** (1)  
**Folk Dance**  
 2 hrs. Lab.  
 Participation in a variety of folk dances from other lands. Cultural backgrounds and costume study is included as a part of the course. Laboratory fee required. No uniform required.
- Physical Education 122** (1)  
**Beginning Gymnastics**  
 2 hrs. Lab.  
 A co-educational class in tumbling, horizontal bar, parallel bars, rings, and trampoline. Uniform required. Laboratory fee required. No uniform required.
- Physical Education 123** (1)  
**Beginning Swimming**  
 2 hrs. Lab.  
 A co-educational course designed to teach a non-swimmer to survive in the water. Uniform required. Laboratory fee required.
- Physical Education 124** (1)  
**Social Dance**  
 2 hrs. Lab.  
 Students who have limited experience in dance will find this course beneficial. Ballroom and Social Dance includes fundamental steps and rhythms of the foxtrot, waltz, tango, and recent dance steps. "Country" dancing includes reel, square dance, and other related dances. No uniform required. Lab fee required.
- Physical Education 125** (1)  
**Conditioning Exercises**  
 3 hrs. Lab.  
 Enables the student to develop an understanding of exercise and its effect on the body and improve physical fitness through a variety of conditioning activities. Uniform required. Laboratory fee required.
- Physical Education 127** (1)  
**Basketball and Volleyball**  
 2 hrs. Lab.  
 Techniques, rules, and strategy of the game will be taught and the emphasis will be on playing the game. Uniform required. Laboratory fee required.
- Physical Education 129** (1)  
**Modern Dance**  
 2 hrs. Lab.  
 A co-educational, beginning class in modern dance. Uniform required. Laboratory fee required.
- Physical Education 131** (1)  
**Weight Training and Conditioning for Men**  
 3 hrs. Lab.  
 A course designed for those students who desire instruction and participation in weight training and conditioning techniques. Uniforms required. Laboratory fee required.
- Physical Education 134** (1)  
**Outdoor Education**  
 3 hrs. Lab.  
 A co-educational course designed to provide students with the opportunity to gain knowledge and skills in outdoor education and camping activities through planned and incidental experiences. Including a week-end camp-out. No uniform required. Activity fee required.
- Physical Education 144** (3)  
**Introduction to Physical Education**  
 3 hrs. Lec.  
 Designed for professional orientation in physical education, health and recreation. Brief history, philosophy and modern trends of physical education, teacher qualification, vocational opportunities, expected competencies, and skill testing comprise the contents of the course. For students majoring in physical education.
- Physical Education 147** (3)  
**Sports Officiating I**  
 2 hrs. Lec.  
 2 hrs. Officiating  
 This course is especially designed for those students who would like to choose sports officiating for an avocation and/or to increase knowledge in and appreciation of sports. Sports covered in this course will be football and basketball. As part of the course requirement students will be expected to officiate intramural games.
- Physical Education 148** (3)  
**Sports Officiating II**  
 2 hrs. Lec.  
 2 hrs. Officiating  
 This course is especially designed for those students who would like to choose sports

officiating for an avocation and/or to increase knowledge in and appreciation of sports. Sports covered in this course will be softball, track and field, and baseball.

### **Physical Education 217 (1)**

#### **Intermediate Archery**

**2 hrs. Lab.**

This course is designed for the student who has had previous experience in archery and who would like to engage in target shooting and field archery. The student furnishes equipment, and no uniform is required. Laboratory fee required.

### **Physical Education 218 (1)**

#### **Intermediate Golf**

**2 hrs. Lab.**

*Prerequisite:* Permission of instructor. A course designed to develop skills and techniques beyond the "beginner" stage. Laboratory fee required. Green fees paid by student.

### **Physical Education 219 (1)**

#### **Intermediate Tennis**

**2 hrs. Lab.**

*Prerequisite:* Permission of instructor. A course designed to develop skills and techniques beyond the "beginner" stage. Uniform required. Laboratory fee required.

### **Physical Education 222 (1)**

#### **Intermediate Gymnastics**

**2 hrs. Lab.**

*Prerequisite:* Physical Education 122. A course designed to develop skills and techniques beyond the "beginner" stage. Uniform required. Laboratory fee required.

### **Physical Education 223 (1)**

#### **Intermediate Swimming**

**2 hrs. Lab.**

*Prerequisite:* Beginning swim certificate or deep water swimmer. Co-educational course designed to qualify students for Red Cross life saving card. Stroke analysis and diving will be included. Uniform required. Laboratory fee required.

### **Physical Education 225 (2)**

#### **Skin and Scuba Diving**

**1 hr. Lec.**

**2 hrs. Lab.**

*Prerequisite:* Intermediate Swimming or permission of instructor. A co-educational

course designed to give students knowledge and experience in the proper use of equipment, safety, physiology, and open water diving. Students successfully completing all course requirements will receive certification as Basic Scuba Divers from the Professional Association of Diving Instructors (PADI). All equipment will be supplied except mask, fins, and snorkel. The student will rent equipment as specified at the time of registration. Laboratory fee required.

### **Physical Education 226 (1)**

#### **Advanced Lifesaving**

**2 hrs. Lab.**

*Prerequisite:* Intermediate swimming or deep water swim ability. Co-educational course of instruction designed to qualify students for the Red Cross Advanced Lifesaving certificate. Uniform required. Laboratory fee required.

### **Physical Education 234 (2)**

#### **Water Safety Instructor**

**1 hr. Lec.**

**2 hrs. Lab.**

*Prerequisite:* Current Advanced Life Saving Card. Principles and techniques for instructors in water safety and life saving classes. Satisfactory completion of course qualifies the student to test for certification for the Red Cross as Water Safety Instructor. Uniform required. Laboratory fee required.

### **Physical Education 236 (3)**

#### **The Coaching of Football and Basketball**

**2 hrs. Lec.**

**2 hrs. Lab.**

An elective course designed for all students who desire a broader knowledge of the skills and techniques involved in football and basketball coaching; history, theories, philosophies, rules, terminology, and the finer points of the sports are studied. Emphasis directed toward coaching techniques.

### **Physical Education 238 (2)**

#### **Aquatics**

**1 hr. Lec.**

**2 hrs. Lab.**

Technique and procedures of selected water-related activities and their use in recreation programs. Included will be pool management, staff training, safety and supervision of aquatics.

- Physical Education 257** (3) **Standard and Advanced First Aid**  
3 hrs. Lec.  
Theory and practice in the standard and advanced courses of the American National Red Cross in first aid and safety.
- Physical Science 118** (4) **Physical Science**  
3 hrs. Lec.  
2 hrs. Lab.  
A study of the basic principles and concepts of physics, chemistry and nuclear science. The course relates these basic sciences to man's physical world at an introductory level. This course is intended primarily for the non-science major. Laboratory fee required.
- Physical Science 119** (4) **Physical Science**  
3 hrs. Lec.  
2 hrs. Lab.  
The course encompasses the interaction of the earth sciences and man's physical world. Geology, astronomy, meteorology and space science are emphasized through the application of selected principles and concepts of the applied sciences. The course is directed toward the non-science major. Laboratory fee required.
- Physics 111** (4) **Introductory General Physics**  
3 hrs. Lec.  
3 hrs. Lab.  
*Prerequisite:* Two years high school algebra, including trigonometry or equivalent. The first semester of a two-semester course designed for pre-dental, biology, pre-medical, pre-pharmacy, and pre-architecture majors and other students who require a two-semester technical course in physics. This course includes a study of mechanics and heat. The laboratory includes a one hour problem session. Laboratory fee required.
- Physics 112** (4) **Introductory General Physics**  
3 hrs. Lec.  
3 hrs. Lab.  
*Prerequisite:* Physics 111. A continuation of Physics 111 which includes the study of electricity, magnetism, light, and sound. Laboratory includes a one hour problem session. Laboratory fee required.
- Physics 115** (4) **Physics for the Liberal Arts**  
3 hrs. Lec.  
3 hrs. Lab.  
An introduction to the various areas of physics as they relate to the world in which we live. Accomplished through the study of selected topics including mechanics, thermodynamics, and acoustics. This course is intended primarily for the non-science major. Laboratory includes a one hour problem session. Laboratory fee required.
- Physics 116** (4) **Physics for Liberal Arts**  
3 hrs. Lec.  
3 hrs. Lab.  
*Prerequisite:* Physics 115. A continuation of Physics 115 which includes a study of selected topics in the area of electrodynamics, optics, and atomic physics. Laboratory includes a one hour problem session. Laboratory fee required.
- Physics 131** (4) **Applied Physics**  
3 hrs. Lec.  
3 hrs. Lab.  
*Prerequisite:* Mathematics 195 or concurrent enrollment in Mathematics 195. The first half of a one year course designed to explain the basic concepts of the property of matter, mechanics, and heat. Emphasis will be placed on applications and problem solving. Designed primarily for students enrolled in technical programs. Laboratory includes a one hour problem session. Laboratory fee required.
- Physics 132** (4) **Applied Physics**  
3 hrs. Lec.  
3 hrs. Lab.  
*Prerequisite:* Physics 131. A continuation of Physics 131. Designed to explain basic concepts in the areas of sound, light, electricity, magnetism, and atomic theory. Laboratory fee required.
- Physics 201** (4) **General Physics**  
3 hrs. Lec.  
3 hrs. Lab.  
*Prerequisite:* Credit for or concurrent registration in Mathematics 126. Principles and application of mechanics, wave motion, and sound emphasizing fundamental concepts,

problem solving, notation, and units. Designed primarily for physics, chemistry, mathematics, pre-med and engineering majors. Laboratory includes a one hour problem session. Laboratory fee required.

### **Physics 202 (4)**

#### **General Physics**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite: Physics 201 and credit or concurrent registration in Mathematics 227.* Principles and applications of heat, electricity, magnetism and optics emphasizing fundamentals, concepts, problem solving, notation and units. Laboratory includes a one hour problem session. Laboratory fee required.

### **Physics 203 (4)**

#### **Introduction to Modern Physics**

**3 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite: Physics 202.* Principles of relativity, atomic and nuclear physics with emphasis on fundamental concepts, problem solving, notation, and units. Laboratory includes a one hour problem session. Laboratory fee required.

### **Psychology 103 (3)**

#### **Sex Roles in American Society**

**3 hrs. Lec.**

A study of the physiological, psychological and sociological aspects of human sexuality. The student may register for either Psychology 103 or Sociology 103, but may receive credit for only one of the two.

### **Psychology 105 (4)**

#### **Introduction to Psychology**

**3 hrs. Lec.**

A study of basic problems and principles of human experience and behavior, heredity and environment, the nervous system, motivation, learning, emotions, thinking and intelligence. (This course is offered on campus and via television.)

### **Psychology 131 (3)**

#### **Human Relations**

**3 hrs. Lec.**

A study involving the direct application of psychological principles to human relations

problems in business and industry. Consideration is given to group dynamics and adjustment factors related to employment and advancement. The presentation will be tailored to fit the needs of the students enrolled in each section.

### **Psychology 201 (3)**

#### **Developmental Psychology**

**3 hrs. Lec.**

*Prerequisite: Psychology 105.* A study of human growth, development and behavior, emphasizing the psychological changes which occur during the life pattern. The processes of life from prenatal beginnings to adulthood are treated in an integrated manner. Due attention is given to aging and its place in the developmental sequence.

### **Psychology 202 (3)**

#### **Applied Psychology**

**3 hrs. Lec.**

*Prerequisite: Psychology 105.* A course designed for the application of psychological facts and principles to problems and activities of life. Special emphasis will be placed on observing, recording and modifying human behavior. Some off-campus work will be required.

### **Psychology 205 (3)**

#### **Psychology of Personality**

**3 hrs. Lec.**

*Prerequisite: Psychology 105.* A consideration of the important factors involved in successful human adjustment including child-parent relationships, adolescence, anxiety states, mechanisms of defense and psychoanalytic concepts. The course includes a survey of methods of personality measurement.

### **Psychology 207 (3)**

#### **Social Psychology**

**3 hrs. Lec.**

*Prerequisites: Psychology 105 and/or Sociology 101.* A survey of the research and theories dealing with individual behavior in the social environment. Topics include socio-psychological process, attitude formation and change, interpersonal relations, and group processes. The student may register for either Psychology 207 or Sociology 207 but may receive credit for only one of the two.



**Psychology 209****General Psychology****3 hrs. Lec.**

*Prerequisite: Psychology 105.* An in-depth survey of behavior, including learning, motivation, perception, and emotion. An introduction to behavioral research, data collecting and analysis will be included. Recommended for psychology majors.

**Quality Control Technology 121 (2)****Introduction to Quality Control****2 hrs. Lec.**

This course traces the elements of quality control through the product life-cycle from research, to development, to purchasing, to production, to testing and finally to customer use. A study of the scope and function of quality will be made, including quality control procedures and specifications, including government publications. Fundamentals of engineering as applied to quality control problems will be emphasized.

**Quality Control Technology 122 (3)****Dimensional Measurement****2 hrs. Lec.****2 hrs. Lab.**

This course provides an opportunity to obtain a practical and theoretical understanding of many types of mechanical and optical measuring devices which are used in dimensional inspection.

**Quality Control Technology 220 (3)****Physical and Environmental Testing****2 hrs. Lec.****2 hrs. Lab.**

This course introduces the student to a variety of tests and evaluations which are performed on raw materials and fabricated parts. Such areas as tensile and hardness testing, metallurgical cross-sectioning, temperature-humidity cycling and corrosion resistance testing are covered.

**Quality Control Technology 227 (3)****Non-Destructive Evaluation****2 hrs. Lec.****2 hrs. Lab.**

This course provides a basic background in such areas as industrial radiography, magnetic particle and penetrant inspection, eddy current and ultrasonic testing.

**(3) Quality Control Technology 236 (4)****Advanced Quality Control Systems****3 hrs. Lec.****2 hrs. Lab.**

*Prerequisite: Engineering Technology 143 or consent of instructor.* A detailed study will be made of the control and information systems and decision procedures necessary to effectively operate the quality control and function. Topics and problems will include reliability process control, failure analysis and corrective action systems. A problem-prevention and problem-solving approach will be emphasized.

**Quality Control Technology****703, 803, 713, 813****(3)****Work Experience****15 hrs. Lab.**

*Prerequisite: Two courses in the student's major and instructor/coordinator approval.* (The description for these courses is the same as that listed for Business 703 and also under Work Experience.)

**Quality Control Technology****704, 804, 714, 814****(4)****Work Experience****20 hrs. Lab.**

(Same as course description above for Quality Control Technology 703, et al.)

**Reading 101****(3)****Effective College Reading****3 hrs. Lec.**

Reading 101 emphasizes comprehension techniques in reading fiction and non-fiction. Improved critical reading skills including analysis, critique, and evaluation of written material are explored. Reading comprehension and flexibility of reading rate are stressed in addition, advanced learning techniques in listening, note-taking, underlining, concentration, and reading in specialized academic areas are developed.

**Reading 102****(3)****Speed Reading/Learning****3 hrs. Lec.**

This course emphasizes improved critical reading/learning skills utilizing an aggressive, dynamic approach. Reading comprehension is stressed using speed reading techniques. Learning and memory depth skills are taught. Offered in a laboratory setting.

**Real Estate 130****(3)****Real Estate Principles and Practices****3 hrs. Lec.**

Fundamental principles and practices covering the broad subject of real estate together with real estate law and operating procedures applicable to the state of Texas. This course of study shall include but not be limited to the following: arithmetical calculations as used in real estate transactions; rudimentary principles of conveyancing; the general purposes and effect of deeds, deeds of trust, mortgages, land contracts of sales, leases, liens, and listing contracts; elementary principles of land economics and appraisals; fundamentals of obligations between principal and agent; principles of real estate practice and canons of ethics pertaining thereto; and the provisions of this act and rules and regulations of the Texas Real Estate Commission.

**Real Estate 230****(3)****Real Estate Office Management****3 hrs. Lec.**

*Prerequisite:* Real Estate 130 or consent of instructor. Overall management procedures of operating a real estate office. In-depth study of office procedures, relations, communication, and ethics.

**Real Estate 233****(3)****Commercial and Investment Real Estate****3 hrs. Lec.**

*Prerequisite:* Real Estate 130. Basic insight into commercial and investment real estate, including syndication, "joint venture" or group ownership of real estate, selection, financing, and management of the investor.

**Real Estate 235****(3)****Property Management****3 hrs. Lec.**

*Prerequisite:* Real Estate 130. Basic management techniques on how to attract and keep tenants and maintain property while obtaining the highest level of income developing-executing-evaluation; legal aspects; property analysis; location factors; employee relations; market, income and expense analysis; maintenance and housekeeping; tenant credits and collections; management of office, records and accounting; management of various kinds of real estate including single and multi-family, retail and commercial properties.

**Real Estate 131****(3)****Real Estate Finance****3 hrs. Lec.**

Suggested for students currently enrolled in or who have completed Principles & Practices. Procedures in financing real estate sales, obtaining funds, legal aspects of mortgages and related instruments. Also problems and cases in real estate finance.

**Real Estate 135****(3)****Real Estate Appraisal****3 hrs. Lec.**

*Prerequisite:* Real Estate 130 or consent of instructor. Principles and methods of appraisal generally used in establishing the market value of real estate along with the knowledge and skills necessary for application or interpretation.

**Real Estate 136****(3)****Real Estate Law****3 hrs. Lec.**

*Prerequisite:* Real Estate 130 or consent of instructor. Emphasizes the more complex aspects of real estate law as encountered by those concerned with real estate transactions. Practical application relating to ownership, use and transfer of real property, enforceability of contractual rights, and the impact of litigation affecting title to real property.

**Real Estate 250****(4)****Real Estate Internship I****20 hrs. Lab.**

*Prerequisite:* Concurrent enrollment in Real Estate 254. Internship training and application of principles and skills. Under supervision of the employer and a member of the real estate faculty. Job-related studies and independent research.

**Real Estate 251****(4)****Real Estate Internship II****20 hrs. Lab.**

*Prerequisite:* Real Estate 254 and 250 and concurrent enrollment in Real Estate 255. Continuation of supervised employment in student's chosen field. Intended to provide increased skills and knowledge in preparing for a career in real estate. Includes research paper.

- Real Estate 254**  
**Real Estate Seminar I**  
**2 hrs. Lec.**  
*Prerequisite: Concurrent enrollment in Real Estate 250 and preliminary interview by real estate faculty.* Problem analysis and project development for students majoring in real estate. Individual and group study of a particular area on problem beyond the scope of regularly offered courses.
- Real Estate 255**  
**Real Estate Seminar II**  
**2 hrs. Lec.**  
*Prerequisite: Real Estate 254 and 250 and concurrent enrollment in Real Estate 251.* Business strategy and the decision-making process applied to real estate management positions. Specific emphasis will be placed upon the application of the student's course knowledge and work experiences.
- Religion 101**  
**Religion in American Culture**  
**3 hrs. Lec.**  
 A systematic examination of religion in American culture. Emphasis upon the characteristics of American religion, an objective study of various religious groups, and an examination of the relation of religion to the arts and other cultural phenomena.
- Religion 103**  
**(Formerly Religion 102)**  
**Introduction to Philosophy of Religion**  
**3 hrs. Lec.**  
 Investigation of basic problems in philosophy of religion faith and reason, the existence of God, the nature of religious language and literature, evil and human destiny. Analysis of the effect of religious belief and practice upon social and moral life in both Eastern and Western traditions.
- Religion 201**  
**Major World Religions**  
**3 hrs. Lec.**  
*Prerequisite: Sophomore standing or consent of instructor recommended.* A survey of major world faiths, the course will concentrate on the basic texts of Eastern and Western religions and on the creative personalities of their founders. There will be some consideration of the problems of "objective" study of religions, of primitive religions, and of alternatives to major world religions such as astrology and atheism.
- (2) Salesmanship**  
**(See Business 230)**
- Science 100**  
**History of Science**  
**3 hrs. Lec.**  
 A study of the development of scientific knowledge, including biology, genetics, chemistry, mathematics, astronomy, architecture, industrial technology, and ethical considerations relating to the use of scientific knowledge. (This course is offered via television.)
- Shorthand**  
**(See Business 159, 166, 266)**
- Social Science 131**  
**American Civilization**  
**3 hrs. Lec.**  
 A course designed to provide the student with some historical perspective for understanding the economic, political, and social institutions of modern society. In this context, emphasis will be placed upon U.S. and Texas history and constitutional development. It is advised that these courses be taken in order, 131, 132.
- Social Science 132**  
**American Civilization**  
**3 hrs. Lec.**  
 A continuation of Social Science 131.
- Sociology 101**  
**An Introduction to Sociology**  
**3 hrs. Lec.**  
 An inquiry into the nature of society and the foundations of group life, including institutions, with a broad presentation of the bases of social change, processes and problems.
- Sociology 102**  
**Social Problems**  
**3 hrs. Lec.**  
*Prerequisite: Sociology 101.* A study of the background, emergence and scope of current group relationships in our society, emphasizing topics as they apply to social adjustment in the family and the total community environment.

- Sociology 103** (3)  
**Sex Roles in American Society**  
 3 hrs. Lec.  
 A study of the physiological, psychological and sociological aspects of human sexuality. The student may register for either Sociology 103 or Psychology 103, but may receive credit for only one of the two.
- Sociology 203** (3)  
**Marriage and Family**  
 3 hrs. Lec.  
*Prerequisite:* Sociology 101 recommended. An analysis of courtship patterns, marriage and family forms, relationships and functions and socio-cultural differences in family behavior.
- Sociology 204** (3)  
**American Minorities**  
 3 hrs. Lec.  
*Prerequisites:* Sociology 101 and/or six hours of U.S. history recommended. The principal minority groups in American society; their sociological significance and historic contributions. An emphasis will be placed on problems of intergroup relations, social movements and related social changes occurring on the contemporary American scene. The student may register for either History 204 or Sociology 204.
- Sociology 206** (3)  
**Introduction to Social Work**  
 3 hrs. Lec.  
*Prerequisite:* Consent of instructor required. Development of the philosophy and practice of social work in the United States; survey of the fields and techniques of social work; attention given to requirements for training in social work.
- Sociology 207** (3)  
**Social Psychology**  
 3 hrs. Lec.  
*Prerequisites:* Psychology 105 and/or Sociology 101. Same as Psychology 207. The student may elect the subject area heading appropriate to his major. The student may not receive credit for both Psychology 207 and Sociology 207.
- Sociology 231** (3)  
**Urban Social Problems**  
 3 hrs. Lec.  
 The sociology of urban groups and institutions; urbanization as a process; the inner city; the aspect of the neighborhood. Emphasis is placed on case studies, enabling the student to identify and understand the types of social problems inherent in the metropolitan environment.
- Spanish 101** (4)  
**Beginning Spanish**  
 3 hrs. Lec.  
 2 hrs. Lab.  
 Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension, and oral expression. Laboratory fee required.
- Spanish 102** (4)  
**Beginning Spanish**  
 3 hrs. Lec.  
 2 hrs. Lab.  
*Prerequisite:* Spanish 101 or equivalent. Continuation of Spanish 101 with emphasis on idiomatic language and complicated syntax. Laboratory fee required.
- Spanish 201** (3)  
**Intermediate Spanish**  
 3 hrs. Lec.  
*Prerequisite:* Spanish 102 or equivalent or consent of the instructor. Reading composition, grammar review and intense oral practice.
- Spanish 202** (3)  
**Intermediate Spanish**  
 3 hrs. Lec.  
*Prerequisite:* Spanish 201 or equivalent. Continuation of Spanish 201 with reading selections drawn more directly from contemporary literary sources. Composition.
- Spanish 203** (3)  
**Introduction to Spanish Literature**  
 3 hrs. Lec.  
*Prerequisite:* Spanish 202 or equivalent or consent of the instructor. Readings in Spanish literature, history, culture, and civilization.
- Spanish 204** (3)  
**Introduction to Spanish Literature**  
 3 hrs. Lec.  
*Prerequisite:* Spanish 202 or equivalent or consent of the instructor. Readings in Spanish literature, history, culture, art and civilization.

- Speech 100** (1)  
**Speech Laboratory**  
**3 hrs. Lab.**  
 A laboratory course for the preparation of speeches, reading of dialogue from literature, and debate propositions which will be presented throughout the community. May be repeated for one additional hour of credit each semester.
- Speech 105** (3)  
**Fundamentals of Public Speaking**  
**3 hrs. Lec.**  
 An introductory course in public speaking. Principles of reasoning. Emphasis upon the delivery of carefully prepared speeches. Special attention to audience analysis, collection of materials, and outlining.
- Speech 109** (3)  
**Voice and Articulation**  
**3 hrs. Lec.**  
 A study of the mechanics of speech applied to improvement of the individual's voice and pronunciation.
- Speech 110** (1)  
**Reader's Theatre Workshop**  
**2 hrs. Lab.**  
 A laboratory course for the preparation and presentation of scripts, readings, and book reviews. Collecting, and arranging all types of literature for group interpretation and performance. May be repeated once for credit.
- Speech 206** (3)  
**Oral Interpretation**  
**3 hrs. Lec.**  
 A study of fundamental techniques of analyzing various types of literature, and practice in preparing and presenting selections orally. Emphasis on individual improvement.
- Speech 207** (3)  
**Advanced Oral Interpretation**  
**3 hrs. Lec.**  
*Prerequisites: Speech 105 and 206.* Application of basic principles of interpretation to longer selections of literature; more detailed analysis and arranging of poetry and prose for various types of multiple reading situations including choral speaking and reader's theatre. Investigation of all types of literature which are suited to group interpretation work.
- Teacher Aide 129** (3)  
**Communication Skills for Teacher Aids**  
**3 hrs. Lec.**  
 This course is designed to test and enhance the teacher aide's basic communication skills in reading, writing, speaking, and listening. It will also include a survey of techniques and methods for encouraging the development of these language skills in the students with whom the aide works. Creative writing, storytelling, and appreciation of literature, tutoring techniques for reading and writing, cursive and manuscript handwriting will be included in the language skills emphasized.
- Teacher Aide 131** (3)  
**Teacher Aide Techniques I**  
**3 hrs. Lec.**  
 The primary purpose of this course is to define the role of the teacher aide within the school structure and to develop an understanding of the organization and administration of the public school system. Special attention will be given to the development of effective interpersonal relationships. Through direct experiences with students on a one-to-one basis, the teacher aide trainee will observe and study the developmental patterns of students. A study will be made of the general principles of human growth and development.
- Teacher Aide 132** (3)  
**Introduction to Media**  
**1 hr. Lec.**  
**4 hrs. Lab.**  
 An introduction to basic skills associated with the preparation of graphic and projected materials and the operation of selected audiovisual equipment.
- Teacher Aide 133** (3)  
**Teacher Aide Techniques II**  
**3 hrs. Lec.**  
 This course is designed to further develop the teacher aide trainee's understandings, skills and attitudes in providing a wholesome learning environment in the classroom. The facilitation of learning with small groups of students will be emphasized through didactic and field experiences. The unique factors affecting the growth and development of inner-city students will be emphasized along with a study of the teacher aide responsibilities as a member of the educational team.

### **Teacher Aide 135 (3)**

#### **Arts and Crafts for Teacher Aides**

**3 hrs. Lec.**

The course acquaints the student with the variety of creative art materials and methods appropriate for use in programs for children as well as opportunities for participation in the use of these materials. Creating an attractive classroom environment with the use of classroom displays, charts, poster art, and bulletin boards will be incorporated in the course.

### **Teacher Aide 231 (2)**

#### **Teacher Aide Seminar I**

**2 hrs. Lec.**

The first seminar section is designed to provide an opportunity for the teacher aide trainees to discuss their experiences as trained observers and participants in the classroom strategies and procedures, supervision techniques and instructional skills.

### **Teacher Aide 232 (4)**

#### **Teacher Aide Practicum I**

**20 hrs. Lab.**

The practicum section will include supervised laboratory experiences in inner-city classrooms under the direct supervision of a teacher. Basic principles of learning and motivation will be applied to the teaching.

### **Teacher Aide 235 (2)**

#### **Teacher Aide Seminar II**

**2 hrs. Lec.**

This section of the seminar will provide the teacher aide trainee an opportunity to continue his experiences in the classroom while obtaining professional consultation and group experiences with his classmates. Small group interaction will enable the trainee to share experiences, demonstrate specific skills and techniques, participate in simulated classroom situations and clarify hypotheses developed in the supporting educational activities. The overall objective will be to provide a means for integrating and relating the total individual and collective experiences of the curriculum into a meaningful pattern.

### **Teacher Aide 236 (4)**

#### **Teacher Aide Practicum II**

**20 hrs. Lab.**

This section of the practicum will continue to provide the teacher aide trainee super-

vised laboratory experiences in classrooms under the supervision of a teacher. Basic principles of learning and motivation will be applied to the teaching-learning situation.

### **Teacher Aide 803, 813 (3)**

#### **Work Experience**

**15 hrs. Lab.**

*Prerequisite: Two courses in the student's major and instructor/coordinator approval.* (The description for these courses is the same as that listed for Business 703 and also under Work Experience.

### **Theatre 100 (1)**

#### **Rehearsal and Performance**

*Prerequisite Acceptance as a member of the cast or crew of a major production.* Participation in the class includes the rehearsal and performance of the current theatrical presentation of the division. Students will be enrolled by the director upon being accepted for participation in a major production. Credit limited to one hour per semester.

### **Theatre 101 (3)**

#### **Introduction to the Theatre**

**3 hrs. Lec.**

A general survey designed to acquaint the student with the various aspects of theatre, plays and playwrights, directing and acting, theatres, artists, and technicians.

### **Theatre 102 (3)**

#### **Contemporary Theatre**

**3 hrs. Lec.**

A study of the modern theatre and cinema as art forms, with attention to the historical background and traditions of each. Emphasis is placed on a better understanding of the social, cultural, and aesthetic significance of these media in today's life. Includes the reading of a number of modern plays and the viewing of specially selected films.

### **Theatre 103 (3)**

#### **Stagecraft I**

**2 hrs. Lec.**

**3 hrs. Lab.**

A study of the technical aspects of play production including set design and construction, stage lighting, make-up, costuming, and related areas.

- Theatre 104** (3)  
**Stagecraft II**  
 2 hrs. Lec.  
 3 hrs. Lab.  
*Prerequisite:* Theatre 103 or consent of instructor. A continuation of Theatre 103 with emphasis on individual projects in set and lighting design and construction, including further exploration of the technical aspects of play production.
- Theatre 105** (3)  
**Make-up for the Stage**  
 3 hrs. Lec.  
 Theory and practice of the craft of make-up. Laboratory fee required.
- Theatre 106** (3)  
**Acting I**  
 2 hrs. Lec.  
 3 hrs. Lab.  
 Individual and group activity with theory and exercises in bodily control, voice, pantomime, interpretation, characterization, and stage movement. Analysis and study of specific roles for stage presentation.
- Theatre 107** (3)  
**Acting II**  
 2 hrs. Lec.  
 3 hrs. Lab.  
*Prerequisite:* Theatre 106 or consent of instructor. Continuation of Theatre 106 with emphasis on problems of complex characterization, ensemble acting, stylized acting and acting in period plays.
- Theatre 108** (3)  
**Movement for the Stage**  
 2 hrs. Lec.  
 3 hrs. Lab.  
 A study of movement as both a pure form as well as its relation and integration with the theatre arts. The course will include movement as a technique to control balance, rhythm, strength, and flexibility. Movement will be explored as it is used in all the theatrical forms and in development of characterization. May be repeated for credit.
- Theatre 109** (3)  
**Voice and Articulation**  
 3 hrs. Lec.  
 Same as Speech 109. The student may not receive credit for both Theatre 109 and Speech 109.
- Theatre 110** (3)  
**History of Theatre I**  
 3 hrs. Lec.  
 Survey of theatre from its beginning through the sixteen century. Study of the theatre in each period as a part of the total culture of the period.
- Theatre 111** (3)  
**History of Theatre II**  
 3 hrs. Lec.  
 Development of the theatre from the seventeenth century through the twentieth century.
- Theatre 112** (3)  
**Beginning Dance Technique in Theatre**  
 2 hrs. Lec.  
 3 hrs. Lab.  
 Course designed to promote body balance, improve manipulation of trunk and limbs, and facilitate the rhythmic flow of physical energy. Exploration of basic movements of the dance with emphasis on swing movements, circular motion, fall and recovery, contraction and release, and contrast of literal and abstract movements.
- Theatre 113** (3)  
**Intermediate Dance**  
 2 hrs. Lec.  
 3 hrs. Lab.  
*Prerequisite:* Theatre 112 or permission of instructor. A general survey to acquaint the student with the various aspects of dance and its role in total theatre, including the evolution of dance styles. Exploration of jazz style emphasizing flow of movement, body placement, dynamic intensity, level, focus, and direction.
- Theatre 115** (2)  
**Mime**  
 1 hr. Lec.  
 2 hrs. Lab.  
*Prerequisite:* Stage movement, Theatre 106. Exploration of the expressive significance and techniques of mime.
- Theatre 119** (1)  
**Demonstration Lab**  
 1 hr. Lab.  
 One hour a week course designed to allow the theatre student an opportunity to practice the theory learned in specific theatre

classes before an audience. Scenes studied in various drama classes will show contrast and the different perspectives. Required of all drama students. Open to all students.

### **Theatre 205 (3)**

#### **Scene Study (Theatre I)**

**2 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Theatre 106, 107. Continuation of Acting II with emphasis on developing character through detailed study of the playscript. Students will deal with the stylistic problems presented by the staging of period plays, concentrating primarily on Ibsen, Chekov, and the development of early realism.

### **Theatre 207 (3)**

#### **Scene Study II**

**2 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Theatre 205. Continuation and intensification of Theatre 205 with concentration upon individual needs of the performer. Conference and scheduled rehearsals in preparation for scene work.

### **Theatre 208 (3)**

#### **Introduction to Technical Drawing**

**2 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Theatre 103 and 104. Basic techniques of drawing for theatrical design and construction.

### **Theatre 209 (3)**

#### **Lighting Design**

**2 hrs. Lec.**

**3 hrs. Lab.**

*Prerequisite:* Theatre 103 and 104. A study

of design and techniques of lighting in the theatre. Practical experience in departmental productions required for one semester.

### **Theatre 235 (3)**

#### **Costume History**

**3 hrs. Lec.**

*Prerequisite:* Theatre 110 or 111. The study of costumes and their use on the stage from the earliest times to the present.

### **Typing**

(See Business 172, 174, 273)

### **Work Experience**

**703, 713, 803, 813**

(15 hrs. lab.)

**3 credits**

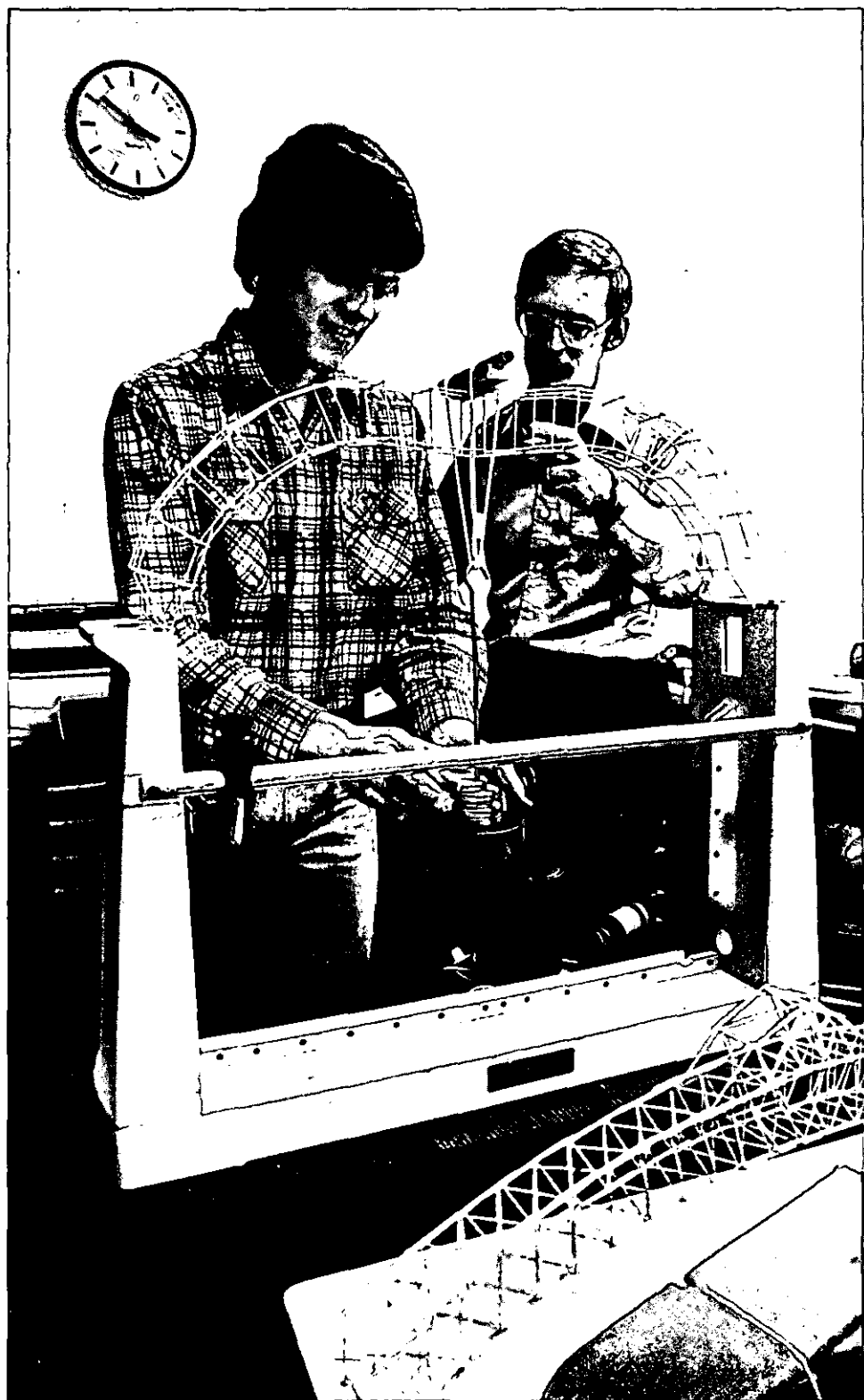
**704, 714, 804, 814**

(20 hrs. lab.)

**4 credits**

*Prerequisite:* Completion of two courses in the student's major and instructor/coordinator approval. These courses constitute an on-the-job application of theory and laboratory instruction received in the formal courses of the student's major curricula. The student will be placed in a work-study position in his technical/occupational field that will test his skill and ability to function successfully in that respective occupation. The student's learning in this course will be guided by a set of learning objectives formulated at the beginning of each semester by the student, his instructor/coordinator, and his supervisor at work. The instructor will determine if the learning objectives are valid and will give final approval for credit. The student will have a regularly scheduled meeting with his instructor and will complete appropriate assignments given to him by his instructor.







# TECHNICAL OCCUPATIONAL PROGRAMS

## Work Experience Education

Richland students may enrich their education in certain technical-occupational programs by enrolling in work experience education courses. These courses are designed to assist students in coordinating classroom study with related on-the-job experience.

### Requirements:

1. Students must have completed at least two courses in their occupational major to be eligible for cooperative work experience.
2. A full-time student must be enrolled in twelve credit hours or more; two courses must relate to the student's work experience, and up to four credit hours may be in cooperative work experience.
3. A part-time student may take up to four credit hours of work experience.
4. Part-time students must be concurrently enrolled in a course related to the work experience.
5. To enroll in a work experience course, a student must have the approval of his instructor/coordinator.
6. For specific requirements, a student must contact instructor-coordinator of the work experience course in which he wishes to enroll.

Course credit will be awarded at the rate of one credit hour for each 80 hours of approved work experience accomplished during the semester. This is approximately five hours per week during a sixteen week semester.

The work experience credit hours available in selected technical-occupational programs are listed in the curriculum for that program.

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### Technical-Occupational Programs Offered on the Seven Campuses of the Dallas County Community College District

#### Eastfield

Accounting Associate  
Air Conditioning and Refrigeration Technology  
Auto Body  
Automotive Technology  
Child Development  
Digital Electronics  
Drafting and Design  
Graphic Arts  
Graphic Communications  
Social Work Associate  
Secretarial Careers  
    Administrative  
    General  
    Professional  
    Office Skills and Systems  
    General Office Occupations  
Mid-Management  
Training Paraprofessionals for the Deaf  
Transportation Technology  
Welding

#### Interior Design

#### Legal Assistant

#### Medical

Associate Degree Nursing  
Dental Assistant Technology  
Long Term Health Care  
Medical Assistant Technology  
Medical Lab Technology  
Medical Transcriptionist  
Operating Room Technology  
Radiologic Technology  
Respiratory Therapy Technology  
Vocational Nursing

#### Mid-Management

#### Pattern Design

#### Political Science

#### Secretarial Careers

#### General

#### Professional

#### Legal

#### General Office Occupations

#### Teacher Aide

#### El Centro

Accounting Associate  
Apparel Design  
Architecture Technology  
Data Processing Programmer  
Drafting and Design  
Fire Protection Technology  
Food Service Instruction  
    Dietetic Technology  
    Food Service Operations  
    School Food Service

#### Mountain View

Accounting Associate  
Animal Medical Technology  
Aviation Administration  
    Air Cargo Transport  
    Airline Marketing  
    Fixed Base Operations  
Avionics  
Drafting and Design Technology  
Electronics Technology  
Horology (Watch Repair)

- Machine Shop
- Mid-Management
- Pilot Technology
- Secretarial Careers
  - General
  - Professional
- Office Skills and Systems
- General Office Occupations
- Teacher Aide
- Welding Technology

## **Richland**

- Accounting Associate
- Accounting Technician
- Construction Management and Technology
- Engineering Technology
  - Electric Power
  - Electro-Mechanical
  - Fluid Power
  - Quality Control
- Human Services
  - Mental Health Assistant
  - Social Worker Assistant
- Mid-Management
- Ornamental Horticulture
- Real Estate
- Secretarial Careers
  - Administrative
  - Educational
  - General Office Occupations
  - Professional
  - Office Skills and Systems
  - General
- Teacher Aide

## **Cedar Valley**

- Accounting Associate
- Air Conditioning and Refrigeration

- Appliance Repair
- Auto Mechanic
- Human Services
- Mid-Management
- Retail Merchandising
- Secretary Occupations
  - General Office Careers
  - Secretary Careers
- Power Mechanics
  - Marine Engines
  - Motorcycles
  - Small Engines

## **North Lake**

- Accounting Associate
- Air Conditioning and Refrigeration
- Building Trades
  - Carpenters
  - Electricians
- Diesel Mechanics
- Mid-Management
- Real Estate
- Secretary Occupations
  - General Office Careers
  - Legal Secretary
  - Secretary Careers

## **Brookhaven**

### **1978**

- Accounting Associate
- Auto Body
- Auto Mechanics
- Auto Parts Specialists
- Child Care and Development
- Mid-Management
- Retail Merchandising
- Secretarial Careers

## **Technical-Occupational Programs Offered by Tarrant County Junior Colleges Available to Dallas County Residents**

Dallas County residents may enroll in the programs listed below at the appropriate Tarrant County Junior College at the Tarrant County resident's tuition rate. This reciprocal arrangement does not apply to programs of instruction which are filled to capacity with Tarrant County students.

### **Northeast Campus Courses**

- Banking & Finance
- Civil Technology
- Dental Hygiene
- Emergency Medical Technician
- Fashion Merchandising

### **Northwest Campus Courses**

- Agribusiness
- Aviation Maintenance Technician
- Small Business Management

### **South Campus Courses**

- Industrial Supervision
- Medical Secretarial
- Power Transmission

## Accounting Associate

This two-year program is designed for persons interested in pursuing careers as junior accountants in business, industry, and government. Emphasis will be placed on internal accounting procedures and generally accepted accounting principles as they relate to external reporting with selected electives in cost accounting and tax accounting. Successful completion of the program leads to the associate in applied arts and sciences degree.

### Curriculum Pattern

#### First Year

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Fall Semester</b>			
BUS 201—Principles of Accounting I .....	3	0	3
BUS 105—Introduction to Business .....	3	0	3
BUS 160—Office Machines .....	3	0	3
COM 131—Applied Composition and Speech <b>or</b> ENG 101—Composition and Expository Reading .....	3	0	3
MTH 130—Business Mathemaics <b>or</b> MTH 111— Mathematics for Business and Economics I .....	3	0	3
			<hr/> 15
<b>Spring Semester</b>			
BUS 202—Principles of Accounting II .....	3	0	3
BUS 136—Principles of Management .....	3	0	3
CS 175—Introduction to Computer Sciences .....	3	0	3
COM 132—Applied Composition and Speech <b>or</b> ENG 102—Composition and Literature .....	3	0	3
<b>**BUS 172—Beginning Typing <b>or</b></b> BUS 713 <b>or</b> BUS 714—Work Experience .....			3 or 4
			<hr/> 15 or 16

#### Second Year

<b>Fall Semester</b>			
BUS 203—Intermediate Accounting .....	3	0	3
BUS 238—Cost Accounting <b>or</b> BUS 239—Income Tax Accounting .....	3	0	3
GOV 201—American Government .....	3	0	3
ECO 201—Principles of Economics .....	3	0	3
BUS 803 <b>or</b> BUS 804—Work Experience <b>or</b> *Elective .....			3 or 4
			<hr/> 15 or 16
<b>Spring Semester</b>			
BUS 204—Managerial Accounting .....	3	0	3
BUS 234—Business Law .....	3	0	3
BUS 231—Business Correspondence .....	3	0	3
ECO 202—Principles of Economics .....	3	0	3
BUS 813 <b>or</b> BUS 814—Work Experience <b>or</b> *Elective .....			3 or 4
			<hr/> 15 or 16

#### \*Recommended Electives

BUS 143	BUS 239
BUS 205	BUS 242
BUS 206	PSY 105
BUS 238	PSY 131

**\*\*Must have typing skills of 30 words per minute to be waived.**

# Accounting Technician (1-year program)

The objective of this program is to provide the student with a working knowledge of bookkeeping procedures currently in use in business; to introduce the student to accounting principles supporting bookkeeping procedures; and to give the student practical bookkeeping experience by the use of problem solving. A certificate is awarded upon completion.

## Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Fall Semester</b>			
BUS 105—Introduction to Business .....	3	0	3
BUS 131—Bookkeeping I .....	3	0	3
BUS 160—Office Machines .....	3	0	3
COM 131—Applied Composition and Speech .....	3	0	3
MTH 130—Business Mathematics .....	3	0	3
			<hr/> 15
<b>Spring Semester</b>			
BUS 132—Bookkeeping II .....	3	0	3
BUS 172—Beginning Typing <b>or</b> BUS 174—Intermediate Typing .....	2 or 1	3 or 2	3 or 2
CS 175—Introduction to Computer Science .....	3	0	3
COM 132—Applied Composition and Speech .....	3	0	3
*Elective .....			3
			<hr/> 15 or 14

### \*Recommended Electives:

- BUS 162
- PSY 105
- PSY 131

# Construction Management and Technology

This program prepares the student for employment as a technician in a wide range of construction industry applications. Course content is designed to provide meaningful experiences in the construction industry at the management and site coordination level. Successful completion of this program leads to the associate in applied arts and sciences degree.

## Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>First Year</b>			
<b>Fall Semester</b>			
CMT 121—Construction Materials, Methods and Equipment I .....	2	3	3
CMT 132—Construction Industry .....	3	0	3
COM 131—Applied Composition and Speech <b>or</b> ENG 101—Composition and Expository Reading .....	3	0	3
CMT 236—Building Codes and Safety .....	3	3	4
HD 107—Leadership <b>or</b> HD 105—Human Development <b>or</b> PSY 105—Introduction to Psychology .....	3	0	3
			<hr/> 16
<b>Spring Semester</b>			
MTH 195—Technical Mathematics .....	3	0	3
CMT 124—Electrical and Mechanical Equipment for Buildings .....	3	3	4
CMT 122—Construction Materials, Methods and Equipment II .....	2	3	3
CMT 123—Construction Graphics .....	2	6	4
*Elective .....			3
			<hr/> 17
<b>Second Year</b>			
<b>Fall Semester</b>			
CMT 231—Contracts and Specifications .....	2	3	3
CMT 136—Surveying and Measurements .....	2	6	4
CMT 138—Construction Management I .....	3	3	4
EGR 289—Mechanics of Structures .....	3	0	3
			<hr/> 14
<b>Spring Semester</b>			
CMT 230—Quality Control and Cost Control .....	3	3	4
CMT 234—Estimating .....	2	6	4
CMT 237—Soils, Foundations, and Reinforced Concrete ....	3	3	4
CMT 238—Construction Management II .....	3	3	4
			<hr/> 16
<b>*Recommended electives:</b>			
BUS 131			
BUS 234			
COM 132			
PHY 131			

Engineering Technology

The engineering technology program provides the student with a broad educational background in several technical areas. During the first year a basic "core curriculum" is followed by all students. In the second year the student will specialize in one of the following areas: electric power, electro-mechanical, fluid power, or quality control. Also during the second year, the student may choose to participate in a cooperative education program where college credit may be earned for related work experience. Successful completion of this two year program leads to the associate in applied arts and sciences degree.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>First Semester</b>			
ET 190—DC Circuits and Electrical Measurements .....	3	3	4
QCT 121—Introduction to Quality Control .....	2	0	2
EGT 141—Basic Hydraulics and Fluid Mechanics .....	3	3	4
MTH 195—Technical Math .....	3	0	3
EGR 186—Manufacturing Processes .....		2	2
			17
<b>Second Semester</b>			
ET 191—AC Circuits .....	3	3	4
EGT 142—Instrumentation & Testing .....	2	3	4
QCT 122—Dimensional Measurement .....	2	2	3
ET 193—Active Devices .....	3	3	4
EGT 143—Interpretation of Technical Data .....	3	2	4
			18
<b>Third Semester</b>			
COM 131—Applied Composition & Speech .....	3	0	3
FLP 222—Fundamentals of Pneumatics .....	2	3	3
EMT 233—Electrical Machines .....	2	3	3
EMT 229—Analog & Digital Circuits .....			4
*Elective .....			2 or 4
			15 or 17
<b>Fourth Semester</b>			
PHY 131—Technical Physics .....	3	3	4
QCT 220—Physical & Environmental Testing .....	2	3	3
EMT 232—Mechanisms & Drives .....	3	3	4
EGT 240—Automatic Control Systems .....	2	3	3
EGT 803, 804—Work Experience or .....			2 or 4
*Elective .....			
			16 or 18
<b>*Recommended elective:</b>			
<b>Electric Power Majors</b>		<b>Fluid Power Majors</b>	
ELP 244		FLP 225	
EMT 237		EGR 187	
<b>Electro-Mechanical Majors</b>		<b>Quality Control Majors</b>	
EMT 237		QCT 227	
EMT 239		QCT 236	



## Electro-Mechanical Certificate Program

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This one year program is designed to provide the student with basic technical skills for entry into the automated industrial environment. All of the courses required for the one-year certificate are applicable to the Engineering Technology Associate Degree.

### Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>First Semester</b>			
ET 190—DC Circuits and Measurements .....	3	3	4
EGR 186—Manufacturing Processes .....	1	2	2
EGT 141—Basic Hydraulics and Fluid Mechanics .....	3	3	4
MTH 195—Technical Math .....	3	0	3
EMT 232—Mechanisms and Drives .....	3	3	4
			<hr/>
			17
<b>Second Semester</b>			
DFT 182—Technical Drafting .....	1	3	2
ET 191—AC Circuits .....	3	3	4
EGT 142—Instrumentation and Testing .....	2	3	3
ET 193—Active Devices .....	3	3	4
EMT 237—Electro-Mechanical Systems .....	2	3	3
EGR 187—Manufacturing Processes .....	1	2	2
			<hr/>
			18

## Electric Power Certificate Program

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A one-year program providing the student with skill and development opportunities in the Electric Power industry. All of the courses required for the one-year certificate are applicable to the Engineering Technology Associate Degree.

### Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>First Semester</b>			
ET 190—DC Circuits & Measurements .....	3	3	4
MTH 195—Technical Mathematics .....	3	0	3
EGR 186—Manufacturing Processes .....	1	2	2
DFT 182—Technical Drafting .....	1	3	2
EMT 233—Electrical Machinery .....	2	3	3
			<hr/>
			14
<b>Second Semester</b>			
ET 191—AC Circuits .....	3	3	4
EGT 142—Instrumentation & Testing .....	2	3	3
EGT 240—Automatic Control Systems .....	2	3	3
ELP 244—Advanced Electric Power Systems .....	3	3	4
EMT 237—Electro-Mechanical Systems .....	2	3	3
			<hr/>
			17

## Fluid Power Certificate Program

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A one year program providing the student with skill and development opportunities in the field of hydraulics and pneumatics. All of the courses required for the one-year certificate are applicable to the Engineering Technology Associate Degree, Fluid Power Option.

### Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>First Semester</b>			
EGT 141—Basic Hydraulics & Fluid Mechanics .....	3	3	4
ET 190—DC Circuits & Measurements .....	3	3	4
MTH 195—Technical Mathematics .....	3	0	3
DFT 182—Technical Drafting .....	1	3	2
EGR 186—Manufacturing Processes .....	1	2	2
			<hr/>
			15
<b>Second Semester</b>			
FLP 222—Fundamentals of Pneumatics .....	2	3	3
FLP 225—Advanced Fluid Power Systems .....	3	3	4
EGT 142—Instrumentation & Testing .....	2	3	4
EGT 240—Automatic Control Systems .....	2	3	3
EGR 187—Manufacturing Processes .....	1	2	2
			<hr/>
			16

## Quality Control Certificate Program

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This one-year program develops the basic skills necessary for advancement in a purchased materials, machine shop or assembly inspection department. All of the courses required for the certificate are applicable to the Engineering Technology Associate Degree.

### Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>First Semester</b>			
QCT 121—Introduction to Quality Control .....	2	0	2
QCT 122—Dimensional Measurement .....	2	2	3
EGT 141—Basic Hydraulics & Mechanics .....	3	3	4
EGR 186—Manufacturing Processes .....	1	2	2
MTH 195—Technical Mathematics .....	3	0	3
DFT 182—Technical Drafting .....	1	3	2
			<hr/>
			16
<b>Second Semester</b>			
EGT 143—Interpretation of Technical Data .....	3	2	4
QCT 227—Non-Destructive Testing .....	2	2	3
QCT 220—Physical/Environmental Testing .....	2	2	3
ET 190—DC Circuits .....	3	3	4
EGR 187—Manufacturing Processes .....	1	2	2
			<hr/>
			16

# Human Services

This two-year program will develop competencies for students to enter employment in para-professional positions as social service assistants in various social and mental health agencies. The first year of the program consists of a basic "core curriculum" followed by a "branching" into either social worker assistant or mental health assistant options in the second year of the program.

## Curriculum Pattern

### First Year Core

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Semester I</b>			
ENG 101—Composition and Expository Reading <b>or</b>			
COM 131—Applied Composition and Speech .....	3	0	3
PSY 105—Introduction to Psychology <b>or</b>			
HD 105—Basic Processes of Interpersonal Relationships	3	0	3
HST 101—History of the United States <b>or</b>			
SS 131—American Civilization <b>or</b>			
SOC 101—Introduction to Sociology .....	3	0	3
HS 131—Orientation to Human Services .....	3	0	3
*Elective .....	3	0	3
			<hr/> 15

### Semester II

ENG 102—Composition and Literature <b>or</b>			
COM 132—Applied Composition and Speech .....	3	0	3
PSY 105—Introduction to Psychology <b>or</b>			
HD 105—Basic Processes of Interpersonal Relationships	3	0	3
SOC 101—Introduction to Sociology <b>or</b>			
SOC 102—Social Problems .....	3	0	3
HS 134—Human Services Seminar .....	3	0	3
*Elective .....	3	0	3
			<hr/> 15

\*Recommended electives for first year:

HD 106	PEH 110
SS 132	PEH 257
BUS 173	PEH 101
BIO 116	DM 090
HUM 101	DM 091
SPE 105	RD 101
SPA 101	TA 133

Human Services (Mental Health Assistant Option)

Curriculum Pattern

Second Year

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Semester III			
SOC 204—American Minorities .....	3	0	3
HD 107—Developing Leadership Behavior .....	3	0	3
HS 235—Introduction to Mental Health .....	3	0	3
HS 240—Work Experience in Human Services (Field Work) .....	0	10	2
HS 241—Work Experience Seminar .....	2	0	2
*Elective .....	3	0	3
			16
Semester IV			
SOC 203—Marriage and the Family .....	3	0	3
PSC 205—Psychology of Personality .....	3	0	3
HS 233—Counseling for the Para-Professional .....	3	0	3
HS 242—Work Experience in Human Services (Field Work) .....	0	10	2
*Elective .....	3	0	3
			16

\*Recommended electives for second year Mental Health Option:

PEH 101	PSY 207	TA 133	HS 803
PEH 257	SPE 105	ANT 202	HS 804
PSY 203	GVT 201	SPA 101	HS 813
		HS 814	

Human Services (Social Worker Assistant Option)

Curriculum Pattern

Second Year

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Semester III</b>			
SOC 204—American Minorities .....	3	0	3
SOC 206—Introduction to Social Work .....	3	0	3
HD 107—Developing Leadership Behavior .....	3	0	3
HS 240—Work Experience in Human Services (Field Work)	0	10	2
HS 141—Work Experience Seminar .....	2	0	2
*Elective .....	3	0	3
			<hr/> 16
<b>Semester IV</b>			
SOC 203—Marriage and the Family .....	3	0	3
GVT 231—Municipal and County Government <b>or</b>			
GVT 201—American Government .....	3	0	3
HS 231—Procedures in Social Work .....	3	0	3
HS 242—Work Experiences in Human Services (Field Work)	0	10	2
HS 243—Work Experience Seminar .....	2	0	2
*Elective .....	3	0	3
			<hr/> 16

\*Recommended electives for second year Social Worker Option

PEH 101	ANT 101
PSY 205	PEH 257
PSY 207	SPA 101
HS 233	TA 133

## Mid-Management

This program in business management is designed to develop the fundamental skills, knowledge, attitudes and experiences which enable men and women to function in decision-making positions as supervisors or junior executives. Successful completion of the program leads to the associate in applied arts and sciences degree.

### Curriculum Pattern

#### First Year

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Fall Semester</b>			
BUS 136—Principles of Management .....	3	0	3
***BUS 150—Management Training .....	0	20	4
***BUS 154—Management Seminar .....	2	0	2
COM 131—Applied Composition and Speech or			
ENG 101—Composition and Expository Reading .....	3	0	3
HUM 101—Introduction to Humanities or			
ART 104, MUS 104, THE 101 .....	3	0	3
	<u>11</u>	<u>20</u>	<u>15</u>
<b>Spring Semester</b>			
BUS 105—Introduction to Business .....	3	0	3
BUS 151—Management Training .....	0	20	4
BUS 155—Management Seminar .....	2	0	2
COM 132—Applied Composition and Speech or			
ENG 102—Composition and Literature .....	3	0	3
*Elective .....	3	0	3
	<u>11</u>	<u>20</u>	<u>15</u>

#### Second Year

<b>Fall Semester</b>			
BUS 201—Principles of Accounting I or			
BUS 131—Bookkeeping I .....	3	0	3
BUS 250—Management Training .....	0	20	0
BUS 254—Management Seminar .....	2	0	2
SS 131—American Civilization or			
HST 101—History of the United States .....	3	0	3
*Elective .....	3	0	3
	<u>11</u>	<u>20</u>	<u>15</u>
<b>Spring Semester</b>			
BUS 251—Management Training .....	0	20	4
BUS 255—Management Seminar .....	2	0	2
ECO 201—Principles of Economics .....	3	0	3
*Elective .....			3
**Elective .....			3
	<u>5</u>	<u>23</u>	<u>15</u>

#### \*Recommended Electives:

BUS 160	BUS 153
BUS 206	BUS 234
BUS 230	BUS 237
BUS 137	CS 175

\*\*This elective must be chosen from the social or behavioral sciences.

\*\*\*Preliminary interview by mid-management coordinator required.

## Ornamental Horticulture Technology (Greenhouse Florist Option)

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This option prepares a student to enter the florist industry. The student may direct his training toward his own goals through the selection of appropriate electives and occupational experience. The program places emphasis on those skills required for success in wholesale greenhouse flower production, retail floral design and sales, and retail greenhouse florist production and sales. Upon graduation, a student is qualified to enter a wide number of positions in crop production, sales and distribution, floral design and flower shop management. Successful completion of this option will lead to an associate in applied arts and sciences degree.

### Curriculum Pattern

#### First Year

	Credit Hrs.
<b>Fall Semester</b>	
HLN 131—Horticultural Science .....	4
HLN 132—Landscape Plant Materials I .....	2
BIO 115—Biology <b>or</b>	
BIO 110—Botany .....	4
COM 131—Applied Composition and Speech .....	3
MTH 195—Technical Mathematics .....	3
	<hr/>
	16
<b>Spring Semester</b>	
HLN 133—Landscape Plant Materials II .....	2
HLN 140—Herbaceous and Exotic Plants .....	3
CHM 115—General Chemistry <b>or</b>	
PSC 118—Physical Science .....	4
ART 110—Basic Design I .....	3
BUS 105—Introduction to Business .....	3
	<hr/>
	15

#### Second Year

##### Fall Semester

HLN 226—Greenhouse Horticulture .....	3
HLN 141—Floral Design .....	4
BUS 240—Salesmanship .....	3
HLN 233—Nursery Operations .....	3
Elective .....	3
	<hr/>
	16

##### Spring Semester

HLN 234—Ornamental Crop Production .....	3
HLN 236—Florist Management .....	4
HLN 239—Applied Horticulture Training .....	2
BUS 131—Bookkeeping I .....	3
HLN 240—Seminar in Horticulture Occupations .....	2
Elective .....	3
	<hr/>
	17

Ornamental Horticulture Technology (Landscape Nursery Option)

This option prepares a student to enter both the landscaping industry and the nursery industry at a technician level. The student may direct his training toward his own goals through the selection of electives and occupational experiences. The course places emphasis on those skills required for success in landscape service, nursery production and sales, and landscaping planning and contracting business. A student who completes this training is also well prepared for work in park and recreation departments, shopping center malls and industrial parks and gardens. The successful completion of this option leads to an associate in applied arts and sciences degree.

Curriculum Pattern

First Year

	Credit Hrs.
<b>Fall Semester</b>	
HLN 131—Horticulture Science .....	4
HLN 132—Landscape Plant Materials I .....	2
BIO 115—Biology or BIO 110—Botany .....	4
COM 131—Applied Composition and Speech .....	3
HLN 146—Fundamentals of Landscaping .....	3
	<hr/>
<b>Spring Semester</b>	16
HLN 145—Landscape Development .....	3
HLN 133—Landscape Plant Materials II .....	2
HLN 140—Herbaceous and Exotic Plants .....	3
MTH 195—Technical Mathematics .....	3
CHM 115—General Chemistry or PSC 118—Physical Science .....	4
	<hr/>
	15

Second Year

<b>Fall Semester</b>	
HLN 226—Greenhouse Horticulture .....	3
HLN 231—Landscape Design I .....	4
HLN 233—Nursery Operations .....	3
BUS 105—Introduction to Business .....	3
Elective .....	3
<b>Spring Semester</b>	
HLN 232—Landscape Planning and Management .....	4
HLN 234—Ornamental Crop Production .....	3
HLN 239—Applied Horticulture Training .....	2
BUS 131—Bookkeeping I .....	2
HLN 240—Seminar in Horticulture Occupations .....	2
Elective .....	3
	<hr/>
	17



## Ornamental Horticulture Technology (Florist Certificate)

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This program prepares the student to enter positions in floral design, retail flower shop operations, and sales and distribution of flowers and florist supplies. Through the selection of electives and occupational experiences the student can guide his training toward specific jobs. Upon successful completion of the required courses the student will be eligible to receive a florist certificate.

### Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Fall Semester</b>			
HLN 141—Floral Design .....	2	6	4
HLN 132—Landscape Plant Materials I .....	1	3	2
ART 110—Basic Design I .....	2	4	3
BUS 105—Introduction to Business .....	3	0	3
Elective .....	3	0	3
			<hr/> 15
<b>Spring Semester</b>			
HLN 236—Florist Management .....	2	6	4
HLN 133—Landscape Plant Materials II .....	1	3	2
HLN 140—Herbaceous and Exotic Plants .....	2	3	3
HLN 239—Applied Horticulture Training .....	0	10	2
BUS 131—Bookkeeping .....	3	0	3
HLN 240—Seminar in Horticulture Occupations .....	2	0	2
			<hr/> 16

## Ornamental Horticulture Technology (Landscape Gardener Certificate)

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This program prepares the student to enter positions in landscape construction, park maintenance, home landscape and garden services and garden center and nursery sales. Through the selection of electives and occupational experiences the student can guide his training toward specific jobs. Upon successful completion of the required courses the student will be eligible to receive a landscape gardener certificate.

### Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Fall Semester</b>			
HLN 131—Horticulture Science .....	3	3	4
HLN 132—Landscape Plant Materials I .....	1	3	2
HLN 146—Fundamentals of Landscaping .....	1	6	3
BUS 105—Introduction to Business .....	3	0	3
Elective .....	3	0	3
			<hr/> 15
<b>Spring Semester</b>			
HLN 133—Landscape Plant Materials II .....	1	3	2
HLN 140—Herbaceous and Exotic Plants .....	2	3	3
HLN 145—Landscape Development .....	1	6	3
HLN 239—Applied Horticulture Training .....	0	10	2
HLN 240—Seminar in Horticulture Occupations .....	2	0	2
Elective .....	0	0	3
			<hr/> 15

## Real Estate

This program in real estate is designed to develop the fundamental skills, attitudes and experiences which enable men and women to function in decision-making positions in the real estate profession. Successful completion of the program leads to the associate in applied arts and sciences degree.

### Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Fall Semester</b>			
COM 131—Applied Composition & Speech <b>or</b>			
ENG 101—Composition & Expository Reading .....	3	0	3
BUS 136—Principles of Management .....	3	0	3
MTH 130—Business Math .....	3	0	3
RE 130—Real Estate Principles & Practices .....	3	0	3
RE 131—Real Estate Finance .....	3	0	3
			<hr/> 15

### Spring Semester

COM 132—Applied Composition & Speech <b>or</b>			
ENG 102—Composition & Literature .....	3	0	3
BUS 230—Salesmanship .....	3	0	3
RE 135—Real Estate Appraisal .....	3	0	3
RE 136—Real Estate Law <b>or</b>			
BUS 234—Business Law .....	3	0	3
Elective (Psychology, Sociology <b>or</b> Human Development) ....	3	0	3
			<hr/> 15

### Fall Semester

ECO 201—Principles of Economics .....	3	0	3
RE 230—Real Estate Office Management .....	3	0	3
RE 250—Real Estate Internship I .....	0	20	4
RE 254—Real Estate Seminar I .....	2	0	2
*Elective .....			3
			<hr/> 15

### Spring Semester

GVT 201—American Government .....	3	0	3
BUS 233—Advertising & Sales Promotion <b>or</b>			
BUS 206—Principles of Marketing .....	3	0	3
RE 251—Real Estate Internship II .....	0	20	4
RE 255—Real Estate Seminar II .....	2	0	2
*Elective .....			3
			<hr/> 15

### \*Recommended Electives:

RE 233  
RE 235  
BUS 131  
BUS 210  
BUS 105  
DFT 185  
ECO 202  
SPE 105

## Secretarial Careers

### Educational Secretary (Two Years)

This program is designed to provide a sound educational basis for persons already employed or for persons desiring to enter employment in the field of education. Special emphasis will be placed on practical business methods, record-keeping, psychology of education and human relations. Upon completion of the courses in the curriculum pattern listed below, the student receives an associate in applied arts and sciences degree.

#### Curriculum Pattern

First Year	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Fall Semester</b>			
BUS 131—Bookkeeping I or			
BUS 201—Principles of Accounting I .....	3	0	3
BUS 160—Office Machines .....	3	0	3
*BUS 159—Beginning Shorthand or			
BUS 166—Intermediate Shorthand .....	3	2	4
BUS 140—Educational Processes .....	3	0	3
*BUS 172—Beginning Typing or			
BUS 174—Intermediate Typing .....	1	2	2
COM 131—Applied Composition and Speech or			
ENG 101—Composition and Expository Reading .....	3	0	3
			<hr/> 18 or 19
<b>Spring Semester</b>			
BUS 165—Introduction to Word Processing .....	3	0	3
BUS 162—Office Procedures .....	3	0	3
BUS 166—Intermediate Shorthand or			
BUS 266—Advanced Shorthand .....	3	2	4
HUM 101—Introduction to Humanities or			
PSY 105—Introduction to Psychology or			
SOC 101—Introduction to Sociology .....	3	0	3
BUS 174—Intermediate Typing or			
BUS 273—Advanced Typing .....	1	2	2
			<hr/> 15
<b>Second Year</b>			
<b>Fall Semester</b>			
BUS 273—Advanced Typing .....	1	2	2
BUS 231—Business Correspondence .....	3	0	3
MTH 130—Business Mathematics .....	3	0	3
GVT 201—American Government .....	3	0	3
BUS 803 or 804—Work Experience or			
Elective .....	3	0	3 or 4
			<hr/> 14 or 15
<b>Spring Semester</b>			
BUS 141—Current Practical Problems .....	3	0	3
PSY 131—Human Relations .....	3	0	3
CS 175—Introduction to Computer Sciences .....	3	0	3
BUS 275—Secretarial Procedures .....	3	0	3
BUS 813 or 814—Work Experience or			
Elective .....	3	0	3 or 4
			<hr/> 15 or 16

#### Recommended Electives:

PEH 257

TA 132

BUS 105

SPE 105

BUS 143

\*Students with previous training in shorthand and/or typing will be placed according to ability.

## Professional Secretary (Two Years)

The purpose of this program is to prepare students to become alert and responsive secretaries capable of performing the tasks required of them in the modern business office. Suggested electives are such that students may take courses which will allow specialties in secretarial areas such as law, selling, advertising, and accounting. Successful completion of the program leads to the associate in applied arts and sciences degree.

### Curriculum Pattern

First Year	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Fall Semester</b>			
BUS 105—Introduction to Business .....	3	0	3
MTH 130—Business Mathematics .....	3	0	3
*BUS 172—Beginning Typing or			
BUS 174—Intermediate Typing .....	1	2	2
*BUS 159—Beginning Shorthand or			
BUS 166—Intermediate Shorthand .....	3	2	4
COM 131—Applied Composition and Speech or			
ENG 101—Composition and Expository Reading			
			<hr/> 15 or 16
<b>Spring Semester</b>			
BUS 174—Intermediate Typing or			
BUS 273—Advanced Typing .....	1	2	2
BUS 166—Intermediate Shorthand or			
BUS 266—Advanced Shorthand .....	3	2	4
BUS 162—Office Procedures .....	3	0	3
BUS 131—Bookkeeping or			
BUS 201—Principles of Accounting I .....	3	0	3
BUS 160—Office Machines .....	3	0	3
			<hr/> 15
<b>Second Year</b>			
<b>Fall Semester</b>			
BUS 266—Advanced Shorthand .....	3	2	4
BUS 273—Advanced Typing .....	1	2	2
BUS 165—Introduction to Word Processing .....	3	0	3
CS 175—Introduction to Computer Science .....	3	0	3
COM 132—Applied Composition and Speech or			
ENG 102—Composition and Literature .....	3	0	3
BUS 803 or 804—Cooperative Work Experience or			
*Elective .....	3 or 4	0	3 or 4
			<hr/> 18 or 19
<b>Spring Semester</b>			
BUS 265—Word Processing Practices and Procedures .....	3	0	3
BUS 275—Secretarial Procedures .....	3	0	3
BUS 231—Business Correspondence .....	3	0	3
PSY 131—Human Relations .....	3	0	3
BUS 813 or 814—Work Experience or			
*Elective .....	3	0	3 or 4
			<hr/> 15 or 16

### Recommended Electives

**BUS 128	**BUS 274	BUS 804	PSY 105
BUS 136	**BUS 167	BUS 813	SPE 105
BUS 143	BUS 803	BUS 814	BUS 237
BUS 234			

\*Students with previous training in shorthand and/or typing will be placed according to ability.

\*\*These classes are available at El Centro College only.

## Secretarial Careers

### Administrative Secretary (One Year)

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This program is designed for the person interested in being an assistant to the office administrator. Emphasis will be placed on developing the ability to make decisions and solve complex problems. The program is primarily designed for the office worker already working or for those who had prior office work experience, such as file clerk, typist, stenographer, or secretary.

#### Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Fall Semester</b>			
BUS 273—Advanced Typing .....	1	2	2
BUS 266—Advanced Shorthand .....	3	2	4
BUS 162—Office Procedures .....	3	0	3
BUS 131—Bookkeeping I or			
BUS 201—Principles of Accounting I .....	3	0	3
BUS 136—Principles of Management .....	3	0	3
			<hr/> 15
<b>Spring Semester</b>			
BUS 275—Secretarial Procedures .....	3	0	3
BUS 231—Business Correspondence .....	3	0	3
MTH 130—Business Mathematics .....	3	0	3
SPE 105—Public Speaking .....	3	0	3
BUS 165—Introduction to Word Processing .....	3	0	3
*Elective .....	3	0	3
			<hr/> 18

#### \*Suggested Electives:

BUS 234  
BUS 237  
BUS 160

## General Secretary (One Year)

The purpose of this program is to prepare students with the basic skills necessary to enter the secretarial field. A certificate is issued upon completion of the program.

### Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Fall Semester</b>			
BUS 105—Introduction to Business .....	3	0	3
BUS 106—Office Machines .....	3	0	3
*BUS 172—Beginning Typing or .....	2	3	3
BUS 174—Intermediate Typing .....	1	2	2
*BUS 159—Beginning Shorthand or			
BUS 166—Intermediate Shorthand .....	3	2	4
COM 131—Applied Composition and Speech or			
ENG 101—Composition and Expository Reading .....	3	0	3
MTH 130—Business Mathematics .....	3	0	3
			<hr/> 20 or 21

### Spring Semester

*BUS 174—Intermediate Typing or			
BUS 273—Advanced Typing .....	1	2	2
*BUS 166—Intermediate Shorthand or			
BUS 266—Advanced Shorthand .....	3	2	4
BUS 162—Office Procedures .....	3	0	3
BUS 131—Bookkeeping I or			
BUS 201—Principles of Accounting I .....	3	0	3
BUS 165—Introduction to Word Processing .....	3	0	3
BUS 231—Business Correspondence .....	3	0	3
			<hr/> 18

## Office Skills and Systems (One Year)

This program is designed to meet the needs of those students who desire to enter a business career in a minimum of time. Intensive training in the basic office skills and systems is provided—including office machines, communications systems, and other related business subjects. A general orientation to business is given.

### Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Fall Semester</b>			
BUS 105—Introduction to Business .....	3	0	3
BUS 131—Bookkeeping I or			
BUS 201—Principles of Accounting I .....	3	0	3
*BUS 172—Beginning Typing or .....	2	3	3
BUS 174—Intermediate Typing .....	1	2	2
COM 131—Applied Composition and Speech or			
ENG 101—Composition and Expository Reading .....	3	0	3
BUS 160—Office Machines .....	3	0	3
			<hr/> 15 or 16

### Spring Semester

BUS 174—Intermediate Typing or			
BUS 173—Advanced Typing .....	1	2	2
BUS 162—Office Procedures .....	3	0	3
BUS 165—Introduction to Word Processing .....	3	0	3
COM 132—Applied Composition and Speech or			
ENG 102—Composition and Literature .....	3	0	3
BUS 231—Business Correspondence .....	3	0	3
MTH 130—Business Math .....	3	0	3
			<hr/> 17

**NOTE:** In all secretarial careers programs, students with previous training in shorthand and typing will be placed according to ability. The last semester of typewriting and shorthand must be taken at Richland College.

\*Students with previous training in shorthand and/or typing will be placed according to ability.

## Teacher Aide

This is a program designed to prepare aides to assist teachers. Graduates of the program will be able to perform the wide range of supportive duties common to educational processes. Special courses will prepare students in the use of instructional media and enhance understanding of learning processes and stages of development. Students completing the first year receive a certificate; completion of two years earns an associate degree in applied arts and sciences.

### Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>Fall Semester</b>			
RD 101—Advanced Reading <b>or</b>			
SPE 105—Fundamentals of Public Speaking .....	3	0	3
DW 090—Developmental Writing <b>or</b>			
COM 131—Applied Composition and Speech <b>or</b>			
ENG 101—Composition and Expository Reading .....	3	0	3
TA 131—Teacher Aide Techniques I .....	3	0	3
<b>**BUS 173—Beginning Typing <b>or</b></b>			
BUS 174—Intermediate Typing .....	1	2	2
HD 105—Basic Processes of Interpersonal Relationships ....	3	0	3
TA 135—Arts and Crafts for Teacher Aides .....	3	0	3
			<hr/> 17
<b>Spring Semester</b>			
TA 129—Communication Skills for Teacher Aides .....	3	0	3
<b>**BUS 174—Intermediate Typing <b>or</b> Elective .....</b>	<b>1</b>	<b>2</b>	<b>2</b>
TA 133—Teacher Aide Techniques II .....	3	0	3
TA 132—Introduction to Media .....	1	4	3
DM 090—Pre-Algebra Mathematics <b>or</b>			
Math Elective .....	3	0	3
			<hr/> 14
<b>Fall Semester</b>			
COM <b>or</b> ENG—Communication <b>or</b> English .....	3	0	3
TA 231—Teacher Aide Seminar I .....	2	0	2
TA 232—Teacher Aide Practicum I .....	0	20	4
PSY 105—Introduction to Psychology .....	3	0	3
SOC 101—Introduction to Sociology .....	3	0	3
			<hr/> 15
<b>Spring Semester</b>			
<b>*COM 132—Applied Composition and Speech <b>or</b></b>			
ENG 102—Composition and Literature .....	3	0	3
TA 235—Teacher Aide Seminar II .....	2	0	2
TA 236—Teacher Aide Practicum II .....	0	20	4
PSY 201—Developmental Psychology .....	3	0	3
SOC 231—Urban Social Problems .....	3	0	3
PEH 101—Fundamentals of Health <b>or</b>			
PEH 257—Standard and Advanced First Aid .....	3	0	3
			<hr/> 18
<b>Recommended Electives:</b>			
PEH 257	HUM 101	TA 803	
SPE 105	PHI 102	TA 813	
HD 107	BUS 161		

\*If COM 132 or ENG 102 was taken previously, an elective may be chosen.

\*\*Typing requirement may be waived by passing proficiency test.



**FACULTY**



Acree, Patricia .....	Secretarial Science
Texas Christian Univ., B.S.C.; North Texas State Univ., M.B.E.	
Aguren, Carolyn .....	Counselor
Univ. of Texas, Austin, B.S.; Southern Methodist Univ., M.A.; North Texas State Univ., Ed.D.	
Albertson, Harold D. ....	Engineering Technology
Univ. of Houston, B.S.; Southern Methodist Univ., M.S.; Univ. of Texas, Austin, Ph.D.	
Allen, Floyd A. ....	English
Univ. of Michigan, B.A., M.A.; North Texas State Univ., Ph.D.	
Alther, Robert C. ....	History
Indiana Univ., B.A., M.A.	
Arasim, Theresa M. ....	Biology
Univ. of New Mexico, B.S.; Texas Woman's Univ., M.S.	
Baker, William E. ....	Counselor
Florida Atlantic Univ., B.A., M.Ed.	
Barrett, John .....	Communications
Univ. of Houston, B.A.; Univ. of Wisconsin, M.A.; Univ. of Notre Dame, Ph.D.	
Beck, Larry A. ....	Mid-Management
Drake Univ., B.S.; North Texas State Univ., M.B.E.	
Bell, David .....	Business
Stephen F. Austin State Univ., B.B.A., M.B.A.	
Bell, Michael C. ....	Biology
East Texas State Univ., B.S.; M.S.	
Biggerstaff, Edwin L. ....	President
North Texas State Univ., B.S., M.S., Ed.D.	
Bird, Sharon W. ....	Developmental Mathematics
Univ. of Texas, Austin, B.S.; Southern Methodist Univ., M.S.	
Bishop, Vicky .....	Community Services Director
Texas Tech Univ., B.A.; North Texas State Univ., M.Ed.	
Black, Jane M. ....	Developmental Writing
East Texas State Univ., B.A., M.A.	
Blackerby, Robert A. ....	Mathematics
Hardin Simmons Univ., B.A.; North Texas State Univ., M.Ed.; Univ. of Illinois, M.A.	
Blaydes, Bart .....	Horticulture
Texas Tech Univ., B.S.	
Bourgeois, Helen D. ....	Mathematics
Tulane Univ., B.E., M.S.	
Boyle, Robert B. ....	History
Southern Methodist Univ., B.A., M.A.	
Briggs, Delores G. ....	Journalism
Univ. of South Carolina, B.S., M.A.; Univ. of Alabama, Ph.D.	
Brownlee, Don D. ....	Mathematics
Louisiana Tech. Univ., B.S.E.E.	
Burke, Rose W. ....	Biology
Bennett College, B.S.; Southern Methodist Univ., M.A.	
Burnham, Weldon S. ....	Chemistry
Univ. of California, Los Angeles, B.S.; Brigham Young Univ., Ph.D.	
Calkin, Allan G. ....	Chairperson, Div. of Developmental Studies
San Angelo College, A.A.; Univ. of Texas, Austin, B.A.; Southern Methodist Univ., M.I.A.	

Camp, Marguerite .....	Counselor
Atlantic Christian College, B.A.; Ohio Univ., M.A.	
Carter, Perry .....	Human Services
Stephen F. Austin State Univ., B.S., M.Ed.	
Catlin, Linda B. ....	Administrative Assistant
Oklahoma City Univ., B.A., Southern Methodist Univ., M.P.A.	
Chapman, Sidney .....	Philosophy
Roberts Wesleyan College, B.A.; Michigan State Univ., M.A.	
Christopherson, Craig W. ....	Business
Drake Univ., B.S.; Southern Methodist Univ., M.B.A.; Texas, C.P.A.	
Chumbley, Richard I. ....	Business
Howard Payne College, B.S.; East Texas State Univ., M.Ed.	
Cimarolli, Mary L. ....	English
Texas Woman's Univ., B.S.; East Texas State Univ., M.A.	
Claunch, Jackie L. ....	Registrar
Trinity Univ., B.A.; Texas A&I Univ., M.A.	
Coldwell, Patricia C. ....	English
Southwestern College, B.A.; Yale University, M.A.	
Collins, Dan .....	Media Specialist
East Texas State Univ., B.S., M.S.	
Cox, John M. ....	Religion
Howard Payne College, B.S.; Southwestern Theological Seminary, M.R.E.; Univ. of Houston, M.A.	
Crisp, Sally C. ....	English
Univ. of Arkansas, B.A., M.A.	
Daugherty, Jean H. ....	Construction Management
North Texas Agricultural College, A.A.; Southern Methodist Univ., B.S., M.A.	
Davis, Gloria Jean .....	Counselor
Bishop College, B.S.; East Texas State Univ., M.Ed.	
Davis, Randy T. ....	Secretarial Science
North Texas State Univ., B.S., M.B.E.	
Davis, Roger G. ....	Chairperson, Social Science
Union College, B.A.; George Washington Univ., M.A.; Ph.D.	
Dawson, Phyllis .....	English
Quachita Baptist Univ., B.A.; Memphis State Univ., M.A.	
Deek, Sami D. ....	Mathematics
Grace College, B.A.; Ball State Univ., M.S.	
Delafield, Charles H. ....	History
Southern Methodist Univ., B.S.; North Texas State Univ., M.S.	
Denmon, Carl .....	Developmental Reading
Wiley College, B.A.; North Texas State Univ., M.Ed.	
DeWald, George C. ....	Community Services Associate
Saint Francis College, B.A., M.S.	
Durst, Patricia.....	Director, Financial Aids
Bishop College, B.A.	
Dyer, Robert E. ....	Theatre
Univ. Texas, Austin, B.F.A.; Yale Univesrity, M.F.A.	
Edwards, Willie J. ....	History
East Texas State Univ., B.A., M.A.	
Elder, Janet R. ....	Developmental Studies
Univ. of Texas, Austin, B.A., Southern Methodist Univ., M.A.	

Elliott, Clay .....	Engineering
Univ. of Texas, Austin, B.S., M.S.	
Esparza, Ralph .....	Mathematics
Midwestern Univ., B.S.; Oklahoma State Univ., M.S.	
Evans, Holland B. ....	Dean of Business Services
Univ. of Oklahoma, B.S.	
Ferguson, Wendell .....	Mid-Management
Southern Methodist Univ., B.B.A.; East Texas State Univ., M.B.A.	
Floyd, Verne F. ....	Physical Education
Southeastern Louisiana Univ., B.A.; M.Ed.	
Franklin, Mitchell B. ....	Mid-Management
McNeese State Univ., B.A.; Univ. of Houston, M.A.	
Freeman, M. Jay .....	Director Student Development
Univ. of Houston, B.B.A.; M.Ed.	
Garcia, Edward H. ....	Chairperson, Div. of Communications
Univ. of Texas, Austin, B.A.; Ohio State Univ., M.A.; Univ. of Texas, Austin, Ph.D.	
Georges, Carolyn M. ....	Biology
North Texas State Univ., B.A.; Southern Methodist Univ., M.A.	
Gibbons, Mary Frances .....	English
Sam Houston State Univ., B.A., M.A.	
Gooch, Stephen .....	History
Baylor Univ., B.A., M.A.	
Graham, Steve .....	Philosophy
Southern Methodist Univ., B.A., M.A.	
Griffith, Henry V. ....	Ornamental Horticulture
Oklahoma State Univ., B.S.; Univ. of Alabama, M.S.; Oklahoma State Univ., M.S., Ed.D.	
Griffith, Jean Sharon .....	Dean of Student Services
Univ. of Tulsa, B.A.; Univ. of New Mexico, M.A.	
Guerrero, Paul .....	Humanities
North Texas State Univ., B.A., M.Ed.	
Harrison, Barbara .....	Assistant Director, Student Development
Southwestern Christian College, A.S.; Texas Tech Univ., B.S.; East Texas State Univ. M.S.	
Hatz, Mary .....	Art
Texas Woman's Univ., B.S., M.A.	
Henderson, Jim R. ....	Choral Music
Midwestern Univ., B.M.F.; North Texas State Univ., M.E.	
Herring, Gus .....	Quality Control
St. Edward's Univ., B.S.; Univ. of Dallas, M.S.	
Hodge, Jewell E. ....	Developmental Mathematics
Arlington State, B.A.; Stetson Univ., M.S.	
Horton, Diane Devillier .....	Counselor
Southeastern Louisiana, B.A.; North Texas State Univ., M.Ed.	
Howe, Jerri D. ....	Government
Northwestern State College, B.A.; Oklahoma State Univ., M.S.	
Hughes, Robert J. ....	Business
Bethany College, B.S.; North Texas State Univ., M.B.E., Ph.D.	
Israel, Donna.....	Placement Director and Director of Cooperative Education
Baylor Univ., B.A.; North Texas State Univ., M.Ed.	
Jagers, JoAnn L. ....	Physical Education
Montclair State College, B.A.; San Jose State College, M.A.	
Jeffrey, Gloria .....	Counselor
Fisk Univ., B.A.; North Texas State Univ., M.Ed.	

Jeser, Sharlee A. ....	Student Services Librarian
Southwest Texas State Univ., B.A.; Univ. of Texas, Austin, M.I.S.	
John, Gary G. ....	Counselor
Austin College, B.A., M.A.; East Texas State Univ., Ed.D.	
Johnson, Carole ....	Director, Library Services
West Texas State Univ., B.S.; North Texas State Univ., M.I.S.	
Johnson, Dan R. ....	Accounting
Univ. of Texas, Austin, B.B.A.; Texas Christian Univ., M.B.A.; Texas, C.P.A.	
Kelley, Jane ....	Business
East Texas State Univ., B.B.A., M.B.A.	
Kelso, Mark ....	Communications
Stephen F. Austin State Univ., B.A., M.A.	
Kennedy, Dale E. ....	Humanities
Univ. of Oklahoma, B.M.E.; Univ. of New Mexico, M.M.E.	
Kerr, James E. ....	English
Univ. of Iowa, B.A., M.A., M.F.A.	
King, Floyd T. ....	Chairperson, Div. of Science/Horticulture
Colorado College, B.S.; M.A.T.	
Krone, Billylu ....	Counselor
Texas Wesleyan College, B.S.; Texas Christian Univ., M.A.	
Lambert, James W. ....	Media Specialist
Northwestern State College, B.S.; Indiana Univ., M.S.	
Leff, Gladys R. ....	History
New York Univ., B.A., M.A.; North Texas State Univ., Ph.D.	
Little, Peggy ....	German
Indiana Univ., A.B., M.A.T.	
Lodewick, Dick ....	Dean of Instruction
Univ. of Wyoming, B.S.; Univ. of New Mexico, M.S.; Univ. of Arizona, Ph.D.	
Lokke, Donald H. ....	Geology
Wheaton College, B.S.; Texas Tech Univ., M.S.	
Lott, Kenneth ....	Mathematics
Univ. of Texas, Austin, B.A.; North Texas State Univ., M.S.	
Luke, Paul J. ....	Physics
North Texas State Univ., B.S., M.S.	
Luter, Edward C. ....	English
Univ. of Dallas, B.A.; Univ. of Miami, M.A.	
Marabito, Ronald E. ....	Construction Management
Univ. of Texas, Austin, Bachelor of Architecture	
Matlock, Jerry L. ....	Developmental Mathematics
Univ. of Texas, Austin, B.A.; East Texas State Univ., M.S.	
Matter, William W. ....	English
Texas Tech Univ., B.A., M.A., Ph.D.	
McAda, Judith ....	English/Journalism
North Texas State Univ., B.A., M.A.	
McClung, Rachel ....	Student Production Lab Consultant
Univ. of Dallas, B.A., M.A.	
McElveen, Jerry D. ....	English
Southeastern Louisiana Univ., B.A.; Louisiana State Univ., M.A.	
McKinney, John E. ....	Mid-Management
Southern Methodist Univ., B.B.A., M.B.A.	

McLaughlin, Thomas A .....	Chairperson, Div. of Physical Education Coalinga College, A.A.; Wisconsin State Univ., B.S.; Southern Illinois Univ., M.S.
McManus, Kay .....	Director, Health Center Univ. of Texas School of Nursing, B.S.; Texas Woman's Univ., M.S.
McPeck, Maurice .....	Director, Media Services East Texas State Univ., B.S., M.Ed.
Mecom, John O. ....	Biology Louisiana Tech, B.S.; Northeastern Univ., M.S.; Univ. of Colorado, Ph.D.
Miles, John M. ....	Physical Education Southern Illinois Univ., B.S.; New Mexico State Univ., M.A.
Millsap, Franklin .....	Ornamental Horticulture Muskogee Junior College, A.A.; Oklahoma State Univ., B.S., M.S.
Milton, Annette S. ....	Developmental Writing East Texas State Univ., B.A., M.S.L.S.
Molina, Gilda .....	Government Southern Methodist Univ., B.A., M.A.
Moreland, William H. ....	Developmental Reading North Texas State Univ., B.S.; Univ. of Guam, M.A.
Morris, Conde .....	Ornamental Horticulture Texas Christian Univ., B.A.; Ohio State Univ., M.S.
Mosley, Joe .....	Developmental Studies Texas Tech Univ., B.A.; Univ. of Arkansas, M.A.
Motley, Tom D. ....	Art Univ. of Texas, Arlington, B.A.; Univ. of Dallas, M.A., M.F.A.
Muyskens, Lois A. ....	Art Dakota Wesleyan Univ., B.A.; North Texas Univ., M.A.
Neal, William B. ....	Physical Education Hiram College, B.A.; Southern Illinois Univ., M.S.
Nelson, Susan J. ....	Mathematics Austin College, B.A.; Southern Methodist Univ., M.S.
Newbury, Fred .....	Business Howard Payne College, B.A.; North Texas State Univ., M.Ed., Ed.D.
Northcut, Mary N. ....	English Univ. of Texas, Austin, B.A.; Southern Methodist Univ., M.A.; Texas Christian Univ., Ph.D.
Nunley, John Parker .....	Anthropology Univ. of Texas, Austin, B.A., M.A.; Southern Methodist Univ., B.A., Ph.D.
Osentowski, Francis .....	Instrumental Music Kearney College, Nebraska, B.M.E.; North Texas State Univ., M.M.E.
Osentowski, Mary .....	Speech Kearney College, Nebraska, B.A.; North Texas State Univ., M.S.
Parker, Carolyn .....	Counselor Southern Methodist Univ., B.A.; Univ. of Florida, M.Ed.
Parr, Vallye E. ....	History Southern Methodist Univ., B.A., M.I.A.
Penner, Gary R. ....	Mathematics Nebraska State Teacher's College, B.S.; Univ. of Illinois, M.A.
Pepper, La Vada .....	Sociology Texas Woman's Univ., B.S., M.A.

Perkins, Dan G. ....	Psychology
Canton Community College, A.A.; Bradley Univ., B.S., M.A.; North Texas State Univ., Ph.D.	
Peteet, Joanne ....	Mathematics
Univ. of Texas, Arlington, B.A.; M.A.	
Peterson, Jane E. ....	Developmental Writing
Bethel College, B.A.; Univ. of Arkansas, M.A., Ph.D.	
Petty, Roy ....	English
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