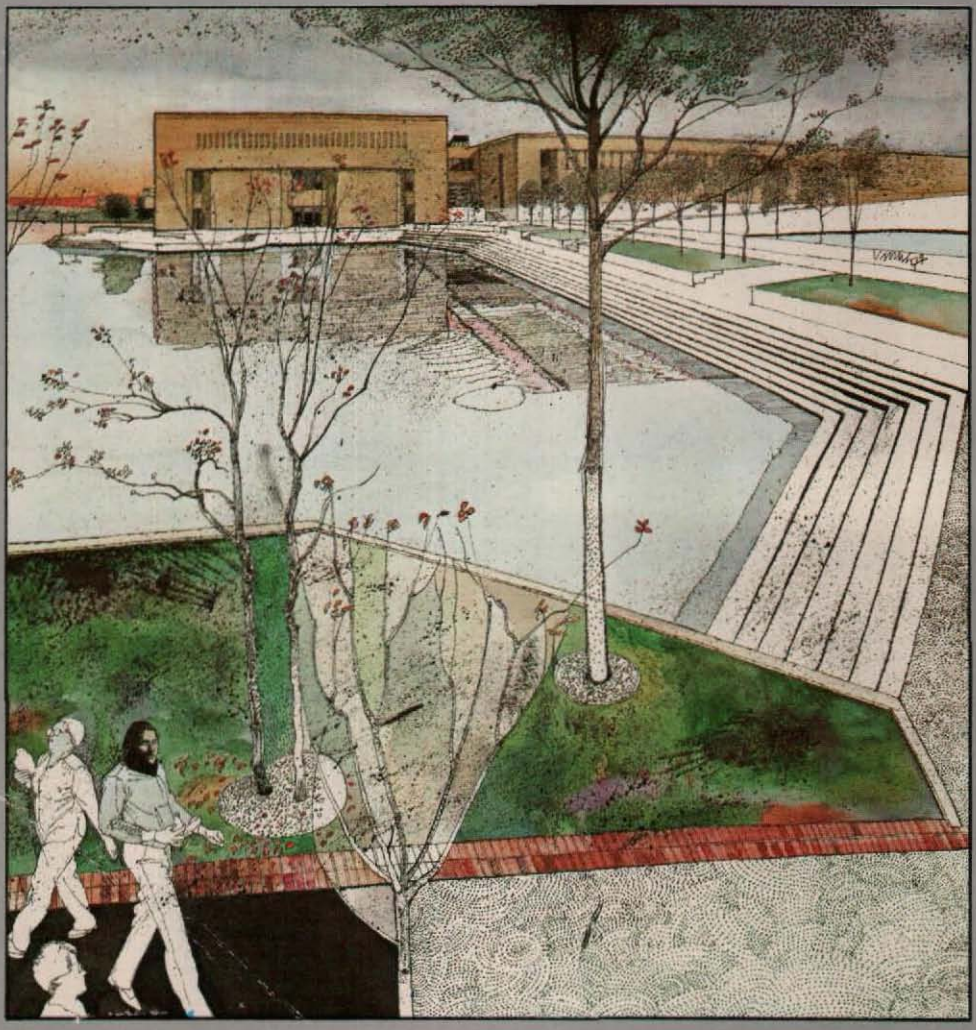
# Cedar Valley College
# 1980/1981



Dallas County Community College District

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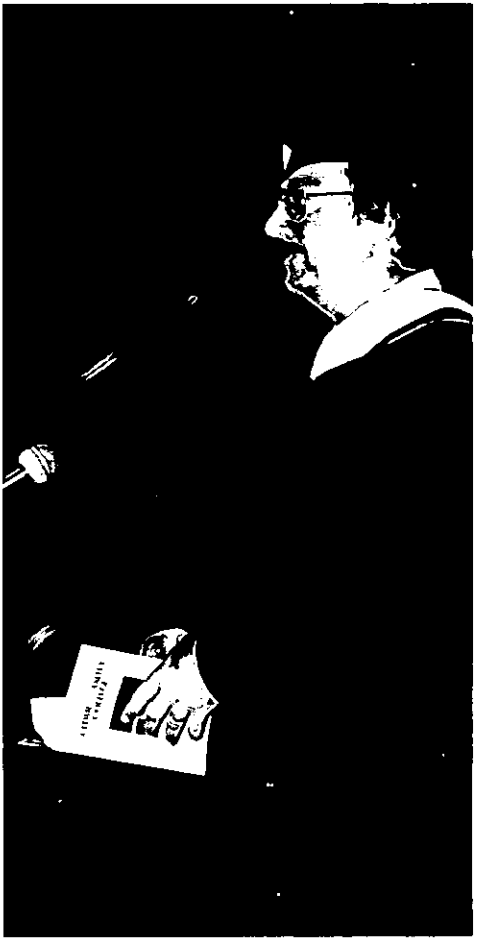
# Cedar Valley College



**CEDAR VALLEY COLLEGE**

Member of the Southern Association of Colleges and Schools (SACS)
Member of the American Association of Community and Junior Colleges
Member of the League for Innovation in the Community College
Recognition and sanction by the Coordinating Board of the Texas College and University System and the Texas Education Agency
An Affirmative Action Equal Opportunity Institution

This catalog contains policies, regulations, and procedures in existence at the time this publication went to press. The College reserves the right to make changes at any time to reflect current Board policies, administrative regulations and procedures, and applicable State and Federal laws and regulations. This catalog is for informational purposes and does not constitute a contract.

## ACADEMIC CALENDAR, 1980-81

### FALL SEMESTER, 1980

| | |
|---|---|
| Aug. 18 (M) | Faculty Reports |
| Aug. 19-21 (T-R) | Registration |
| Aug. 22 (F) | Faculty Professional Development |
| Aug. 23 (S) | Saturday classes begin |
| Aug. 25 (M) | Classes begin |
| Aug. 29 (F) | Last day for tuition refund |
| Sept. 1 (M) | Labor Day holiday |
| Sept. 6 (S) | 12th class day |
| Nov. 27 (R) | Thanksgiving holidays begin |
| Dec. 1 (M) | Classes resume |
| Dec. 8 (M) | Last day to withdraw "W" |
| Dec. 13 (S) | Final exams for Saturday classes |
| Dec. 15 (M) | Last day of classes |
| Dec. 16-19 (T-F) | Final examinations |
| Dec. 19 (F) | Semester closes |

### SPRING SEMESTER, 1981

| | |
|---|---|
| Jan. 12 (M) | Faculty Reports |
| Jan. 13-15 (T-R) | Registration |
| Jan. 16 (F) | Faculty Professional Development |
| Jan. 17 (S) | Saturday classes begin |
| Jan. 19 (M) | Classes begin |
| Jan. 23 (F) | Last day for tuition refund |
| Jan. 30 (F) | 12th class day |
| Mar. 6 (F) | Faculty Professional Development |
| Mar. 16 (M) | Spring Break begins |
| Mar. 20 (F) | Spring holiday for all employees |
| Mar. 23 (M) | Classes resume |
| Apr. 17 (F) | Easter holiday begins |
| Apr. 20 (M) | Classes resume |
| May 8 (F) | Last day to withdraw "W" |
| May 15 (F) | Last day of classes |
| May 16 (S) | Final exams for Saturday classes |
| May 18-21 (M-R) | Final examinations |
| May 21 (R) | Graduation |
| May 21 (R) | Semester closes |

### SUMMER SESSIONS, 1981

**FIRST SESSION**

| | |
|---|---|
| May 29 (F) | Registration |
| June 1 (M) | Classes begin |
| June 2 (T) | Last day for tuition refund |
| June 4 (R) | 4th class day |
| June 29 (M) | Last day to withdraw "W" |
| July 3 (F) | Independence Day holiday |
| July 6 (M) | Final examinations |
| July 6 (M) | Session closes |

**Second Session**

| | |
|---|---|
| July 7 (T) | Registration |
| July 9 (R) | Classes begin |
| July 10 (F) | Last day for tuition refund |
| July 14 (T) | 4th class day |
| Aug. 6 (R) | Last day to withdraw "W" |
| Aug. 12 (W) | Final examinations |
| Aug. 12 (W) | Session closes |

# 1980

**AUGUST**

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**SEPTEMBER**

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**OCTOBER**

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**NOVEMBER**

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**DECEMBER**

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# 1981

**JANUARY**

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**FEBRUARY**

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**MARCH**

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**APRIL**

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**MAY**

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**JUNE**

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**JULY**

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**AUGUST**

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# CONTENTS

## CEDAR VALLEY COLLEGE



## GENERAL INFORMATION

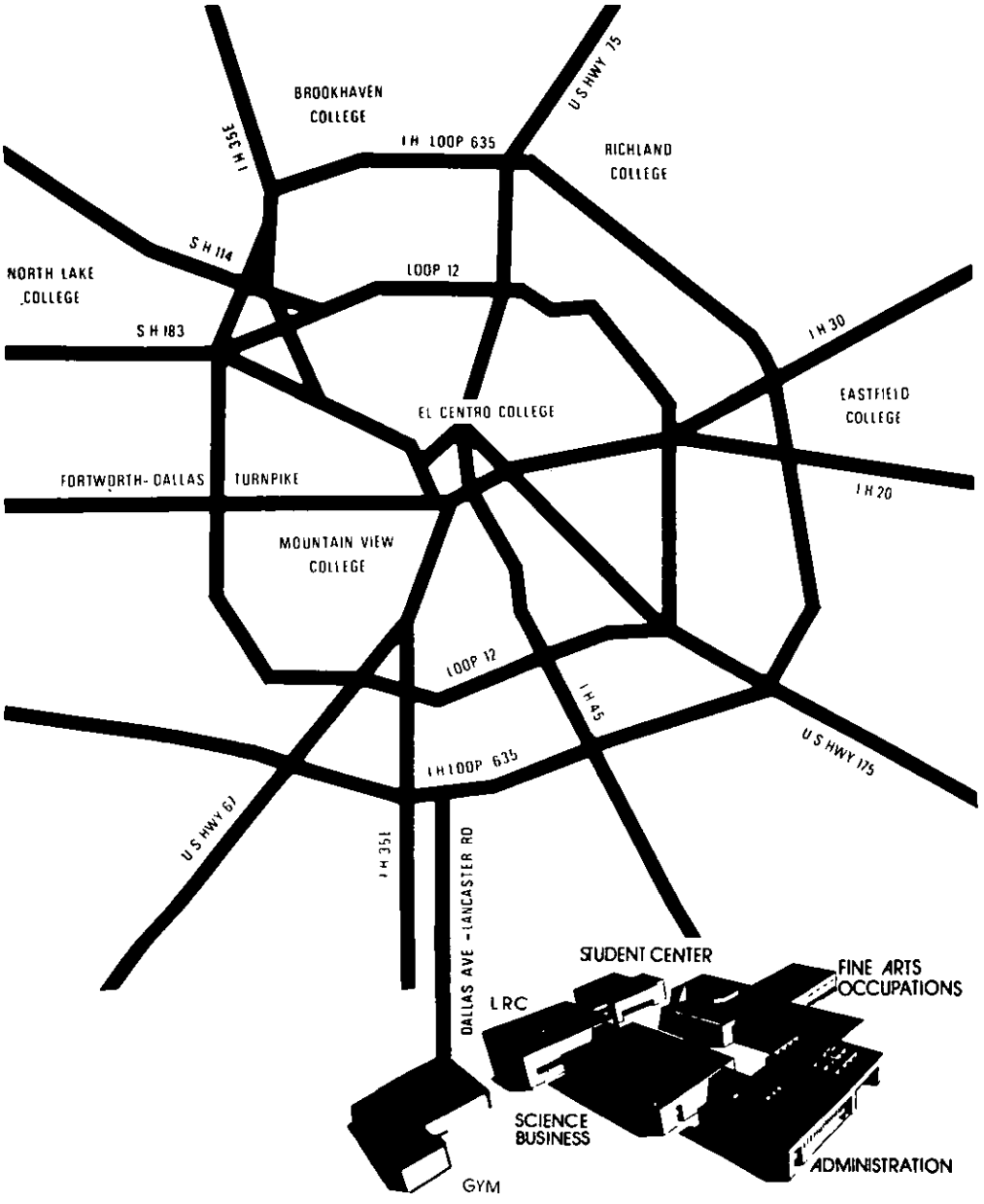
For the Seven Member Colleges of the DCCCD



## GENERAL EDUCATION COURSES



## TECHNICAL/OCCUPATIONAL PROGRAMS AND COURSES




# 3030 N DALLAS AVE • LANCASTER

**CEDAR VALLEY COLLEGE**

Cedar Valley College opened in 1977 on an 353-acre site at 3030 North Dallas Avenue in Lancaster. The school occupies a strategically important position in south Dallas County, east of Interstate 35 and south of Interstate 20. Continuing residential and industrial expansion in this area has thrust Cedar Valley into an increasingly vital role of service to the community.

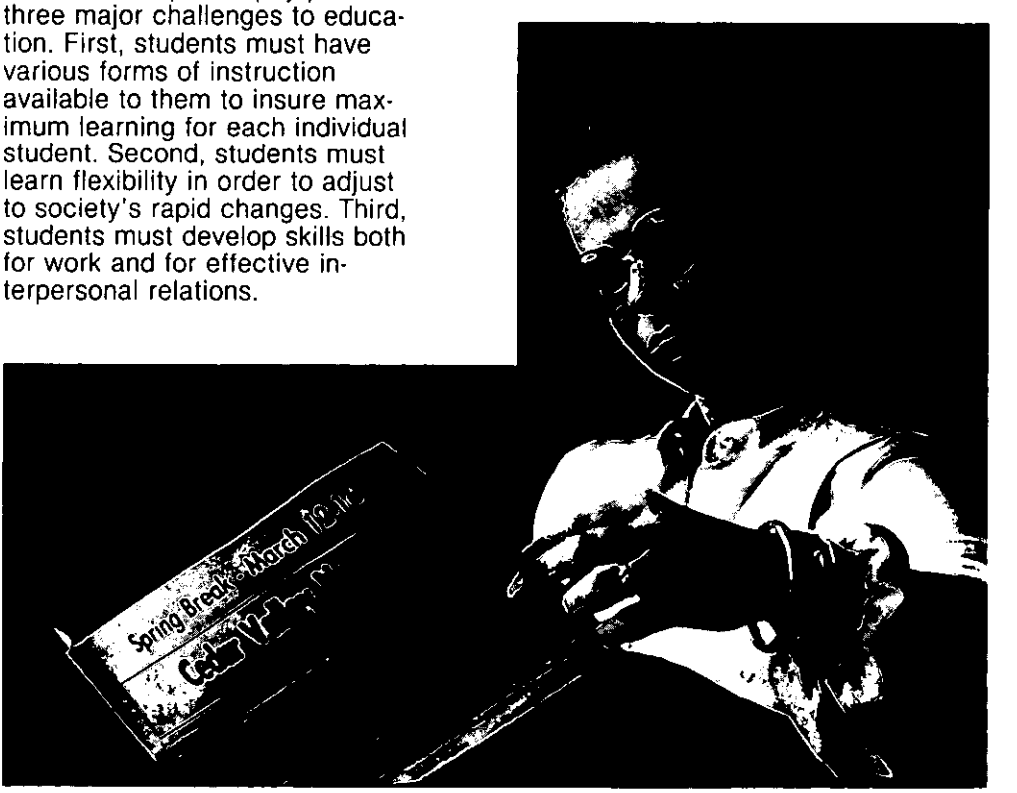
Award winning architecture and careful attention to landscaping have given the College a reputation for being one of the most scenic areas in the Metroplex. An internal courtyard punctuated with flower beds and shade trees provides a hub of activity between the main buildings. The entire campus stretches along the shore of a twelve-acre man-made lake.

Functional building design is blended well with the natural impact of sky and water to give the campus a feeling of openness and light. Students can lounge or study on lakeside terraces and the free use of glass opens classrooms, lounges and eating areas to spacious scenic vistas.

PHILOSOPHY

Cedar Valley operates under the philosophy that each individual is unique and must function in an ever-changing society where people are becoming increasingly dependent on one another. This philosophy presents three major challenges to education. First, students must have various forms of instruction available to them to insure maximum learning for each individual student. Second, students must learn flexibility in order to adjust to society's rapid changes. Third, students must develop skills both for work and for effective interpersonal relations.

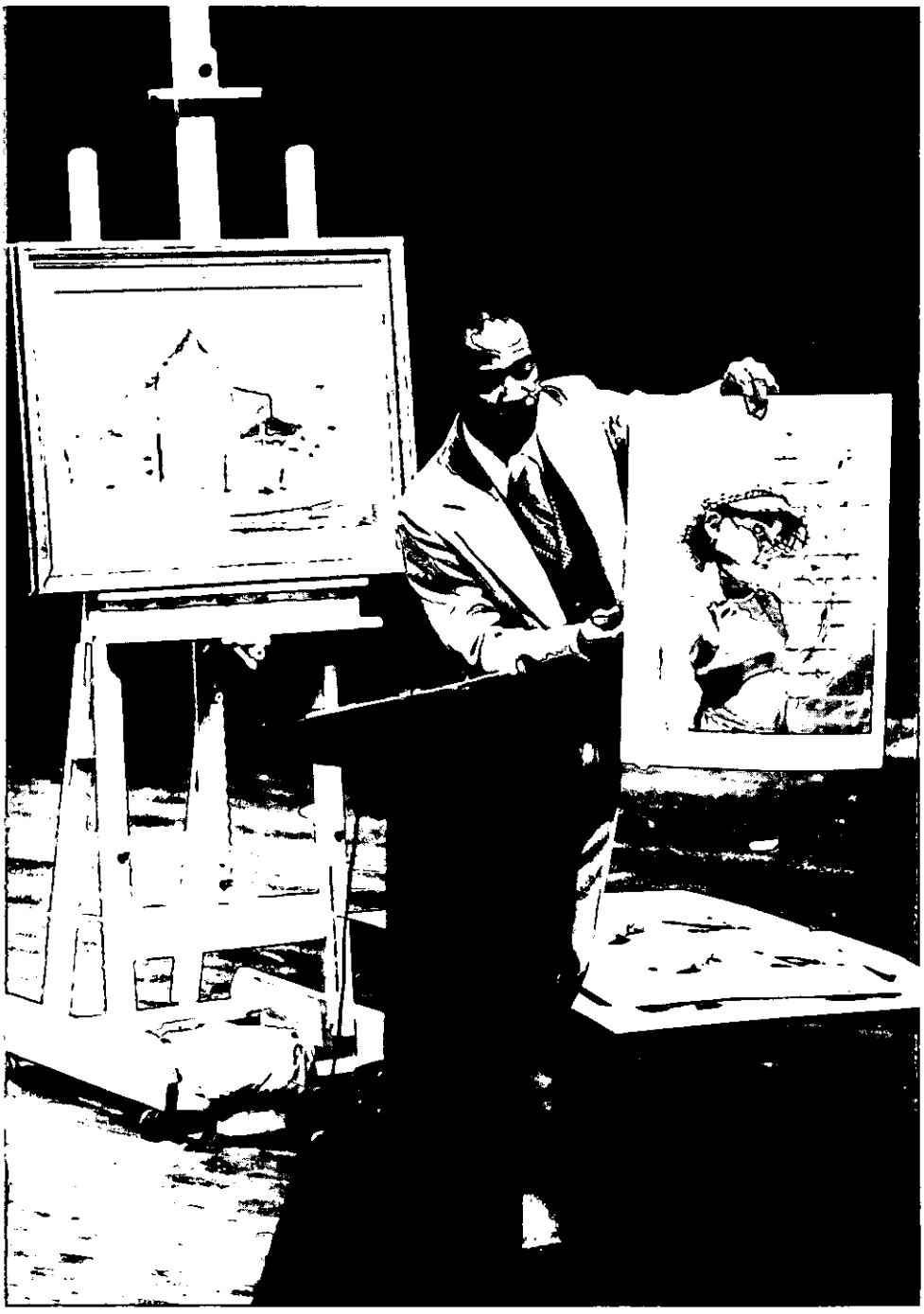
The purpose of Cedar Valley College is to provide all students with learning experiences that meet these challenges and take into account the student's interest and abilities. This purpose is accomplished through effective career planning with guidance from a competent counseling staff and through providing alternative ways of learning. Most of all, it is accomplished through the work of a faculty dedicated to helping all students become well-adjusted, productive citizens.



PROGRAMS

Cedar Valley provides a broad range of Academic Transfer Programs for students desiring to continue their education at four year institutions. In addition to these, Cedar Valley's Technical/Occupational Programs provide many options for gaining needed training for area job markets in business and industry. Some of these programs are shared by other colleges in the District and some are exclusive offerings of Cedar Valley. For instance, Cedar Valley is the only college in the District to offer programs in Animal Medical Technology, Major Appliance Repair, Commercial Music, Small Engine Mechanics, Outboard Marine Engine Mechanics, and Motorcycle Mechanics.

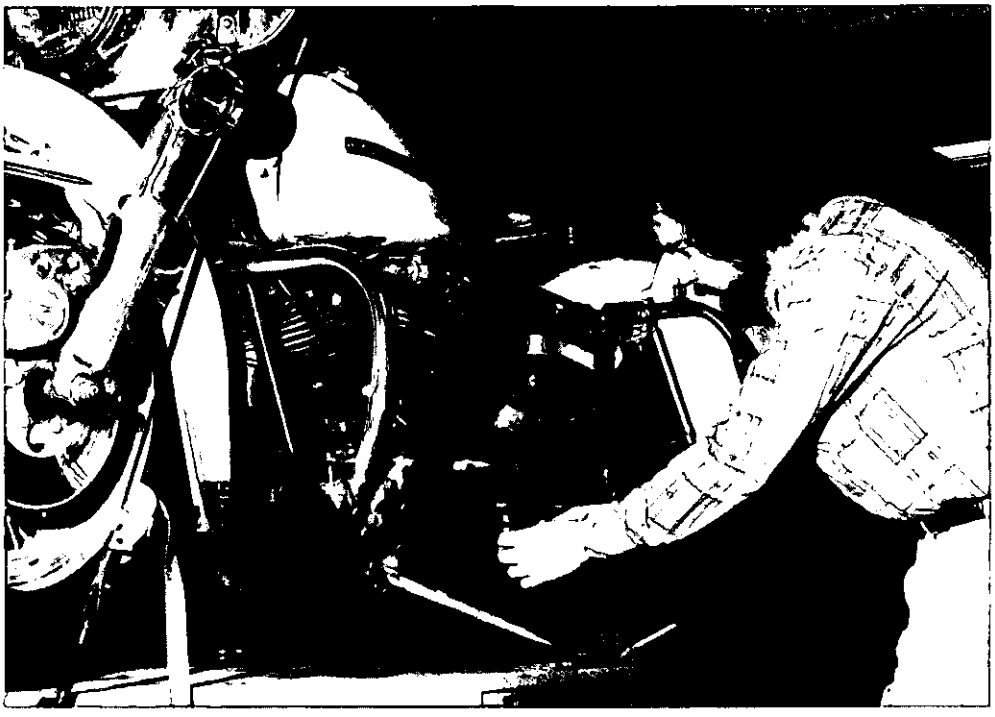
Cedar Valley also provides many valuable educational opportunities for people of all ages through its Community Services Program. A schedule of these non-credit courses can be obtained through the College's Community Service Division.

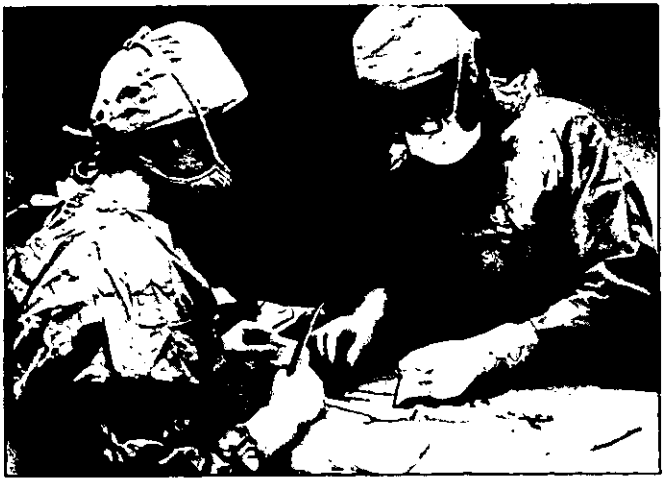


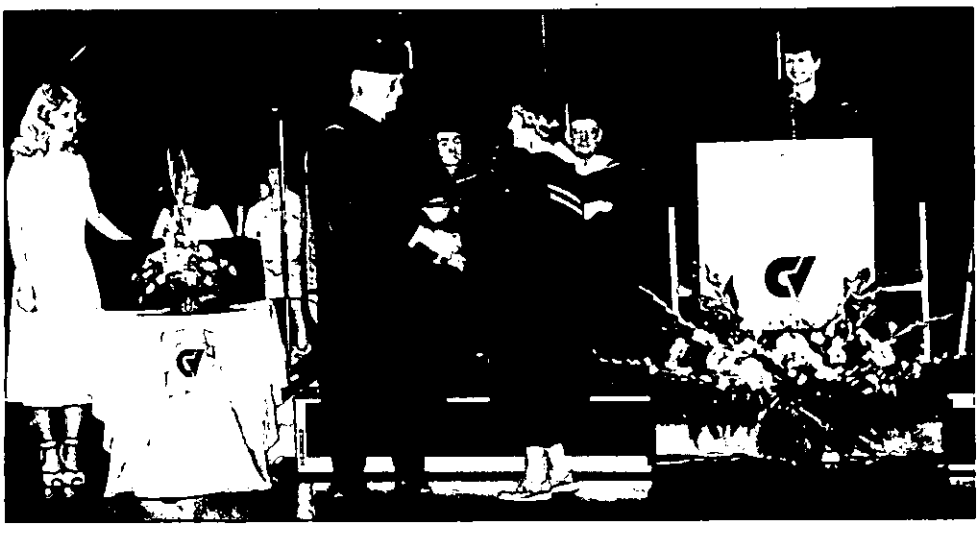
*Renowned artist Nathan Jones was one of the guest lecturers in the series sponsored each year by the Cedar Valley Art Department*

*The Commercial Music Program brings such notables to Cedar Valley as jazz musician Clark Terry*

*Whether in*
*Fashion Merchandising,*
*Motorcycle Mechanics,*
*Animal Medical Technology*
*or Academic Transfer,*
*the proudest moment*
*is graduation.*








**ADMINISTRATIVE STAFF — CEDAR VALLEY COLLEGE**

| | |
|---|---|
| President | Floyd S. Elkins |
| Vice President — Business Services | Walter N. Beene |
| Associate Dean, Extended Day Programs | Kenneth W. Thomas |
| Associate Dean, Learning Resources Center | Ruth J. Watkins |
| Associate Dean, Technical/Occupational Programs | Roger E. Kinseth |
| Assistant Dean, Community Service Programs | Diana Henshaw |
| Director of Cooperative Work Experience and Job Placement | Donna R. Mainzer |
| Director of Counseling | Joanne Cox |
| Director of Public Information | Kathleen Krebbs |
| Director of Financial Aids | Frank Ellis |
| Registrar and Director of Admissions | John Williamson |
| Division Chairperson, Business/Social Science | Patsy Fulton |
| Division Chairperson, Communications/Humanities | Mary Davidson |
| Division Chairperson, Math/Science/PE/An. Med. Tech. | Mike R. Huddleston |

## CEDAR VALLEY FACULTY AND STAFF

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Boswell, Carolyn D. ..... Associate Registrar/IS User Coordinator
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Thompson, John Paul ..... Director of Media Services
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Watkins, Ruth J. ..... Associate Dean — Learning Resources
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Wheeler, Jo ..... Director of College Store

Wigley, Manual L. ..... Director of Physical Plant

Williamson, John W. ..... Director of Admissions & Registrar
Kilgore Junior College, A.A.; East Texas State Univ., B.S., M.S.

Wilkie, Dave ..... Athletic Director/Physical Education
Ball State Univ., B.S., M.A.

Wright, David L. ..... Animal Medical Technology
Texas A&M Univ., B.S., D.V.M.

Young, Rebecca ..... Fashion Merchandising
Iowa State Univ., B.S.; Texas Woman's Univ., M.S., Ph.D.

Youngblood, Mary Ann ..... English
Univ. of Texas at Arlington, B.A.; North Texas State Univ., M.A.

**DALLAS COUNTY COMMUNITY COLLEGE DISTRICT BOARD OF TRUSTEES,**

*Seated, left to right: Jerry Gilmore, vice-chairman; Pattie T. Powell, chairman; Bill J. Priest, chancellor and secretary to the Board; and Robert H. Power. Standing, left to right: Bob Beard; Bart Rominger; J. D. Hall; and Don Buchholz.*

**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
Assistant to the Chancellor . . . . . Ruth G. Shaw
Special Assistant to the Chancellor . . . . . Jan Sanders
Director of Computer Services . . . . . James R. Hill
Director of Development . . . . . Carole Shlipak
Director of Personnel . . . . . Quincy Ellis
Director of Planning and Accreditation . . . . . Bill Tucker
Director of Program Development . . . . . Linda Coffey
Director of Public Information . . . . . Claudia Robinson
Director of Special Services . . . . . Bonny S. Franke
Director of Technical Services . . . . . Paul E. Dumont
Legal Counselor . . . . . Robert Young

# General Information

For the Seven
Member Colleges
of the Dallas County
Community College District

# I. GENERAL INFORMATION

### HISTORY OF THE DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

The Dallas County Community College District is comprised of seven colleges located strategically throughout Dallas County. Together the colleges enroll approximately 75,000 students and employ over 1,900 full-time faculty and staff members.

The growth of the District into an educational system with such impact was not by chance. It took the careful planning and hard work of many people over a period of 15 years. In May, 1965, voters created the Dallas County Junior College District and approved a $41.5 million bond issue to finance it. The next year the District's first college, El Centro, began operation in downtown Dallas.

Eastfield College and Mountain View College enrolled their first students in 1970, and the plans for a multi-campus district became a reality. Richland College became the District's fourth college in 1972.

The voters of Dallas County approved the sale of an additional $85 million in bonds in September, 1972. This step provided for expansion of the four existing colleges and the construction of three more colleges. A key part of the expansion program was the remodeling and enlarging of El Centro College, a project completed in 1979. Construction of new facilities resulted in the opening of Cedar Valley College and North Lake College in 1977. Brookhaven College, the final campus in the seven-college master plan, opened in 1978.

### DISTRICT PHILOSOPHY AND GOALS

Since 1972, the District has been known as the Dallas County Community College District. The name shows that the District has outgrown the term "junior college."

The name also reflects the District's philosophy. The colleges truly are community institutions, meeting the varied educational needs of the growing Dallas County region. The primary goal of the District and its colleges is to help students of all ages achieve effective living and responsible citizenship in a fast-changing region, state, nation, and world. Each college is therefore committed to providing a broad range of educational programs for the people it serves.

The needs, abilities, and goals of each student are considered important. The focus is on creating an educational program for the individual rather than squeezing or stretching the individual to fit an "educational mold."

The District therefore has a place for different kinds of students. There is a place for the young person setting forth toward a degree in medicine, and a place for the adult delving into an interesting hobby to enrich leisure hours. There is a place for the person preparing to enter a trade or technical field with a year or two of studies, and a place for the employed individual wanting to improve occupational skills. There is a place for the very bright high school student ready to begin college work in advance of high school graduation, and a place for the high school dropout who now sees the need for education in today's complex society. In short, there is a place for everyone.

How do the colleges meet the educational needs of such a varied family? The answer is found in four categories of programs:

1. For the student working toward a bachelor's or higher degree, the colleges offer a wide range of first-year and second-year courses which transfer to senior colleges and universities.
2. For the student seeking a meaningful job, the colleges offer one-year and two-year programs in technical and occupational fields.
3. For the employed person wishing to improve job skills or to move into a new job, the colleges offer credit and non-credit adult educational courses.
4. For the person who simply wants to make life a little more interesting, the colleges offer community service programs on cultural, civic and other topics.

Additional programs are available for the high school student, dropout, and others with special needs.

The colleges help each student design the educational program that best meets individual needs. Every student is offered intensive counseling to define goals and identify abilities. Continued guidance is available throughout the student's college career in case goals and plans change. This emphasis on counseling, rare for some institutions, is routine at all District colleges.

**DISTRICT RESPONSIBILITIES**

To carry out the District philosophy, the colleges obviously must offer a range of programs and courses, including guidance services. These programs and courses must help each individual attain a high level of technical competence and a high level of cultural, intellectual, and social development.

In addition, high professional standards for the academic staff must be maintained within a framework prescribed by the Board of Trustees. At the same time, the program and organization of each college must make maximum use of faculty and facilities.

The colleges have a basic responsibility to provide educational and cultural leadership to the community. They must be sensitive to changing community needs and adapt readily to those needs. Individuals capable of continuing their educational development should be given the opportunity to improve their skills. Finally, to continue to meet its responsibilities in changing times, the college system must guard against stagnation.

Creativity and flexibility are therefore fostered at the District level and on each campus.

**LEAGUE FOR INNOVATION**

The Dallas County Community College District is a member of the League for Innovation in the Community College. The League is composed of 16 outstanding community college districts throughout the nation. Its purpose is to encourage innovative experimentation and the continuing development of the community college movement in America. Membership commits the District to research, evaluation, and cooperation with other community college districts. The goal is to serve the community with the best educational program and the fullest use of resources.

## EQUAL EDUCATIONAL AND EMPLOYMENT OPPORTUNITY POLICY

Dallas County Community College District is committed to providing equal educational and employment opportunity regardless of sex, marital or parental status, race, color, religion, age, national origin, or handicap. The District provides equal opportunity in accord with Federal and State laws. Equal educational opportunity includes admission, recruitment, extra-curricular programs and activities, access to course offerings, counseling and testing, financial aid, employment, health and insurance services, and athletics. Existing administrative procedures of the College are used to handle student grievances. When a student believes a condition of the College is unfair or discriminatory, the student can appeal to the administrator in charge of that area. Appeals to higher administrative authority are considered on the merits of the case.

## FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

In compliance with the Family Educational Rights and Privacy Act of 1974, the College may release information classified as "directory information" to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone number, (4) dates of attendance, (5) educational institution most recently attended, and (6) other information, including major field of study and degrees and awards received. A student may request that all or any part of the directory information be withheld from the public by giving written notice to the Registrar's Office during the first twelve class days of a fall or spring semester or the first four class days of a summer session. If no request is filed, information is released upon inquiry.

No telephone inquiries are acknowledged; all requests must be made in person.
No transcript or academic record is released without *written consent* from the student stating the information to be given, except as specified by law.

## STUDENT CONSUMER INFORMATION SERVICES

Pursuant to Public Law 178, the College provides all students with information about its academic programs and financial aid available to students.

## STANDARDS OF CONDUCT

The college student is considered a responsible adult. The student's enrollment indicates acceptance of the standards of conduct published in this catalog.

# II. ADMISSIONS AND REGISTRATION

## GENERAL ADMISSIONS POLICY

The College has an "open door" admissions policy. It insures that all persons who can profit from post-secondary education have an opportunity to enroll. The College may require certain assessment procedures for use in course placement, but the assessment is not used to determine admissions.

## ADMISSION REQUIREMENTS

*Beginning Freshmen*
Students enrolling in college for the first time who fit one of the following categories may apply for admission:

a. Graduates from an accredited high school.
b. Graduates from an unaccredited high school who are 18 years of age.
c. Students who are not high school graduates but who are 18 years of age and whose high school class has graduated.
d. High school students recommended by their high school principal. The College admits a limited number of students in this category. The students are concurrently enrolled for a maximum of 6 hours of special study each semester. Students must continue to make normal progress toward high school graduation.

*Transfer Students*
Transfer applicants are considered for admission on the basis of their previous college record. Academic standing for transfer applicants is determined by the Registrar's Office according to standards established by the College. Students on scholastic or disciplinary suspension from another institution must petition the Committee on Admissions and Academic Relations for special approval. Contact the Admissions Office for further information.

*Former Students*
Students formerly enrolled in the Dallas County Community College District must submit an application for readmission to any District college. Students with unsettled financial debts at any District college will not be readmitted.

*Non-Credit Students*
Students enrolling for non-credit courses apply through Community Services.

*International Students*
The College is authorized under federal law to enroll non-immigrant alien students. International students are not admitted, however, until all admissions requirements are complete. International students must:

a. complete a personal interview with the international student counselor and receive approval from the College administration,
b. present TOEFL (Test of English as a Foreign Language) test scores of 525 or higher,
c. be proficient in English and provide a letter in their own handwriting indicating educational and vocational plans,
d. show evidence of sufficient financial support for the academic year,
e. complete a health information form,
f. fulfill all admission requirements for international students at least 30 days prior to registration,
g. enroll as a full-time student (minimum of 12 credit hours),
h. complete one full year at the admitting institution if the student has already been accepted by other U.S. educational institutions. (See government form I-20.)

Contact the Admissions Office for further information.

## APPLICATION AND ADMISSION PROCEDURES

Applications may be submitted any time prior to registration, but applicants should submit materials at least three weeks before registration to insure effective counseling and schedule planning. Earlier application is desirable because the student's place in registration is determined by the date an applicant's admission file is complete. A late place in registration may mean that the student cannot register for some courses because they are already filled.

Applicants must submit the following material to the Admissions Office to have a complete admissions file:

a. An official application, available from the Admissions Office.
b. An official transcript from the last school (high school or college) attended. Students seeking certificates or associate degrees must submit official transcripts of all previous college work. The College's accrediting agency requires transcripts, and the College uses them in program advisement.
c. Written proof from a medical office of (1) a negative tuberculin skin test or chest X-ray, (2) a polio immunization if the applicant is under 19 years of age, and (3) a diptheria/tetanus injection within the last 10 years. This medical proof is required by state law (Senate Bill 27).

Once the above materials are submitted, the applicant is assigned a place in registration. All applicants may select only those classes available when they register. Students may enroll in certain courses at times other than regular semester registration. See Flexible Entry Courses in this catalog and contact the Registrar's Office for additional information.

## TUITION

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

Tuition is subject to change without notice by the Board of Trustees or the Texas Legislature.

## ADDITIONAL FEES

Additional fees may be assessed as new programs are developed with special laboratory costs. These fees will always be kept to a practical minimum. A graduation fee is not assessed, but each student must pay for cap and gown rental.

## SPECIAL FEES AND CHARGES

*Laboratory Fee:* $2 to $8 a semester (per lab).

*Physical Education Activity Fee:* $5 a semester.

*Bowling Class Fee:* Student pays cost of lane rental.

*Private Music Lesson Fee:** $35 for one hour per week (maximum) for one course, $20 for one half hour per week.

*Audit Fee:* The charge for auditing a course is the same as if the course were taken for credit, except that a student service fee is not charged.

*Credit by 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.

## DALLAS COUNTY COMMUNITY COLLEGE DISTRICT
## TUITION AND STUDENT SERVICES FEE
## FALL AND SPRING SESSIONS, 1980-81

| Semester | Dallas County* | | | Out-of District** | | | Out-of State, or Out-of-Country*** | | |
|---|---|---|---|---|---|---|---|---|---|
| Cr. Hours | Tuition | Fee | Total | Tuition | Fee | Total | Tuition | Fee | Total |
| 1 | 25 | 1 | 26 | 25 | 1 | 26 | 40 | 1 | 41 |
| 2 | 25 | 2 | 27 | 40 | 2 | 42 | 80 | 2 | 82 |
| 3 | 25 | 3 | 28 | 60 | 3 | 63 | 120 | 3 | 123 |
| 4 | 28 | 4 | 32 | 80 | 4 | 84 | 160 | 4 | 164 |
| 5 | 35 | 5 | 40 | 100 | 5 | 105 | 200 | 5 | 205 |
| 6 | 42 | 6 | 48 | 120 | 6 | 126 | 240 | 6 | 246 |
| 7 | 49 | 7 | 56 | 140 | 7 | 147 | 280 | 7 | 287 |
| 8 | 56 | 8 | 64 | 160 | 8 | 168 | 320 | 8 | 328 |
| 9 | 63 | 9 | 72 | 180 | 9 | 189 | 360 | 9 | 369 |
| 10 | 70 | 10 | 80 | 200 | 10 | 210 | 400 | 10 | 410 |
| 11 | 75 | 10 | 85 | 205 | 10 | 215 | 440 | 10 | 450 |
| 12 | 80 | 10 | 90 | 210 | 10 | 220 | 480 | 10 | 490 |
| 13 | 85 | 10 | 95 | 215 | 10 | 225 | 520 | 10 | 530 |
| 14 | 90 | 10 | 100 | 220 | 10 | 230 | 560 | 10 | 570 |
| 15 | 95 | 10 | 105 | 225 | 10 | 235 | 600 | 10 | 610 |
| 16 | 100 | 10 | 110 | 230 | 10 | 240 | 640 | 10 | 650 |
| 17 | 105 | 10 | 115 | 235 | 10 | 245 | 680 | 10 | 690 |
| 18 | 110 | 10 | 120 | 240 | 10 | 250 | 720 | 10 | 730 |
| 19 | 115 | 10 | 125 | 245 | 10 | 255 | 760 | 10 | 770 |
| 20 | 120 | 10 | 130 | 250 | 10 | 260 | 800 | 10 | 810 |

## TUITION SCHEDULE FOR SUMMER SESSIONS, 1981

| Semester Cr. Hours | Dallas County* | Out-of-District** | Out-of-State, or Out-of-Country*** |
|---|---|---|---|
| 1 | 25 | 30 | 45 |
| 2 | 25 | 60 | 90 |
| 3 | 30 | 90 | 135 |
| 4 | 40 | 120 | 180 |
| 5 | 50 | 150 | 225 |
| 6 | 60 | 180 | 270 |
| 7 | 64 | 184 | 310 |
| 8 | 68 | 188 | 350 |
| 9 | 72 | 192 | 390 |

*The Dallas County Community College District Board of Trustees has waived the difference in the rate of tuition for non-resident and resident students for a person or his dependent, who owns property which is subject to ad valorem taxation by the District.

**The DCCCD Board of Trustees defines an Out-of-District student as: (1) a student eighteen (18) years of age or older who resides in a Texas county other than Dallas County; (2) a student who is less than eighteen (18) years of age whose parents do not live in Dallas County.

***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 twelve (12) months immediately preceding the date of registration; or a student of eighteen (18) years of age who resides out of the state or who has not been a resident of the state twelve (12) months.

These definitions are intended as a guideline for the student. The student is referred to the Director of Admissions for a more complete definition.

## REFUND POLICY

Student tuition and fees provide only a fraction of the cost of education. When students enroll in a class, they reserve places which cannot be made available to other students unless they officially drop the class during the first week of the semester. Also, the original enrollment of students represents a sizable cost to the District whether or not they continue in the class. Therefore, a refund is made only under the following conditions:

a. No 100% refund is granted unless College error is involved.
b. An 80% refund of tuition and fees may be obtained through the date noted in the college calendar. An 80% refund may be given through the first two class days of a six-week summer session or fast track semester. Refunds for Flexible Entry Courses are considered through completion of the second day of class from the date of enrollment.
c. No refund is given for advanced placement or College Level Examination Program (CLEP) tests.
d. A physician's statement must be submitted along with petitions when medical reasons account for withdrawal. Requests for refunds must be submitted before the end of the semester for which the refund is requested.
e. No refund of less than $4 for tuition and fees is made.

Refund Petition Forms are available in the Counseling Center and the Office of the Vice President of Student Services. Students who believe their refund requests are due to extenuating circumstances beyond the limits of the refund policy should state explicitly their circumstances on the Refund Petiton Form. All requests for refunds are referred to the Refund Petition Committee. The Committee's recommendations are made to the Vice President of Student Services who notifies the student of the action taken. Refund checks normally require a minimum of one month from date of approval for processing.

## RETURNED CHECKS

Checks returned to the Business Office must be paid with cash or a cashier's check within the time limits prescribed by the notification letter. An additional fee is added for returned checks.
If a check for tuition payment is returned, the student's enrollment is considered void.

## ADVISEMENT PROCEDURES

When students are admitted to the College, they are invited to an advisement session. This session may be conducted individually or in a group with a counselor.
New students are expected to attend a Self-Assessment Lab or New Student Orientation for advisement. These sessions help students choose courses and programs of study. They are designed for students who are enrolling in college for the first time and who expect to attend full-time. The College may use tests and other means to counsel students about placement in courses and programs. Developmental studies are available for students who need skill development in reading, writing, or math. Test data, transcripts, previous work, and counseling may be used to determine placement in this program.

## COURSE PREREQUISITES

Prerequisites are established for certain advanced courses to help assure that students have sufficient background in the subject area to maximize their probability of success in the course. The College recognizes that certain related life experiences may also provide necessary background for success in these courses. Therefore, the division chairperson is authorized to waive a course prerequisite.

## CHANGE OF SCHEDULE

Students should be careful in registering to schedule courses only for the days and hours they can attend. Students requesting class changes should contact the Registrar's Office during the time specified in the class schedule. No change is complete until it has been processed by the Registrar's Office.

## AUDITING A COURSE

Any person 18 years of age or older may, with the consent of the instructor, enroll in a course as an "audit student." Audit students may attend classes but do not take examinations or receive credit for the course unless they enroll in the course again as a regular student. The charge for auditing a course is the same as for taking it for credit, except that a student services fee is not assessed. Procedures for auditing a course are administered by the Registrar. No audits are approved prior to the first day of the second week of classes in the fall or spring semester. The deadline for auditing is the twelfth class day for a fall or spring semester and the fourth class day for a summer session. Most courses with laboratories may not be audited.

## TRANSFER OF CREDITS

Transfer of credit is generally given for all passing work completed at accredited colleges and universities. The Registrar's Office evaluates all transfer credit. Transfer students admitted with a grade point deficiency cannot graduate until the deficiency is cleared by earning additional grade points.
Credits earned in military service schools or through the U.S. Armed Forces Institute are reviewed by the Registrar and credit granted if applicable.

## DROPPING A COURSE OR WITHDRAWING FROM COLLEGE

To drop a class or withdraw from the College, students must obtain a drop or withdrawal form from a counselor and follow the prescribed procedure.

Should circumstances prevent a student from appearing in person to withdraw from the College, the student may withdraw by mail by writing to the Registrar. No drop or withdrawal requests are accepted by telephone. Students who drop a class or withdraw from the College before the semester deadline receive a "W" (Withdraw) in each class dropped. The deadline for receiving a "W" is indicated on the academic calendar. After that time students receive a performance grade in each course.

## ADDRESS CHANGES AND SOCIAL SECURITY NUMBER

Each student has the responsibility to inform the Registrar's Office of changes in name or address. Each applicant for admission is asked to furnish a Social Security number. This number doubles as a student identification number and insures accuracy of student records. If a student does not have a Social Security number, another number is assigned for record keeping.

# III. ACADEMIC INFORMATION

### DEGREE REQUIREMENTS

The College confers the Associate in Arts and Sciences Degree upon students who have completed all general and specific requirements for graduation. Each degree candidate must earn the last 15 hours as a resident student in the District colleges or accrue 45 hours in residence. The degree is granted by the District college at which the student took the last 15 hours or where the majority of hours were accrued.
Correspondence work must be approved by the Registrar for graduation credit. No more than one-fourth of the work required for any degree or certificate may be taken by correspondence.

### ASSOCIATE IN ARTS AND SCIENCES DEGREE

Students must have a minimum of 60 credit hours and a grade point average of at least "C" (2.0) to receive the Associate in Arts and Sciences Degree. These 60 hours may be earned at any District college. They must include:
- English 101-102 plus an additional 6 hours of English for a total of 12 credit hours in English.
- 8 credit hours in Laboratory Science (Music majors are exempt from this requirement. Check listing under subject field).
- 12 credit hours of History 101-102 and Government 201-202. No substitutions are allowed. Only 3 credit hours of history or 3 credit hours of government may be earned through credit by examination. CLEP credit may not be used to meet this requirement.
- 3 credit hours in Humanities, selected from Theater 101, Art 104, Music 104, Humanities 101 or Philosophy 102. A maximum of 4 physical education activity hours may be counted as credit toward requirements for graduation. Courses numbered 99 and below cannot be included to meet degree or certificate requirements. Music 199, Art 199, and Theatre 199 may not be counted toward the 60 hour minimum. All students planning to transfer to a four-year institution may complete their four semester requirements in physical education during their freshman and sophomore year. Students are urged to consult the catalogs of the institutions to which they may transfer for their special requirements. These catalogs should be used by students and advisors in planning programs.

### ASSOCIATE IN APPLIED ARTS AND SCIENCES DEGREE AND CERTIFICATE CAREER PROGRAMS

Students must have a minimum of 60 credit hours and a grade point average of at least "C" (2.0) to receive the Associate in Applied Arts and Sciences Degree. For some programs, more than 60 credit hours are required. All prescribed requirements for the specific Technical/Occupational Program in which the student is enrolled must be completed. These programs may also have other criteria in addition to degree requirements. See the Technical/Occupational Programs section of this catalog for a more detailed explanation.
The requirements for certificates are detailed under specific programs listed in the Technical/Occupational Programs section of this catalog. A "C" (2.0) grade point average is required.
A maximum of 4 physical education activity hours may be counted as credit toward graduation. Courses numbered 99 and below may not be included to meet degree or certificate requirements.
Music 199, Art 199, and Theatre 199 may not be counted toward the 60-hour minimum.

**PROCEDURE FOR FILING DEGREE AND CERTIFICATE PLANS AND FOR GRADUATION**

Students should request a degree plan from the Registrar's Office at the end of their freshman year.
Official transcripts of all previous college work must be on file at the time of request for degree plans. Students following a one-year certificate program should request an official plan during the first semester of their enrollment. Application for the granting of the degree or certificate should be filed in the Registrar's Office prior to the deadline announced by the Registrar.
An annual graduation ceremony is held at the conclusion of the spring semester. Participation is ceremonial only and confers on a student no rights to a degree. January and August graduates may participate in the next commencement if they desire, but they are not required to do so. The Registrar's Office should be notified if the student wishes to participate. Instructions for graduation are mailed to all candidates thirty days prior to commencement.
Candidates for any degree or certificate must meet the requirement set forth in the catalog for the year of first enrollment unless they elect to graduate under the requirements of a later catalog. Candidates must indicate the catalog of their choice when they file a degree or certificate plan.

**RECOMMENDED ACADEMIC LOAD**

The maximum academic load is 18 credit hours of course work per semester or five classes plus physical education. Students must receive permission of the Registrar or the appropriate college official to carry a heavier load. Employed students carrying a full load (12 credit hours or more) should not work more than twenty hours per week. Students working more hours should reduce their academic load proportionately. The recommended load limit for day or evening students who are employed full-time is 6 credit hours.

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

**CLASS ATTENDANCE**

Students are expected to attend regularly all classes in which they are enrolled. Students have the responsibility to attend class and to consult with the instructor when an absence occurs.
Instructors are responsible for describing attendance policy and procedures to all students enrolled in their classes. Generally, when absences reach a total equal to the number of credit hours for the course, the instructor files a drop for excessive absences. The student is notified by a letter from the Registrar's Office sent to the student's address of record. The effective drop date is stated in the letter. A student who desires to remain in class must contact the instructor within the time specified in the instructor's letter. With the instructor's approval, a student may be reinstated. Students dropped for excessive absences prior to the published withdrawal deadline receive a grade of "W." Students who do not attend class during the first twelve days of a long semester or the first four days of a summer session are dropped.

## SCHOLASTIC STANDARDS: GRADES AND GRADE POINT AVERAGE

Final grades are reported for each student for every course 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 |
| CR | Credit | 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. For example, a student who takes a three hour course and earns an "A" accumulates 12 grade points for that course. A student's *grade point average* is computed by adding the total grade point values for all courses and dividing by the number of credit hours attempted during the same period. For example, a student who takes the following courses and earns the following grades has a grade point average 2.93:

| Credit Hours | Grade | Grade Points |
|---|---|---|
| 2-hour course | A | 8 |
| 3-hour course | B | 9 |
| 4-hour course | B | 12 |
| 3-hour course | C | 6 |
| Total Credit Hours: | | Total Grade Points: |
| 12 | | 35 |

$35 \div 12 = 2.93$

For repeated courses, only the latest grade earned is included in cumulative grade point averages. Transcripts do, however, indicate all work completed in the District, even if the latest grade is lower than a preceding grade. When a student withdraws from a course being repeated, the cumulative grade point average is calculated by using the immediately preceding grade in the same course. An incomplete grade "I" may be given when an unforeseen emergency prevents a student from completing the work in a course. The "I" must be converted to a performance grade (one with a grade point value) within ninety days after the first day of classes in the subsequent semester. If the work is not completed after ninety days, the "I" is converted to a performance grade. An *Incomplete Contract* is used to convert an incomplete grade to a performance grade and states the requirements for the satisfactory completion of the course. The Incomplete Contract must be agreed upon and signed by the instructor, the student and the division chairperson and submitted with the final grade report. When an Incomplete Contract must be submitted without the student's signature, the instructor must include a statement indicating that the student is aware of and in agreement with the contract. The "P" grade (Progress) may be awarded when a student has attended class regularly and the instructor has evidence that the student has made significant progress toward meeting course objectives, but the student has not met those objectives at a level appropriate for a performance grade (A-F). "P" grade may be computed as an "F" grade at some receiving colleges and universities. To earn credit for a course in which the student has a "P" grade, the student must re-enroll in that course.

## ACCEPTABLE SCHOLASTIC PERFORMANCE

College work is measured in terms of credit hours. The number of credit hours offered for each course is given with the course description. Acceptable scholastic performance is the maintenance of a grade point average of 2.0 (on a 4.0 scale) or better. Students may not be graduated from any degree or certificate program unless they have a cumulative grade point average of 2.0 or better. Grade points and hours earned in courses numbered 99 and below are included

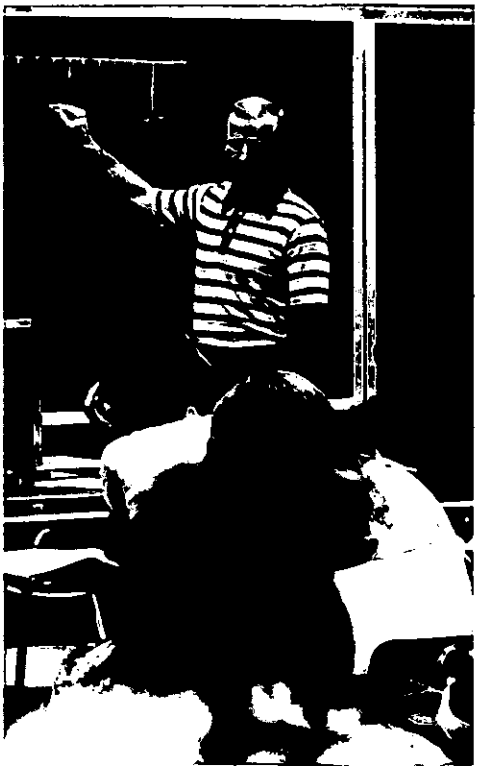
in computing a student's scholastic standing, but they cannot be used to meet graduation requirements.

**HONORS**

Full-time students who complete at least 12 hours of credit and earn a grade point average of 3.00-3.49 are listed on the College's Honor Roll. Full-time students who complete at least 12 hours of credit and average 3.50-4.00 are placed on the Vice President's Honor List. Part-time students who take 6-11 credit hours and maintain a 3.5 or higher grade point average are placed on the Academic Recognition List. The Honor Roll, the Vice President's Honor List, and the Academic Recognition List are published each semester.

**SCHOLASTIC PROBATION AND SCHOLASTIC SUSPENSION**

Full-time and part-time students who have completed a total of 12 credit hours are placed on probation if they fail to maintain a 2.0 cumulative grade point average. Students may be removed from probation when they earn a 2.0 cumulative grade point average. 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 are continued on scholastic probation. Students previously enrolled in college who are placed on scholastic probation are encouraged to enroll in a Human Development Course. Under special circumstances this course may be required for probationary students. Students on probation who do not meet the requirements for continued probation are placed on scholastic suspension. Students on suspension for the first time may not register for one regular semester. For subsequent suspensions, students may not register for two regular semesters. Suspended students must file a petition for readmission. The conditions for readmission are established and administered by the Vice President of Student Services.



**GRADE REPORTS**

A grade report is issued to each student at the end of each semester and gives the grade earned in each course that semester. A transcript is the official record of college work and gives all grades earned throughout the college career. Transcripts are withheld from students who have not met financial or other obligations to the College. (See Student Codes and Expectations: "Financial Transactions with the College.")

**WAIVING OF SCHOLASTIC DEFICIENCY**

Any student in an academic transfer program may transfer to a career program. In such a case, the student may choose to have any grades below "C" disregarded. However, the procedure for disregarding low grades may only be exercised while the student is in a career program. If the student changes to an academic transfer program, the original

conditions of the academic transfer program must be followed, including the calculation of a cumulative grade point average of all college credits earned. The procedure for waiving scholastic deficiency applies both to students of this college and to students transferring from other institutions. The student who wishes to use this opportunity should state his or her intentions in writing to the Registrar prior to registration. The student should also inform a counselor during the pre-registration advisement session.

**TRANSCRIPTS OF CREDIT**

Upon the written request of a student, the Registrar's Office will send an official transcript to the individual student or to any college or agency named. The transcript may be withheld, however, until the student has settled all obligations with the College. The first request for a transcript is filled without charge. Later requests are filled for a $1 charge.

**CLASSIFICATION OF STUDENTS**

Freshman:
A student who has completed fewer than 30 credit hours.
Sophomore:
A student who has completed 30 or more credit hours.
Part-time:
A student carrying fewer than 12 credit hours in a given semester.
Full-time:
A student carrying 12 or more credit hours in a given semester.

**INSTRUCTORS**

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

**LEARNING RESOURCES CENTER AND LIBRARY OBLIGATIONS**

The Learning Resources Center (LRC) supports classroom instruction. It is a place where students can find books and non-print materials to supplement classroom learning or where—if they choose—they can actually take a course. The LRC helps students to learn in their own ways and at their own speeds. It provides books, slides, tapes, and films. The College has a growing collection of books on a wide variety of general information areas to support Academic Transfer Programs and Technical/Occupational Programs. In addition, there are special collections of career materials and pamphlets. The library also subscribes to current popular and technical periodicals as well as to area and national newspapers.
Classroom Resource Services is a part of the LRC and supports the instructional program. It is responsible for all campus audio-visual equipment and non-print materials used in the classroom or by individual students and for the production of instructional materials.
Willful damage to library materials (or property) or actions disturbing users of the library may lead to the loss of library privileges. Damage cases are referred to the appropriate authorities for further action. All books and other library materials must be returned before the end of each semester. No transcript is issued until the student's library record is cleared.

# IV. EDUCATIONAL AND SPECIAL OPPORTUNITIES

### ACADEMIC TRANSFER STUDIES

Students who desire to earn a bachelor's degree may complete the first two years at this 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

Students who desire to enter a chosen field as a skilled employee after one or two years of college work may enroll in one of the many Technical/Occupational Programs offered by the College. Technical/occupational courses carry college credit leading to a Certificate of Completion or an Associate in Applied Arts and Sciences Degree. These programs are established only after studies verify that employment opportunities will exist at the time the student completes training. The College attempts to match the community's labor requirements with the ambitions and goals of its students. This realistic approach to occupational education is made possible by the excellent cooperation of local industry, business, and public agencies. They increasingly depend on DCCCD colleges to supply skilled personnel. A continuous liaison is maintained with prospective employers to help place graduates and to keep the training programs current with job requirements. Recommendations for adding new programs to the College offerings are made periodically and are based on community studies which identify additional training needs.

### CREDIT BY EXAMINATION

Students who believe they already meet the requirements of a course by experience or previous training may request credit by examination. The Counseling Center has a list of courses available through this method.

The examination may be a section of the College Level Examination Program (CLEP), Advanced Placement Exams (CEEB), or a teacher-made test, depending on the course. The student pays an examination fee of $20 per course examination. This fee must be paid prior to taking the examination and is not refundable.

The colleges credit by examination program is coordinated with similar programs of four-year institutions. Final acceptance of credit by examination for specific degree purposes is determined by the degree-granting institution. Students planning to use credit by examination to meet degree requirements at other institutions should check the requirements of the *receiving* institution.

Students must be currently enrolled at this college to receive credit by examination. Students may not request credit by examination in courses for which they are currently enrolled. Students may earn as many credits through examination as their ability permits and needs require, but the last 15 credit hours required for graduation in any degree or certificate program must be earned in residency. Credit by examination may be attempted only one time in any given course, and a grade of "C" or better must be earned in order for credit to be recorded. A student may use credit by examination for only three (3) credit hours to apply toward the degree requirements in history and only three (3) credit hours to apply toward the degree requirements in government.

## NON-TRADITIONAL LEARNING

The College is committed to serve students and the community in the most effective manner possible while maintaining high standards of education. Students learn in a variety of ways and through a multitude of experiences, therefore, the College shall assess these learning activities and grant equivalent college credit according to the following guidelines:

1. A student must be currently enrolled in the College to receive equivalent credit for non-traditional learning.
2. Credit may be granted for non-traditional learning as it relates to specific courses offered by the college assessing the learning experiences. Credit will be awarded on a course by course basis only.
3. A student is required to complete at least 12 semester hours of course work with the District prior to awarding of equivalent credits for non-traditional activities. The "CR" grade is awarded for non-traditional course work accepted for credit.
4. Credit may be granted for occupational courses approved by the Texas Education Agency.
5. The number of equivalent credits awarded may not exceed the total number of credits required for the student's specific associate degree objective. No graduation, residency, degree or program requirements will be waived as a result of credits earned as provided by this policy.

Students desiring to take advantage of this opportunity should consult with the College Advocate For Non-traditional Learning for additional information. Students making application for assessment of prior learning through life experiences are required to enroll in a Human Development Course to facilitate the process.

## FLEXIBLE ENTRY COURSES

In keeping with its commitment to meet individual educational needs, the College makes available Flexible Entry Courses. These courses are self-paced, allowing students to work at their own speed. Students are cautioned to be aware of the time specified by the College as to when the course requirements need to be completed. Students may register for Flexible Entry Courses during the pre-semester registration periods or at regular times during the semester. Students should check with the Registrar to determine times for registration in these courses. Approval must be obtained for enrollment.

## TELECOURSES

Students may take a variety of college credit courses via television. The schedule of telecourses varies each semester and may include courses in anthropology, astronomy, business, earth science, ecology, biology, English, economics, government, history, humanities, psychology, religion, and sociology. Content and credit for these courses are the same as for similar courses taken on campus. Telecourses include the viewing of television programs on KERA/Channel 13, plus reading, study guide and writing assignments. Students come to the campus for an orientation session at the beginning of the semester, for one to four discussion meetings, for three or four tests, and for laboratory sessions in science courses having laboratories. These campus visits are normally scheduled for a time convenient to the students. Field trips are required in some courses. Telecourses may be taken in conjunction with on-campus courses or by persons who are not enrolled in any on-campus courses. Students may register for telecourses by mail or through the regular on-campus registration process.

## COOPERATIVE WORK EXPERIENCE EDUCATION

Students may enrich their education in certain career programs by enrolling in Cooperative Work Experience Courses. These courses allow students to combine classroom study with on-the-job experience at training stations approved by the College.
Students must have completed at least two courses in their occupational major to be eligible for Cooperative Work Experience.
A full-time student (carrying 12 credit hours or more) must take two courses which relate to the student's work experience, and a maximum of 4 credit hours may be in Cooperative Work Experience. Part-time students (carrying under 12 credit hours) may take a maximum of 4 credit hours of work experience. They must be concurrently enrolled in a course related to their work experience (or a support course to be applied toward their occupational degree or certificate).
To enroll in a Cooperative Work Experience Course, students must have the approval of their instructor/-coordinator. Course credit is awarded at the rate of 1 credit hour for each 80 hours of approved work experience during the semester. The 80 hours is approximately 5 hours per week during a fall or spring semester.
Additional information regarding Cooperative Work Experience may be secured from the Cooperative Education Office. The Technical/Occupational Programs having work experiences are indicated in the Course Descriptions Section of this catalog.

## INTERNATIONAL STUDIES

Selected programs combine learning experiences with foreign travel. This travel-study is under the direct supervision of regular faculty members of this college or other colleges in the District. These courses support specific learning objectives, and college credit may be earned by students who successfully meet the objectives.

## HUMAN DEVELOPMENT

In Human Development Courses students can explore the relationship between meaningful education and some of the dilemmas or questions commonly brought to college. "Why learn" and "how to learn" are put in a perspective of "who is to learn." These courses are taught by counselors and other qualified instructors. They offer academic credit which transfers to most surrounding four-year institutions. The courses in human development enhance the total curriculum and blend in with the total concept of the community college.

## EVENING AND WEEKEND COLLEGE

In dynamic, growing communities such as those encompassing this college, people have continuing educational needs, yet many of them have work schedules and personal involvements which make it impossible for them to attend college during normal daytime hours. For this reason, evening and weekend college courses offer the same broad spectrum of programs available for full-time day students. Courses are offered both on campus and at selected community locations. Evening and weekend courses offer high quality instruction, excellent facilities, and a variety of student services, including counseling, health, library, bookstore, food services, financial aid, and recreation. Instructors are selected from the College's own full-time staff, from outstanding Dallas area educators, and from other professional specialists interested in teaching. To enroll in the evening and weekend courses, contact the Director of Admissions. Information may also be obtained by contacting the Extended Day Administration Office.

**SERVICEMEN'S OPPORTUNITY COLLEGE**

In cooperation with other community colleges in the United States, colleges of the Dallas County Community College District participate in the Servicemen's Opportunity College. Through this program, students can plan an educational experience regardless of location requirements of the military.
For further information, contact the Admissions Office.

**COMMUNITY SERVICE PROGRAMS**

Community Service Programs are an important element in the concept of the community college. They greatly expand the available opportunities for persons of all ages to participate in college programs and activities. And courses are offered throughout the year to meet a variety of community needs.
Community Service Programs are offered in the following categories:

- Continuing education opportunities for individuals who want to broaden their knowledge or learn new skills for different occupational fields.
- Cultural and community enrichment studies for groups and individuals seeking to enhance their quality of life.
- Personal entertainment and recreation for individuals wishing to explore new activities for personal growth and enjoyment.
- Resources for industry, government and professional groups needing to supplement their own training and development programs.

Community Service Programs offer short courses, seminars, workshops, and institutes. The type of course offering is determined by the nature of the material, instructional approach, and needs of the requesting individuals or organizations.
Generally there are no entrance requirements or examinations. Some courses may have age restrictions or may require a certain amount of experience for enrollment. Admission is on a first-come, first-served basis. All one need do to register is fill out the form and pay the fee. Classes and activities are held on campus and in a variety of locations throughout the community. Most classes and activities are conducted on weekday evenings, but many are also held on weekdays and weekends.
Community Service Program instructors are professional men and women from the community who have proven experience in their fields. Their objective is to share their knowledge, insight, and experience, and to insure that students acquire a greater perspective of the subject and have a meaningful experience.
Although most Community Service Courses do not require textbooks, the nature of some special offerings do require the purchase of books or supplies. Students are notified of the need for texts and other materials at the first meeting.
Library privileges are available for Community Service students during the term they are registered. Contact the Community Service Office for further information.

**CONTINUING EDUCATION UNITS (CEU'S)**

Although no college credit is awarded for Community Service class participation, Continuing Education Units are transcripted for successful completion of most courses. The CEU, by nationwide definition, is "ten contact hours of participation in an organized continuing adult education 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 one accumulates over a period of years.

# V. STUDENT SERVICES

The College is committed to providing opportunities for each individual student's total educational development. Specific student services are integrated with the instructional program of the College to address individual needs for educational, personal, social, cultural, and career development.

**STUDENT DEVELOPMENT AND ACTIVITIES**

The Student Development Office plans and presents programs and activities for the general campus population. Programs often are coordinated with the various instructional divisions to provide students with valuable educational experiences. Many programs and activities are offered to help the student develop life enriching skills. Other programs provide students with interesting and entertaining ways to spend leisure time on campus. The goal of all programs is to facilitate the development of cultured and well-rounded human beings. Student participation in the operation of programs is highly encouraged.

**GUIDANCE AND COUNSELING SERVICES**

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 in selecting courses of study, determining transferability of courses, choosing or changing careers, gaining independence, and confronting problems of daily living.
Confidential assistance is provided by the counseling staff in the following areas:

1. Career counseling to explore possible vocational directions, occupational information, and self-appraisals of interest, personality and abilities.

2. Academic advisement to examine appropriate choices of courses, educational plans, study skills, and transferability of courses.
3. Confidential personal counseling to make adjustment and life decisions about personal concerns.
4. Small group discussions led by counselors and focusing on such areas as interpersonal relationships, test anxiety, and 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 needed in planning and making decisions.
6. Referral sources to provide indepth assistance for such matters as legal concerns, financial aid, tutoring, job placement, medical problems, or psychological problems.

### TUTORING SERVICES

For students needing special temporary assistance in course work, tutoring services are available. Students are encouraged to seek services through self referral as well as through instructor referral.

### TESTING AND EVALUATION CENTER

The Testing Center administers various tests. Types of tests include:

1. Psychological tests of personality, vocational interests, and aptitudes.
2. Academic tests for college instructional programs. Many courses are individualized and self-paced, permitting students to be tested at appropriate times.
3. Diagnostic tests for appropriate class placement. These tests are very strongly recommended to insure student success.
4. Tests for selected national programs.

### HEALTH CENTER

Health is the most fundamental human need, and a high standard of physical and mental health is a basic right of every human being. The Health Center helps maintain and promote the health of students, faculty, and staff. Services provided by the Health Center include education and counseling about physical and emotional health, emergency first aid treatment, referral services to community agencies and physicians, free tuberculin skin tests and other screening programs, and programs of interest to students and faculty.

Students are encouraged to make an appointment with the nurse to discuss specific health problems. No information on a student's health is released without written permission from the student, except as required by law.

### SERVICES FOR HANDICAPPED STUDENTS

The Services for Handicapped Students Office offers a variety of support services to enable handicapped students to participate in the

full range of college experiences. Services are arranged to fit the individual needs of the student and include interpreters, notetakers, tutors, mobility assistants, loan of wheelchairs, readers for the blind, and tape recorders. Handicapped students should contact the office at least one month before registration. The office will provide students with an orientation session and registration information. For additional information, contact the Services for Handicapped Students Office or the Counseling Center.

### STUDENT ORGANIZATIONS

Information about participation in any organization may be obtained through the Student Development Office. The development of student organizations is determined by student interest. Categories of organizations include:

- Co-curricular organizations pertinent to the educational goals and purposes of the College.
- Social organizations to provide an opportunity for friendships and promote a sense of community among students.
- Service organizations to promote student involvement in the community.
- Pre-professional and academic organizations to contribute to the development of students in their career fields.

## INTERCOLLEGIATE ATHLETICS

Participation on athletic teams is voluntary on a non-scholarship basis for students who meet requirements established by the Metro Athletic Conference. For more information regarding eligibility, rules, standards, and sports offered, contact the Physical Education Office.

## INTRAMURAL SPORTS

The College provides a campus intramural program for students and staff and encourages participation. For additional information contact the intramural director in the Physical Education Office or the Student Development Office.

## HOUSING

The College does not operate dormitories of any kind or maintain listings of available housing for students. Students who do not reside in the area must make their own arrangements for housing.

## CAMPUS SECURITY

Campus security is required by State law to "protect and police buildings and grounds of state institutions of higher learning." Because all laws of the state are in full force within the campus community, specially trained and educated personnel are commissioned to protect College property, personal property, and individuals on campus. Security officers are certified peace officers. They have the power to enforce all Texas laws and rules, regulations, and policies of the College, including the Code of Student Conduct.

# VI. FINANCIAL AID

Students who need financial aid to attend college can apply for grants, scholarships, loans, or job opportunities. These aid opportunities are provided in the belief that education should not be controlled by the financial resources of students.

Students needing financial assistance are encouraged to complete an application well in advance of registration for the semester they wish to attend. Early application allows the Financial Aid Office to prepare a realistic financial aid package.

Some of the grant, scholarship, loan and job programs available to students are outlined in the following paragraphs. Contact the Financial Aid Office for detailed information about any program.

### BASIC EDUCATIONAL OPPORTUNITY GRANT (BEOG)

The Basic Grant is a federally funded program designed to help undergraduate pre-bacculaureate students continue their education. The purpose of this program is to provide eligible students with a "foundation" of financial aid to assist with the costs of attending college.

All students applying for financial assistance through the College must apply for a Basic Grant. Other types of financial aid may be awarded if the student applies and qualifies. Eligibility for Basic Grant is based on "financial need" and satisfactory academic progress. Applications and additional information concerning the Basic Grant Program are available in the Financial Aid Office and in the counseling offices of most high schools. The application process takes approximately four to six weeks. In response to the Basic Grant application, a Student Eligibility Report (SER) will be mailed directly to the student. The student should immediately review the SER to make sure it is correct and bring it to the Financial Aid Office. The exact amount of the Basic Grant award will depend upon the eligibility index on the SER and the number of hours for which the student enrolls. In order to be eligible, a student must enroll for at least 6 credit hours for each semester.

### SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)

The SEOG is a Federal program to help pre-baccalaureate students of exceptional need. The amount of a SEOG award depends on the individual student's needs, the total number of applicants, and funds available. The SEOG must be matched by other sources of aid, such as BEOG, College Work/Study Program, private scholarships, etc. To be eligible, students must enroll for at least 6 credit hours, make satisfactory progress toward their educational goal and have financial need. Students must apply each year for the SEOG.

### TEXAS PUBLIC EDUCATIONAL GRANT (TPEG)

The TPEG is a State program to assist students attending state-supported colleges. To be eligible, students must make satisfactory progress toward their educational goal and have financial need according to an approved needs analysis system. Grants are awarded by eligibility on a first-come, first-served basis. Students must apply each year for the TPEG.

### TEXAS PUBLIC EDUCATIONAL GRANT STATE STUDENT INCENTIVE GRANT (TPEG-SSIG)

The TPEG-SSIG is a State program. To qualify, students must enroll and remain in 12 credit hours per semester, make satisfactory progress toward their educational goal, be enrolled in an undergraduate course of study (not possess a bachelor's or graduate degree), be a Texas resident, and have financial need. Grants are awarded by eligibility on a first-come, first-served basis. Students must apply each year for the TPEG-SSIG.

### HINSON-HAZLEWOOD COLLEGE STUDENT LOAN PROGRAM

The Hinson-Hazlewood College Student Loan Program is a state operated, federally insured student loan program. To qualify, students must enroll on at least a half-time basis (6 credit hours in the fall or spring semester), be a Texas resident, and demonstrate financial need. Students must apply for all other types of aid before applying for this loan, and they must apply each year to renew the loan.

Repayment begins nine to twelve months after the student ceases to be enrolled for at least one-half the normal course load. Repayment may extend up to 10 years, but a minimum payment of $30 a month is required. The interest rate is 7% a year (adjusted).

### SOCIAL SECURITY ADMINISTRATION

The Social Security Administration offers benefits to students who meet its criteria. The Admissions Office acts as liaison between students and the Social Security Administration. Students need to contact the regional Social Security Administration Office regarding eligibility.

### BUREAU OF INDIAN AFFAIRS

The Bureau of Indian Affairs offers educational benefits to American Indian students. Students need to contact the regional Bureau of Indian Affairs Office regarding eligibility.

Bureau of Indian Affairs
1100 Commerce - Room 2C44
Dallas, Texas 75202

### VOCATIONAL REHABILITATION

The Texas Rehabilitation Commission offers assistance to students who are vocationally handicapped as a result of a physical or mental disability. For further information, contact the closest office of the Texas Rehabilitation Commission listed in the telephone white pages under "Texas-State of" and "Rehabilitation Commission."

### VETERANS' BENEFITS PROGRAM

The Veterans' Benefits Program is coordinated by the Veterans' Affairs Office of the College. Services of this office include counseling the veteran concerning benefits, Veterans Administration loans, Veterans Administration work study programs, financial problems, career counseling, and other areas related to the veteran's general welfare.

When testing indicates that a veteran should enroll in developmental courses such as reading, writing, or math, the student may pursue these courses with no charge to his or her benefits. Tutoring services are also available to the veteran who is having learning difficulties in one or more subjects.

The veteran student should be aware of some of the Veterans Administration guidelines. Violation of these guidelines causes complications in receiving monthly benefits or loss of those benefits.

1. Class attendance is mandatory. Failure to attend class results in suspension from class.
2. A veteran student who plans to enroll in developmental courses must be tested and show a need in basic skills before enrolling in these courses.

3. A veteran student enrolled in television courses must be pursuing more on-campus credit hours than hours taken by television.
4. A veteran student who has successfully completed credit hours at another college or university must submit a transcript from that college or university before applying for V.A. benefits. The transcript is evaluated and credit granted when applicable.
5. A veteran student must enroll in courses required for a degree program. Information on degree requirements may be obtained from the Registrar's Office.
6. A veteran student who withdraws or who is dropped from all courses attempted during a semester is considered as making unsatisfactory progress by the V.A. and may lose future benefits. A veteran student must also maintain a satisfactory grade point average as outlined in the catalog.

The above V.A. regulations are subject to change without notice. Students should contact the Veterans' Affairs Office in order to be aware of current regulations and procedures.

**HAZLEWOOD ACT**

Under the Hazlewood Act certain veterans who have exhausted remaining educational benefits from the Veterans Administration can attend Texas state-supported institutions and have their tuition and fees waived. To be eligible, students must have been residents of Texas at the time they entered the service, have an honorable discharge and must now be residents of Texas. To apply, students must submit a Hazlewood Act application and a copy of their discharge papers to the Financial Aid Office.

**STUDENT EMPLOYMENT**

*The College Work/Study Program* is a Federal program to assist students through jobs both on and off campus. To be eligible, students must demonstrate financial need, be enrolled in 6 or more credit hours, and make satisfactory progress toward their educational goal. Students may work a maximum of 20 hours per week.

*The Student Employment Program* provides some jobs on campus for students who do not meet the financial need requirement of the College Work/Study Program. Students must be enrolled in 6 or more credit hours and make satisfactory progress toward their educational goal. Students may work a maximum of 20 hours per week. The Placement Office helps any student who wants on-campus employment. This part-time employment may be in the form of on-campus placement, work-study programs, and off-campus student assistantships. See also the "Job Placement" section in this catalog.

**ACADEMIC PROGRESS REQUIREMENT**

Students who receive financial aid are required by government regulations to make measureable progress toward the completion of their course of study.

*The 2.0 Grade Point Average (GPA) Requirement*

a. Students funded for full-time course loads must complete a full-time course load with a minimum GPA of 2.0 each semester an award is made.
b. Students funded for part-time course loads are expected to achieve a minimum GPA of 2.0 on all courses funded each semester. No drops or withdrawals are allowed.

*Academic Compliance*

a. If the 2.0 GPA requirement is not met once, a warning notice is mailed to the student. Transfer students entering the District on probation are considered to be in this category.
b. If the 2.0 GPA requirement is not met twice, no award is made for six months.
c. A third chance may be approved at the discretion of the Financial Aid Director after the six-month suspension period. The student must sign acknowledgement of conditional approval before the award is

made. If the 2.0 GPA requirement is not met three times, no award is made for two years.

d. A fourth chance may be approved at the discretion of the Financial Aid Director after the two-year suspension period. If approved, the student must sign a warning notice before the award is made.

Students may appeal the Financial Aid Director's decisions to the Vice President of Student Services. The appeal must be in writing.

The Financial Aid Office reserves the right to review and cancel awards at any time because of (1) failure to maintain an acceptable academic record, (2) failure to meet the minimum course load requirements, (3) changes in the financial status of the student or the student's family, or (4) failure by the student to meet any regulations governing the program from which the student is receiving aid. It is understood that the student is aware of the conditions under which aid is offered and agrees to meet all requirements.

**SHORT-TERM LOANS**

The College offers students short-term loans. Students may borrow up to $100 at no interest if funds are available. The loan must be repaid within sixty to ninety days or before the end of the semester in which the money is borrowed.

**JOB PLACEMENT SERVICES**

The Placement Office is available to assist any student in job placement, either on or off-campus. Job openings are listed in the Placement Office. The Placement Office also works directly with students and community employers to locate jobs and students qualified to fill them. Career placement assistance is available for students nearing the end of their course of study. In addition to listing full-time career opportunities, the Placement Office also assists students in developing resumes, preparing for interviews, and developing successful job search strategies.

# VII. STUDENT CODES AND EXPECTATIONS

**1. General Provisions**

**a. Purpose**

(1)A student at a college of the Dallas County Community College District neither loses the rights nor escapes the responsibilities of citizenship. He is expected to obey both the penal and civil statutes of the State of Texas and the Federal Government and the Board of Trustees rules, college regulations and administrative rules. He may be penalized by the college for violating its standards of conduct even though he is also punished by State or Federal authorities for the same act.

(2) This code contains regulations for dealing with alleged student violations of college standards of conduct in a manner consistent with the requirements of procedural due process. It also contains descriptions of the standards of conduct to which students must adhere and the penalties which may be imposed for the violation of those standards.

**b. Scope**

(1) This code applies to individual students and states the function of student, faculty, and administrative staff members of the college in disciplinary proceedings.

(2) The College has jurisdiction for disciplinary purposes over a person who was a student at the time he allegedly violated a Board policy, college regulation, or administrative rule.

**c. Definitions** In this code, unless the context requires a different meaning:

(1) "Class day" means a day on which classes before semester or summer session final examinations are regularly scheduled or on which semester or summer session final examinations are given;

(2) "Vice President of Student Services" means the Vice President of Student Services, his delegate(s) or his representative(s);

(3) "Director of Student Development" means the Director of Student Development, his delegate(s) or his representative(s);

(4) "Director of Campus Security" means the Director of Campus Security, his delegate(s) or his representative(s);

(5) "President" means the President of a college of the Dallas County Community College District;

(6) "Student" means a person enrolled in a college of the Dallas County Community College District, or a person accepted for admission to the College;

(7) All vice presidents, deans, associate deans, assistant deans, directors, and division chairmen of the College for the purposes of this code shall be called "administrators";

(8) "Complaint" is a written summary of the essential facts constituting a violation of a Board policy, College regulation or administrative rule;

(9) "Board" means the Board of Trustees, Dallas County Community College District;

(10) "Chancellor" means the Chancellor of the Dallas County Community College District;

(11) "Major violation" means one which can result in suspension or expulsion from the College or denial of degree;

(12) "Minor violation" means one which can result in any disciplinary action other than suspension or expulsion from the College or denial of degree.

**2. Standards of Conduct**

**a. Basic Standard: The basic standard of behavior requires a student:**

(1) Not to violate any municipal, State, or Federal laws, and

(2) Not to interfere with or disrupt the orderly educational processes of any college of the Dallas County Community College District.

A student is not entitled to greater immunities or privileges before the law than those enjoyed by other citizens generally.

**b. Enumerated Standards:** The succeeding regulations describe offenses for which disciplinary proceedings may be initiated, but the College expects from its students a higher standard of conduct than the minimum required to avoid discipline. The College expects all students to obey the law, to show respect for properly constituted authority, to perform contractual obligations, to maintain absolute integrity and a high standard of individual honor in scholastic work, and to observe standards of conduct appropriate for a community of scholars. In short, a student enrolled in the College assumes an obligation to conduct himself in a manner compatible with the College function as an educational institution.

(1) Student Identification:

(a) Issuance and Use: I.D. cards will be distributed during the first week of school and will be required for the following events and services: library usage, concerts, lectures, campus movies, use of student center facilities, voting in campus elections, and tickets for campus and community events. All I.D. cards are the property of the College. Students are required to be in possession of their I.D. cards at all times and are prohibited from loaning their I.D. cards to any other person for any reason. Likewise, it is prohibited to use any other card except the one issued by the College. On withdrawal from school, a student must return his I.D. card to the Registrar's Office.

(b) Replacement Cards: If lost, duplicate I.D. cards may be obtained in the Business Office by payment of a $4.00 charge.

(2) Use of District Facilities: Each college of the Dallas County Community College District is a public facility entrusted to the Board of Trustees and college officials for the purpose of conducting the process of education. Activities which appear to be compatible with this purpose are approved through a procedure maintained in the Student Development Office. Activities which appear to be incompatible or in opposition to the purposes of education are normally disapproved. It is imperative that a decision be made prior to an event in order to fulfill the trust of the public. No public facility could be turned over to the indiscriminate use of anyone for a platform or forum to promote random causes. Thus, reasonable controls are exercised by college officials of the use of facilities to ensure the maximum use of the College for the purpose for which it was intended.

Therefore, anyone planning an activity at one of the colleges of the Dallas County Community College District which requires space to handle two or more persons to conduct an activity must have prior approval. Application forms to reserve space must be acquired through the Student Development Office. This office also maintains a statement on procedures for reserving space.

(3) Speech and Advocacy: Students have the right of free expression and advocacy; however, the time, place and manner of exercising speech and advocacy shall be regulated in such a manner to ensure orderly conduct, non-interference with college functions or activities, and identification of sponsoring groups or individuals. Meetings must be registered with the Student Development Office. An activity may be called a meeting when the following conditions prevail at the activity:

(a) When two or more persons are sitting, standing, or lounging so as to hear or see a presentation or discussion of a person or a group of persons.

(b) When any special effort to recruit an audience has preceded the beginning of discussions or presentations.

(c) When a person or group of persons appears to be conducting a systematic discussion or presentation on a definable topic.

(4) Disruptive Activities: Any activity which interrupts the scheduled activities or processes of education may be classified as disruptive; thus, anyone who initiates in any way any gathering leading to disruptive activity will be violating college regulations and/or State law.

The following conditions shall normally be sufficient to classify behavior as disruptive:

(a) Blocking or in any other way interfering with access to any facility of the College.

(b) Inciting others to violence and/or participating in violent behavior, e.g., assault; loud or vulgar language spoken publicly; or any form of behavior acted out for the

purpose of inciting and influencing others.

(c) Holding rallies, demonstrations, or any other form of public gathering without prior approval of the College.

(d) Conducting any activity which causes college officials to be drawn off their scheduled duties to intervene, supervise or observe the activity in the interest of maintaining order at the College.

Furthermore, the Vice President of Student Services shall enforce the provisions of the Texas Education Code, Section 4.30.

**Education Code Section 4.30 provides:**

(a) No person or group of persons acting in concert may willfully engage in disruptive activity or disrupt a lawful assembly on the campus or property of any private or public school or institution of higher education or public vocational and technical school or institute.

(b) For the purposes of this section, disruptive activity means:

(1) Obstructing or restraining the passage of persons in an exit, entrance, or hallway of any building without the authorization of the administration of the school;

(2) Seizing control of any building or portion of a building for the purpose of interfering with any administrative, educational, research, or other authorized activity;

(3) Preventing or attempting to prevent by force or violence or the threat of force or violence any lawful assembly authorized by the school administration.

(4) Disrupting by force or violence or the threat of force or violence a lawful assembly in progress; or

(5) Obstructing or restraining the passage of any person at an exit or entrance to said campus or property or preventing or attempting to prevent by force or violence or by threats thereof the ingress or egress of any person to or from said property or campus without the authorization of the administration of the school.

(c) For the purpose of this section, a lawful assembly is disrupted when any person in attendance is rendered incapable of participating in the assembly due to the use of force or violence or due to a reasonable fear that force or violence is likely to occur.

(d) A person who violates any provisions of this section is guilty of a misdemeanor and upon conviction is punishable by a fine not to exceed $200 or by confinement in jail for not less than 10 days nor more than 6 months, or both.

(e) Any person who is convicted the third time of violating this section shall not thereafter be eligible to attend any school, college, or university receiving funds from the State of Texas for a period of two years from such third conviction.

(f) Nothing herein shall be construed to infringe upon any right of free speech or expression guaranteed by the Constitutions of the United States or the State of Texas.

(5) Drinking of Alcoholic Beverages: Each college of the Dallas County Community College District specifically forbids the drinking of or possession of alcoholic beverages on its campus.

(6) Gambling: State law expressly forbids gambling of any kind on State property.

(7) Hazing: Each college of the Dallas County Community College District, as a matter of principle and because it is a violation of State law, is opposed to and will endeavor to prevent hazing activities which involve any of the following factors singly or in conjunction:

(a) Any actions which seriously imperil the physical well-being of any student (all walks and all calisthenics are held to be actions which seriously imperil the physical well-being of students and are, therefore, accordingly specifically prohibited).

(b) Activities which are by nature indecent, degrading, or morally offensive.

(c) Activities which by their nature may reasonably be assumed to have a degrading effect upon the mental or moral attitude of the persons participating therein.

The institutional policy is one discouraging all activities incompatible with the dignity of the college student and exercising disciplinary correction over such of these activities as escape from reasonable control, regulation, and decency. From the institutions's point of view, the responsibility for the control of hazing activities, if engaged in by an organization, rests in the elected and responsible officials of the group, as individuals, and in the group as a whole, since it sets and approves the policy to be followed in these matters. It is accordingly recommended that all groups be informed that both their officers and the group itself will be held singularly and collectively responsible for any actions considered to be unreasonable, immoral, and irresponsible with the policy limits detailed above. Individual activity falling in this category shall be handled on an individual basis and will result in disciplinary action.

(8)Scholastic Dishonesty:

(a) The Vice President of Student Services may initiate disciplinary proceedings against a student accused of scholastic dishonesty.

(b) "Scholastic dishonesty" includes, but is not limited to, cheating on a test, plagiarism and collusion.

(c) "Cheating on a test" includes:

(i) Copying from another student's test paper;

(ii) Using, during a test, materials not authorized by the person giving the test;

(iii) Collaborating with another student during a test without authority;

(iv) Knowingly using, buying, selling, stealing, transporting or soliciting in whole or part the contents of an unadministered test;

(v) Substituting for another student, or permitting another student to substitute for one's self, to take a test; and

(vi) Bribing another person to obtain an unadministered test or information about an unadministered test.

(d) "Plagiarism" means the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit.

(e) "Collusion" means the unauthorized collaboration with another person in preparing written work for credit.

(9) Financial Transactions with the College:

(a) No student may refuse to pay or fail to pay a debt he owes to the College.

(b) No student may give the College a check, draft or order with the intent to defraud the College.

(c) A student's failure to pay the College the amount due on a check, draft or order, on or before the fifth class day after the day the Business Office sends written notice that the drawee has rightfully refused payment on the check, draft or order, is prima facie evidence that the student intended to defraud the College.

(d) The Vice President of Student Services may initiate disciplinary proceedings against a student who has allegedly violated the provisions of this section.

(10) Other Offenses:

(a) The Vice President of Student Services may initiate disciplinary proceedings against a student who:

(i) Conducts himself in a manner that significantly interferes with college teaching, research, administration, disciplinary proceedings or other college activities, including its public service functions, or with other authorized activities on college premises;

(ii) Damages, defaces or destroys college property or property of a member of the college community or campus visitor;

(iii) Knowingly gives false information in response to requests from the College;

(iv) Engages in hazing, as defined by State law and college regulations;

(v) Forges, alters or misuses college documents, records, or I.D. cards;

(vi) Violates college policies or regulations concerning parking, registration of student organizations, use of college facilities, or the time, place, and manner of public expression;

(vii) Fails to comply with directions of college officials acting in the preformance of their duties;

(viii) Conducts himself in a manner which adversely affects his suitability as a member of the academic community or endangers his own safety or the safety of others;

(ix) Illegally possesses, uses, sells or purchases drugs, narcotics, hallucinogens, or alcoholic beverages on or off campus;
(x) Commits any act which is classified as an indictable offense under either State or Federal law.

**3. Disciplinary Proceedings**

**a. Administrative Disposition**

(1) Investigation, Conference and Complaint:
(a) When the Vice President of Student Services Office receives information that a student has allegedly violated a Board policy, college regulation, or administrative rule, the Vice President or a subordinate delegated by him shall investigate the alleged violation. After completing the preliminary investigation, the Vice President may:
(i) Dismiss the allegation as unfounded, either before or after conferring with the student; or
(ii) Proceed administratively under 3(a) 3(d); or
(iii) Prepare a complaint based on the allegation for use in disciplinary hearings along with a list of witnesses and documentary evidence supporting the allegation.
(b) The President may take immediate interim disciplinary action, suspend the right of a student to be present on the campus and to attend classes, or otherwise alter the status of a student for violation of a Board policy, college regulation, or administrative rule, when in the opinion of such official the interest of the College would best be served by such action.
(c) No person shall search a student's personal possessions for the purpose of enforcing this code unless the individual's prior permission has been obtained. Searches by law enforcement officers of such possessions shall be only authorized as by law.

(2) Summons:
(a) A student may be summoned to appear in connection with an alleged violation by sending him a letter by certified mail, return receipt requested, addressed to the student at his address appearing in the Registrar's Office records. It is the student's responsibility to immediately notify the Registrar's Office of any change of address.
(b) The letter shall direct the student to appear at a specified time and place not less than three class days after the date of the letter. The letter shall also describe briefly the alleged violation and shall state the Vice President of Student Services' intention to handle the allegation as a minor or major violation.
(c) The Vice President of Student Services may place on disciplinary probation a student who fails without good cause to comply with a letter of summons, or the Vice President may proceed against the student under 3(a)(3).

(3) Disposition:
(a) At a conference with a student in connection with an alleged minor or major violation, the Vice President shall advise the student of his rights.
(b) A student may refuse administrative disposition of the alleged violation and, on refusal, is entitled to a hearing under 3(b) of this code. If a student accepts administrative disposition, he shall sign a statement that he understands the nature of the charges, his right to a hearing or to waive the same, the penalty imposed, and his waiver of the right to appeal.
(c) The Vice President of Student Services shall prepare an accurate, written summary of each administrative disposition and forward a copy to the student (and, if the student is a minor, to the parent or guardian of the student), to the Director of Student Development and to the Director of Campus Security.
(d) The Vice President of Student Services may impose disciplinary action as follows:
(i) For minor violations, any action authorized by 4a(1) through (8) of this code.
(ii) For major violations, any action authorized by 4a of this code.

**B. Student Discipline Committee**

(1) Composition; Organization:
(a) When a student refuses administrative disposition of either a major or a minor violation, he is entitled to a hearing before the Student Discipline Committee. This request must be made in writing on or before the third day following administrative disposition. The Committee shall be composed of any three administrative officers of the College. The Committe shall be appointed by the President for each hearing on a rotating basis or on a basis of availability.
(b) The Student Discipline Committee shall elect a Chairman from the three appointed members. The Chairman of the Committee shall rule on the admissibility of evidence, motions, and objections to procedure, but a majority of the committee members may override the Chairman's ruling. All members of the Committee are eligible to vote in the hearing.
(c) Chairman: The Chairman shall set the date, time, and place for the hearing and may summon witnesses, and require the production of documentary and other evidence.
(d) The Vice President of Student Services shall represent the College before the Student Discipline Committee and present evidence to support any allegations of violations of Board policy, college regulation, or administrative rules. The Vice President of Student Services may be assisted by legal counsel when in the opinion of the Vice President of Student Services the best interests of the student or the College would be served by such assistance.

(2) Notice:
(a) The Committee Chariman shall by letter notify the student concerned of the date, time and place for the hearing. The letter shall specify a hearing date not less than three (3) nor more than ten (10) class days after the date of the letter. If the student is under 18 years of age, a copy of the letter shall be sent to the parents or guardian.
(b) The Chairman may for good cause postpone the hearing so long as all interested parties are notified of the new hearing date, time and place.
(c) The Student Discipline Committee may hold a hearing at any time if the student has actual notice of the date, time, and place of the hearing, and consents in writing thereto, and the President, or his designated representative in his absence, states in writing to the Committee that, because of extraordinary circumstances the requirements are inappropriate.
(d) The notice shall specify whether the charge or charges are considered minor violations or major violations; shall direct the student to appear before the Committee on the date and at the time and place specified, and shall advise the student of the following rights:
(i) To a private hearing;
(ii) To appear alone or with legal counsel (if charges have been evaluated as a major violation or if the College is represented by legal counsel);
(iii) To have his parents or legal guardian present at the hearing;
(iv) To know the identity of each witness who will testify against him;
(v) To cause the Committee to summon witnesses, require the production of documentary and other evidence possessed by the College, and to offer evidence and argue in his own behalf;
(vi) To cross-examine each witness who testifies against him;
(vii) To have a stenographer present at the hearing to make a stenographic transcript of the hearing, at the student's expense, but the student is not permitted to record the hearing by electronic means;
(viii) To appeal to the Faculty-Student Board of Review, subject to the limitations established by 3c(1)(a) of this code.
(e) The Vice President of Student Services may suspend a student who fails without good cause to comply with a letter sent under this section, or, at his discretion, the Vice President of Student Services may proceed with the hearing in the student's absence.

(3) Preliminary Matters:
(a) Charges arising out of a single transaction or occurence, against one or more students, may be heard together or, either at the option of the Committee or the

request by one of the students-in-interest, separate hearings may be held.

(b) At least three (3) class days before the hearing date, the student concerned shall furnish the Committee Chairman with:

(i) The name of each witness he wants summoned and a description of all documentary and other evidence possessed by the College which he wants produced;

(ii) An objection that, if sustained by the Chairman of the Student Discipline Committee, would prevent the hearing;

(iii) The name of legal counsel, if any, who appear with him;

(iv) A request for a separate hearing, if any, and the grounds for such a request.

(c) When the hearing is set under waiver of notice or for other good cause determined by the Committee Chairman, the student concerned is entitled to furnish the information described in paragraph (b) hereof at any time before the hearing begins.

(4) Procedure:

(a) The hearing shall be informal and the Chairman shall provide reasonable opportunities for witnesses to be heard. The College may be represented by staff members of the Vice President of Student Services Office, legal counsel and other persons designated by the President. The hearing shall be open to the public so long as space is available, but may include the following persons on the invitation of the student:

(i) Representatives of the College Council;

(ii) A staff member of the College newspaper;

(iii) Representatives of the Faculty Association;

(iv) Student's legal counsel; and

(v) Members of the student's immediate family.

(b) The Committee shall proceed generally as follows during the hearing:

(i) The Vice President of Student Services shall read the complaint;

(ii) The Vice President of Student Services shall inform the student of his rights, as stated in the notice of hearing;

(iii) The Vice President of Student Services shall present the College's case;

(iv) The student may present his defense;

(v) The Vice President of Student Services and the student may present rebuttal evidence and argument;

(vi) The Committee will vote the issue of whether or not there has been a violation of Board policy, college regulation or administrative rule; if the Committee finds the student has violated a Board policy, college regulation or administrative rule, the Committee will determine an appropriate penalty.

(vii) The Committee shall inform the student of the decision and penalty, if any;

(viii) The Committee shall state in writing each finding of a violation of Board policy, college regulation or administrative rule, and the penalty determined. Each committee member concurring in the finding and penalty shall sign the statement. The Committee may include in the statement its reasons for the finding and penalty.

(5) Evidence:

(a) Legal rules of evidence shall not apply to hearings before the Student Discipline Committee, and the Committee may admit and give probative effect to evidence that possesses probative value and is commonly accepted by reasonable men in the conduct of their affairs. The Committee shall exclude irrelevant, immaterial and unduly repetitious evidence. The Committee shall recognize as privileged communications between a student and a member of the professional staff of the Health Center, Counseling and Guidance Center, or the Office of the Vice President of Student Services where such communications were made in the course of performance of official duties and when the matters discussed were understood by the staff members and the student to be confidential. Committee members may freely question witnesses.

(b) The Committee shall presume a student innocent of the alleged violation until it is convinced by clear and convincing evidence that the student violated a Board policy, college regulation or administrative rule.

(c) All evidence shall be offered to the Committee during the hearing and made a part of the hearing record. Documentary evidence may be admitted in the form of copies of extracts, or by incorporation by reference. Real evidence may be photographed or described.

(d) A student defendant may not be compelled to testify against himself.

(6) Record:

(a) The hearing record shall include: a copy of the notice of hearing; all documentary and other evidence offered or admitted in evidence; written motions, pleas, and any other materials considered by the Committee; and the Committee's decisions.

(b) If notice of appeal is timely given as hereinafter provided, the Vice President of Student Services, at the direction of the Committee Chariman, shall send the record to the Board of Review, with a copy to the student appellant on or before the tenth class day after the notice of appeal is given.

**c. Faculty-Student Board of Review**

(1) Right to Appeal:

(a) In those cases in which the disciplinary penalty imposed was as prescribed in 4a(6) through (11), the student may appeal the decision of the Student Discipline Committee, or the decision of the President in an interim action under 3a(1)(b) to the Faculty-Student Board of Review. Disciplinary actions taken under 4a(1) through (5) cannot be appealed beyond the Student Discipline Committee. A student appeals by giving written notice to the Vice President of Student Services on or before the third class day after the day the decision or action is announced. This notice may be informal, but shall contain the student's name, the date of the decision or action, the name of his legal counsel, if any, and a simple request for appeal.

(b) Notice of appeal timely given suspends the imposition of penalty until the appeal is finally decided, but interium action may be taken as authorized under 3a(1)(b).

(2) Board Composition:

(a) The President shall appoint Boards of Review to hear appeals under this code. Each such Board shall have three faculty representatives and two students appointed by the President in alphabetical rotation from available members of the Review Panel.

(b) The Review Panel shall have twenty-five (25) members, selected as follows:

(i) Fifteen (15) representatives from the faculty, recommended by the President of the Faculty Association and appointed by the President of the College for three-year staggered terms.

(ii) Ten (10) students shall be appointed by the President of the College for one-year terms. Student members must have an overall 2.0 average on all college work attempted at the time of the nomination and must not have a discipline case pending.

(c) The President shall instruct the Board of Review members on students disciplinary policies, rules, and hearing procedures as soon as practicable after the members are appointed.

(3) Consideration of Appeal:

(a) The Board of Review shall consider each appeal on the record of the Student Discipline Committee and for good cause shown, original evidence and newly discovered evidence may be presented.

(b) Upon timely appeal, the President shall select a Board of Review as aforesaid and shall notify the student

appellant and the Vice President of Student Services in writing of the time, date, and place of the hearing as determined by the President.

(c) The President will designate one of the members of the Board of Review to serve as Chariman.

(d) Appellate hearings will follow the procedure prescribed in 3b of this code.

(e) The Board of Review will hear oral argument and receive written briefs from the student appellant and Vice President of Student Services or their representatives.

(f) The Board of Review, after considering the appeal, may affirm the Student Discipline Committee's decision, reduce the penalty determined or otherwise modify the decision of the Student Discipline Committee, or dismiss the complaint.

(g) The Board of Review shall modify or set aside the finding of violation, penalty or both, if the substantive rights of the student were prejudiced because the Student Discipline Committee's finding of facts, conclusions or decisions were:

(i) In violation of a Federal or State law, Board policy, college regulation, administrative rule, or authorized procedure;

(ii) Clearly erroneous in view of the reliable probative and substantial evidence on the complete hearing; or

(iii) Capricious, or characterized by abuse of discretion or clearly unwarranted exercise of discretion.

(h) The Board of Review may not increase a penalty assessed by the Student Discipline Committee.

(4) Petition for Administrative Review

(a) A student is entitled to appeal in writing to the Board of Trustees through the President, the Chancellor, and the Chairman of the Board. The President shall automatically review every penalty of expulsion.

(b) A petition for review is informal but shall contain, in addition to the information required by 3c(1)(a), notice of appeal, the date of the Board of Review's action on the student's appeal and his reasons for disagreeing with the Board's action. A student shall file his petition with the President on or before the third class day after the day the Board of Review announces its action on the appeal. If the President rejects the petition, and the student appellant wishes to petition the Chancellor, he shall file the petition with the Chancellor on or before the third class day after the President rejects the petition in writing. If the Chancellor rejects the petition, and the student appellant wishes to petition the Board of Trustees, he shall file the petition with the Chairman of said Board on or before the third class day after the day the Chancellor rejects the petition in writing.

(c) The President, the Chancellor, and the Board of Trustees in their review may take any action that the Student Discipline Committee is authorized to take. They may receive written briefs and hear oral argument during their review.

**4. Penalties**

**a. Authorized Disciplinary Penalties:** The Vice President of Student Services, under 3a, or the Student Discipline Committee, under 3b, or the Faculty-Student Board of Review, under 3c, may impose one or more of the following penalties for violation of a Board policy, college regulation, or administrative rule:

(1) Admonition
(2) Warning probation
(3) Disciplinary probation
(4) Withholding of transcript or degree
(5) Bar against readmission
(6) Restitution
(7) Suspension of rights or privileges
(8) Suspension of eligibility for official athletic and non-athletic extracurricular activities
(9) Denial of degree
(10) Suspension from the College
(11) Explusion from the College

**b. Definitions:** The following definitions apply to the penalities provided in 4a:

(1) An "Admonition" is a written reprimand from the Vice President of Student Services to the student on whom it is imposed.

(2) "Warning probation" indicates that further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires.

(3) "Disciplinary probation" indicates that further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires. Students will be placed on disciplinary probation for engaging in activities such as the following: being intoxicated, misuse of I.D. card, creating a disturbance in or on campus facilities, and gambling.

(4) "Withholding of transcript or degree" is imposed upon a student who fails to pay a debt owed the College or who has a disciplinary case pending final disposition. The penalty terminates on payment of the debt or final disposition of the case.

(5) "Bar against readmission" is imposed on a student who has left the College on enforced withdrawal for disciplinary reasons.

(6) "Restitution" is reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.

(7) "Disciplinary suspension" may be either or both of the following:

(a) "Suspension of rights and privileges" is an elastic penalty which may impose limitations or restrictions to fit the particular case.

(b) "Suspension of eligibility for official athletic and non-athletic extracurricular activities" prohibits, during the period of suspension, the student on whom it is imposed from joining a registered student organization; taking part in a registered student organization's activities, or attending its meetings or functions; and from participating in an official athletic or non-athletic extracurricular activity. Such suspension may be imposed for any length of time up to one calendar year. Students will be placed on disciplinary suspension for engaging in activities such as the following: having intoxicating beverages in any college facility; destroying State property or student's personal property; giving false information in response to requests from the College; instigating a disturbance or riot; stealing; possession, use, sale or purchase of illegal drugs on or off campus; any attempt at bodily harm, which includes taking an overdose of pills or any other act where emergency medical attention is required; and conviction of any act which is classified as a misdemeanor or felony under State or Federal law.

(8) "Denial of degree" may be imposed on a student found guilty of scholastic dishonesty and may be imposed for any length of time up to and including permanent denial.

(9) "Suspension from the College" prohibits, during the period of suspension, the student on whom it is imposed from being initiated into an honorary or service organization; from entering the college campus except in response to an official summons; and from registering, either for credit or non-credit, for scholastic work at or through the College.

(10) "Expulsion" is permanent severance from the College. This policy shall apply uniformly to all of the colleges of the Dallas County Community College District.

In the event any portion of this policy conflicts with the State law of Texas, the State law shall be followed.

# General Education Courses

For the Seven
Member Colleges
of the Dallas County
Community College District

**DEFINITION OF TERMS**

The following terms are used throughout the catalog and particularly in this section of Course Descriptions. A brief explanation follows each term.

1. *Concurrent Enrollment*
   (a) Enrollment by the same student in two different colleges of the District at the same time, or (b) enrollment by a high school senior in a high school and one of the District colleges at the same time, or (c) enrollment by a student in two related courses in the same semester.
2. *Contact Hours* - The number of clock hours a student spends in a given course during the semester.
3. *Credit Hours* (Cr.) - College work is measured in units called credit hours. A credit hour value is assigned to each course and is normally equal to the number of hours the course meets each week. Credit hours are sometimes referred to as semester hours.
4. *Elective* - A course chosen by the student that is not required for a certificate or degree.
5. *Flexible Entry Course* - A course that permits beginning or ending dates other than the beginning or ending of the semester. Consult the class schedule for further information.
6. *Laboratory Hours* (Lab.) - The number of clock hours in the fall or spring semester the student spends each week in the laboratory or other learning environment.
7. *Lecture Hours* (Lec.) - The number of clock hours in the fall or spring semester the student spends each week in the classroom.
8. *Major* - The student's main emphasis of study (for example, Automotive Technology, Psychology, etc.)
9. *Performance Grades* - Grades assigned point values, including A, B, C, D, and F.
10. *Prerequisite* - A course that must be successfully completed or a requirement such as related life experiences that must be met before enrolling in another course.

In the following course descriptions, the number of credit hours for each course is indicated in parenthesis opposite the course number and title. Courses numbered 100 (except Music 199, Art 199 and Theater 199) or above may be applied to requirements for associate degrees. Courses numbered below 100 are developmental in nature and may not be applied to degree requirements. Students are urged to consult their counselors or specific college catalogs for information about transferability of courses to four-year institutions. Course prerequisites may only be waived by the appropriate division chairperson.
All courses listed in this catalog may not be offered during the 1980-1981 year.

**ANTHROPOLOGY (ANT) 100 (3)**
INTRODUCTION TO ANTHROPOLOGY (3 LEC.)

This course surveys the origin of mankind involving the processes of physical and cultural evolution, ancient man, and preliterate man. Attention is centered on fossil evidence, physiology and family/group roles and status.

**ANTHROPOLOGY (ANT) 101 (3)**
CULTURAL ANTHROPOLOGY (3 LEC.)

Cultures of the world are surveyed and emphasis given to those of North America. Included are the concepts of culture, social and political organization, language, religion and magic, and elementary anthropological theory. (This course is offered on campus and may be offered via television.)

**ANTHROPOLOGY (ANT) 104 (3)**
AMERICAN INDIAN CULTURE (3 LEC.)

Native Americans are studied 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-determination, health care, etc.

**ANTHROPOLOGY (ANT) 110 (3)**
THE HERITAGE OF MEXICO (3 LEC.)

Students may register for either History 110 or Anthropology 110 but may receive credit for only one of the two. This course (cross-listed as History 110) deals with the archeology of Mexico beginning with the first humans to enter the North American Continent and culminating with the arrival of the Spanish in 1519 A.D. Emphasis is archaic cultures, the Maya, the Toltec, and Aztec empires.

**ANTHROPOLOGY (ANT) 208 (3)**
MULTICULTURAL STUDIES (3 LEC.)

Prerequisite: Anthropology 101 or consent of instructor. This course is a multicultural approach to the study of modern Texas. Emphasis is on African, Anglo and Hispanic cultures. Field experiences and interviews are interspersed with lecture to provide opportunities for personal contact with various cultural behaviors.

**ANTHROPOLOGY (ANT) 210 (3)**
LANGUAGE, CULTURE AND PERSONALITY (3 LEC.)

Prerequisite: Anthropology 101 or consent of instructor. Interrelated aspects of language, culture and personality are presented. Special consideration is given to intellectual, social and behavioral problems characteristic of multilingual, multicultural societies.

**ANTHROPOLOGY (ANT) 231 (3)**
INTRODUCTION TO ARCHEOLOGY (3 LEC.)

This course is an anthropological approach to archeology. Topics include an introduction to the study of humanity's past. How archeologists retrieve, process, analyze and interpret surviving prehistoric materials is covered, as well as a survey of world prehistory through neolithic times.

**ART (ART) 103 (1)**
INTRODUCTION TO ART (3 LAB.)

Materials and techniques of studio art are introduced for the non-major. Included are basic design concepts and traditional media. Laboratory fee.

**ART (ART) 104 (3)**
ART APPRECIATION (3 LEC.)

Films, lectures, slides and discussions focus on the theoretical, cultural and historical aspects of the visual arts. Emphasis is on the development of visual and aesthetic awareness.

**ART (ART) 105 (3)**
SURVEY OF ART HISTORY (3 LEC.)

This course covers the history of art from prehistoric time through the Renaissance. It explores the cultural, geophysical and personal influences on art styles.

**ART (ART) 106 (3)**
SURVEY OF ART HISTORY (3LEC.)

This course covers the history of art from the Baroque period through the present. It explores the cultural, geophysical and personal influences on art styles.

**ART (ART) 110 (3)**
DESIGN I (2 LEC., 4 LAB.)

Basic concepts of design with two-dimensional materials are explored. The use of line, color, illusion of space or mass, texture, value, shape and size in composition is considered.

**ART (ART) 111 (3)**
DESIGN II (2 LEC., 4 LAB.)

Basic concepts of design with three-dimensional materials are explored. The use of mass, space, movement and texture is considered. Laboratory fee.

**ART (ART) 114 (3)**
DRAWING I (2 LEC., 4 LAB.)

This beginning course investigates various media, techniques and subjects. It explores perceptual and descriptive possibilities and considers drawing as a developmental process as well as an end in itself.

**ART (ART) 115 (3)**
DRAWING II (2 LEC., 4 LAB.)

Prerequisite: Art 114. This course is an expansion of Art 114. It stresses the expressive and conceptual aspects of drawing, including advanced compositional arrangements, a range of wet and dry media, and the

development of an individual approach to theme and content.

**ART (ART) 116 (3)**
INTRODUCTION TO JEWELRY I (2 LEC., 4 LAB.)

Prerequisites: Art 110, Art 111, or the consent of the instructor. The basic techniques of fabrication and casting of metals are presented. Emphasis is on original design. Laboratory fee.

**ART (ART) 117 (3)**
INTRODUCTION TO JEWELRY II (2 LEC., 4 LAB.)

Prerequisite: Art 116. This course continues Art 116. Advanced fabrication and casting techniques are presented. Emphasis is on original design. Laboratory fee.

**ART (ART) 118 (3)**
CREATIVE PHOTOGRAPHY FOR THE ARTIST I (2 LEC., 4 LAB.)

Prerequisites: Art 110, Art 114, or the consent of the instructor. Creative use of the camera is studied. Photosensitive materials are examined as a means of making expressive graphic images. Emphasis is black and white processing and printing techniques. Laboratory fee.

**ART (ART) 119 (3)**
CREATIVE PHOTOGRAPHY FOR THE ARTIST II (2 LEC., 4 LAB.)

Prerequisite: Art 118 or the consent of the instructor. This course is a continuation of Art 118. Emphasis is on individual expression. Laboratory fee.

**ART (ART) 199 (1)**
ART SEMINAR (1 LEC.)

Area artist, critics and art educators speak with students about the work exhibited in the gallery and discuss current art styles and movements. They also discuss specific aspects of being artists in contemporary society.

**ART (ART) 201 (3)**
DRAWING III (2. LEC., 4 LAB.)

Prerequisites: Art 110, Art 111, Art 115, Sophomore standing and/or permission of the division chair. This course covers the analytic and expressive drawing of the human figure. Movement and volume are stressed. Laboratory fee.

**ART (ART) 202 (3)**
DRAWING IV (2 LEC., 4 LAB.)

Prerequisites: Art 201, Sophomore standing and/or permission of the division chair. This course continues Art 201. Emphasis is on individual expression. Laboratory fee.

**ART (ART) 203 (3)**
ART HISTORY (3 LEC.)

Prerequisites: Art 105 and Art 106. The development of the art of western culture during the Renaissance Period is presented. Emphasis is on the development of Renaissance art in Northern and Southern Europe.

**ART (ART) 204 (3)**
ART HISTORY (3 LEC.)

Prerequisites: Art 105 and Art 106. The development of the art of western culture from the late 19th century through today is presented. Emphasis is on the development of modern art in Europe and America.

**ART (ART) 205 (3)**
PAINTING I (2 LEC., 4 LAB.)

Prerequisites: Art 110, Art 111, Art 115 or the consent of the instructor. This studio course stresses fundamental concepts of painting with acrylics and oils. Emphasis is on painting from still life, models and the imagination.

**ART (ART) 206 (3)**
PAINTING II (2 LEC., 4 LAB.)

Prerequisite: Art 205. This course continues Art 205. Emphasis is on individual expression.

**ART (ART) 208 (3)**
SCULPTURE I (2 LEC., 4 LAB)

Prerequisites: Art 110, Art 111, Art 115 or the consent of the instructor. Various sculptural approaches are explored. Different media and techniques are used. Laboratory fee.

**ART (ART) 209 (3)**
SCULPTURE II (2 LEC., 4 LAB)

Prerequisite: Art 208. This course continues Art 208. Emphasis is on individual expression. Laboratory fee.

**ART (ART) 210 (3)**
COMMERCIAL ART I (2 LEC., 4 LAB)

Prerequisites: Art 110, Art 111, Art 115 or the consent of the instructor. The working world of commercial art is introduced. Typical commercial assignments are used to develop professional attitudes and basic studio skills. Laboratory fee.

**ART (ART) 211 (3)**
COMMERCIAL ART II (2 LEC., 4 LAB.)

Prerequisite: Art 210. This course continues Art 210. Added emphasis is on layout and design concepts. Work with simple art form reproduction techniques and the development of a professional portfolio are also included. Laboratory fee.

**ART (ART) 212 (3)**
ADVERTISING ILLUSTRATION (2 LEC., 4 LAB.)

Prerequisite: Art 210. Problems of the illustrator are investigated. Elements used by the illustrator are explored. Problem-solving projects are conducted.

**ART (ART) 215 (3)**
CERAMICS I (2 LEC., 4 LAB)

Prerequisites: Art 110, Art 111, Art 115 or the consent of the instructor. This course focuses on the building of pottery forms by coil, slab and use of the wheel. Glazing and firing are also included. Laboratory fee.

**ART (ART) 216 (3)**
CERAMICS II (2 LEC., 4 LAB.)

Prerequisite: Art 215 or the consent of the instructor. Glaze technology is studied. Advanced problems in the creation of artistic and practical ceramic ware. Laboratory fee.

**ART (ART) 220 (3)**
PRINTMAKING I (2 LEC., 4 LAB)

Prerequisites: Art 110, Art 111, Art 115, or the consent of the instructor. Basic printmaking processes are introduced. Included are planographic, intaglio, stencil and relief processes. Laboratory fee.

**ART (ART) 228 (3)**
THREE-DIMENSIONAL DESIGN (2 LEC., 4 LAB.)

Prerequisite: Art majors: Art 110, 111, 114. Drafting Technology majors: Drafting 183, Engineering 186. Development 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 esthetic form. Laboratory fee.

**ASTRONOMY (AST) 101 (3)**
DESCRIPTIVE ASTRONOMY (3 LEC.)

This course surveys the fundamentals of astronomy. Emphasis is on the solar system. Included is the study of the celestial sphere, the earth's motions, the moon, planets, asteroids, comets, meteors and meteorites. (This course is offered on campus and may be offered via television.)

**ASTRONOMY (AST) 102 (3)**
GENERAL ASTRONOMY (3 LEC.)

Stellar astronomy is emphasized. Topics include a study of the sun, the properties of stars, star clusters, nebulae, interstellar gas and dust, the Milky Way Galaxy and external galaxies.

**ASTRONOMY (AST) 103 (1)**
ASTRONOMY LABORATORY I (3 LAB.)

Prerequisite: Credit or concurrent enrollment in Astronomy 101. The student uses simple equipment to make elementary astronomical obervations of the motions of celestial objects. Also covered are elementary navigational techniques, graphical techniques of calculating the position of a planet or comet, and construction of simple observing equipment. This course includes night observations. Laboratory fee.

**ASTRONOMY (AST) 104 (1)**
ASTRONOMY LABORATORY II (3 LAB.)

Prerequisite: Credit or concurrent enrollment in Astronomy 102. The student makes and uses elementary

astronomical observations. Topics include timekeeping, the various uses of spectra, and the motions of stars and galaxies. This laboratory includes night observations. Laboratory fee.

**ASTRONOMY (AST) 111 (4)**
FUNDAMENTALS OF ASTRONOMY (3 LEC., 3 LAB)

This course concerns fundamental aspects of the solar system and the historial development of astronomical ideas. Included are studies of the celestial sphere and motions of the earth, the moon, planets, and other minor bodies. The origin and evolution of the solar system are also covered. The laboratory includes outdoor viewing sessions and study of celestial motions, elementary navigation, constellation indentification, and telescope construction. Laboratory fee.

**ASTRONOMY (AST) 112 (4)**
GENERAL INTRODUCTORY ASTRONOMY (3 LEC., 3 LAB.)

This course concerns fundamental properties of stars, stellar systems, star clusters, nebulae, interstellar gas and dust, and galaxies. Included is the study of the sun, Milky Way galaxy, stellar evolution, black holes, and current cosmological ideas. The laboratory includes outdoor viewing sessions and the study of time-keeping, use of spectra, and motions of stars and galaxies. Laboratory fee.

**BIOLOGY (BIO) 101 (4)**
GENERAL BIOLOGY (3 LEC., 3 LAB.)

This course is a prerequisite for all higher level biology courses and should be taken in sequence. Topics include the cell, tissue, and structure and function in plants and animals. Laboratory fee.

**BIOLOGY (BIO) 102 (4)**
GENERAL BIOLOGY (3 LEC., 3 LAB.)

This course is a continuation of Biology 101. Topics include Mendelian and molecular genetics, evolutionary mechanisms, and plant and animal development. The energetics and regulation of ecological communities are also studied. Laboratory fee.

**BIOLOGY (BIO) 110 (4)**
INTRODUCTORY BOTANY (3 LEC., 3 LAB.)

This course introduces plant form and function. Topics ranging from the cell through organs are included. Emphasis is on the vascular plants, including the taxonomy and life cycles of major plant divisions. Laboratory fee.

**BIOLOGY (BIO) 115 (4)**
BIOLOGICAL SCIENCE (3 LEC., 3 LAB.)

Selected topics in biological science are presented for the non-science major. Topics include the cell concept and basic chemistry as it relates to biology. An introduction to genetics, evolution, cellular processes, such as mitosis, meiosis, respiration, and photosynthesis, and plant and animal reproduction is also covered. Laboratory fee. (This course is offered on campus and may be offered via television.)

**BIOLOGY (BIO) 116 (4)**
BIOLOGICAL SCIENCE (3 LEC., 3 LAB.)

Selected topics in biological science are presented for the non-science major. Topics include the systems of the human body, disease, drug abuse, aging, evolution, ecology, and people in relation to their environment. Laboratory fee.

**BIOLOGY (BIO) 120 (4)**
INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY (3 LEC., 3 LAB.)

This coures is a foundation course for specialization in Associate Degree Nursing and Allied Health disciplines. Other students interested in the study of structure and function of the human body should consult a counselor. No science background is presupposed. Major topics include cell structure and function, organization of the body, tissues, organs, the blood and cardio-vascular system, and the respiratory system. Emphasis is on homeostasis. Laboratory fee.

**BIOLOGY (BIO) 121 (4)**
INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY (3 LEC., 3 LAB.)

Prerequisites: Biology 120. This course is a continuation of Biology 120. Major

topics include the neuro-muscular, digestive, excretory, and endocrine systems. Laboratory fee.

**BIOLOGY (BIO) 203 (4)**
INTERMEDIATE BOTANY (3 LEC., 3 LAB.)
Prerequisites: Biology 101 and 102. The major plant groups are surveyed. Emphasis is on morphology, physiology, classification, and life cycles. Evolutionary relationships of plants to each other and their economic importance to humans are also covered. Laboratory fee.

**BIOLOGY (BIO) 211 (4)**
INVERTEBRATE ZOOLOGY (3 LEC., 3 LAB.)
Prerequisite: 8 hours of biological science. This course surveys the major groups of animals below the level of chordates. Consideration is given to phylogeny, taxonomy, morphology, physiology, and biology of the various groups. Relationships and importance to higher animals and humans are stressed. Laboratory fee.

**BIOLOGY (BIO) 216 (4)**
GENERAL MICROBIOLOGY (3 LEC., 4 LAB.)
Prerequisite: Biology 102 or the consent of the instructor. Microbes are studied. Topics include growth, reproduction, nutrition, genetics, and ecology of micro-organisms. Laboratory activities constitute a major part of the course. Laboratory fee.

**BIOLOGY (BIO) 217 (4)**
FIELD BIOLOGY (3 LEC., 4 LAB.)
Prerequisite: 8 hours of biological science. Plant and animal life are surveyed in relationship to their environment. Aquatic and terrestrial communities are studied with reference to ecological principles and techniques. Emphasis is on the classification, identification, and collection of specimens in the field. Laboratory fee.

**BIOLOGY (BIO) 221 (4)**
ANATOMY AND PHYSIOLOGY I (3 LEC., 3 LAB.)
Prerequisite: Biology 102 or the consent of the instructor. This course examines the skeletal, muscular, and circulatory systems as related to humans. Emphasis is on structure, function, and the interrelationships of the systems. Laboratory fee.

**BIOLOGY (BIO) 222 (4)**
ANATOMY AND PHYSIOLOGY II (3 LEC., 3 LAB.)
Prerequisite: Biology 221 or the consent of the 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 interrelationships of these systems. Laboratory fee.

**BIOLOGY (BIO) 224 (4)**
ENVIRONMENTAL BIOLOGY (3 LEC., 3 LAB.)
Prerequisite: 6 hours of biology. The principles of aquatic and terrestial communities are presented. Emphasis is on the relationship of these principles to the problems facing people in a modern technological society. Laboratory fee.

**BIOLOGY (BIO) 226 (4)**
GENETICS (3 LEC., 3 LAB.)
This course focuses on genetics. Topics include Mendelian inheritance, recombination genetics, the biochemical theory of genetic material, and mutation theory. Plant and animal materials are used to study population genetics, linkage, gene structure and function, and other concepts of heredity. Laboratory fee.

**BIOLOGY (BIO) 230 (4)**
MAMMALIAN PHYSIOLOGY (3 LEC., 3 LAB.)
Prerequisite: 12 hours of biology, 8 hours of inorganic chemistry, or concurrent registration in organic chemistry, and the consent of the instructor. This course is a study of the function of various mammaliam systems. Emphasis is on interrelationships. Instruments are used to measure various physiological features. Laboratory fee.

**BIOLOGY (BIO) 235 (4)**
COMPARATIVE ANATOMY OF THE VERTEBRATES (3 LEC., 4 LAB.)
Prerequisites: Biology 101 and 102. For science majors and pre-medical and pre-dental students. Major groups of vertebrate class is studied. Emphasis is on morphology and evolutionary relationships. Laboratory fee.

**BUSINESS (BUS) 105 (3)**
INTRODUCTION TO BUSINESS (3 LEC.)

This course provides an overall picture of business operations. Specialized fields within business organizations are analyzed. The role of business in modern society is identified. (This course is offered on campus and may be offered via television.)

**BUSINESS (BUS) 143 (3)**
PERSONAL FINANCE (3 LEC.)

Personal financial issues are explored. Topics include financial planning, insurance, budgeting, credit use, home ownership, savings, investment, and tax problems.

**BUSINESS (BUS) 234 (3)**
BUSINESS LAW (3 LEC.)

This course presents the historical and ethical background of the law and current legal principles. Emphasis is on contracts, property, and torts.

**BUSINESS (BUS) 237 (3)**
ORGANIZATIONAL BEHAVIOR (3 LEC.)

The persisting human problems of administration in modern organizations are covered. The theory and methods of behavioral science as they relate to organizations are included.

**CHEMISTRY (CHM) 101 (4)**
GENERAL CHEMISTRY (3 LEC., 3 LAB.)

Prerequisite: Developmental Mathematics 093 or the equivalent. This course is for science and science-related majors. It covers the laws and theories of matter. The laws and theories are used to understand the properties 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.

**CHEMISTRY (CHM) 102 (4)**
GENERAL CHEMISTRY (3 LEC., 3 LAB)

Prerequisite: Chemistry 101. This course is for science and science-related majors. It is a continuation of Chemistry 101. Previously learned and new concepts are applied. Topics include solutions and colloids, chemical kinetics and equilibrium, electrochemistry, and nuclear chemistry. Qualitative inorganic analysis is also included. Laboratory fee.

**CHEMISTRY (CHM) 115 (4)**
GENERAL CHEMISTRY (3LEC., 3 LAB.)

Prerequisite: Developmental Mathematics 091 or the equivalent. This course is for non-science majors. It traces the development of theoretical concepts. These concepts are used to expain various observations and laws relating to chemical bonding reactions, states of matter, solutions, electrochemistry, and nuclear chemistry. Also included is the descriptive chemistry of some common elements and inorganic compounds. Laboratory fee.

**CHEMISTRY (CHM) 116 (4)**
GENERAL CHEMISTRY (3 LEC., 3 LAB.)

Prerequisite: Chemistry 115. This course is for non-science majors. It covers oganic chemistry and biochemistry. The important classes of organic compounds are surveyed. The concept of structure is the central theme. Biochemistry topics include carbohydrates, proteins, lipids, chemistry of heredity, disease and therapy, and plant biochemistry. Laboratory fee.

**CHEMISTRY (CHM) 201 (4)**
ORGANIC CHEMISTRY I (3 LEC., 4 LAB.)

Prerequisite: Chemistry 102. This course is for science and science-related majors. It introduces organic chemistry. The fundamental types of organic compounds are presented. Their nomenclature, classification, reactions, and applications are included. The reactions of aliphatic and aromatic compounds are discussed in terms of modern electronic theory. Emphasis is on reaction mechanisms, stereo-chemistry, transition state theory, and organic synthesis. Laboratory fee.

**CHEMISTRY (CHM) 202 (4)**
ORGANIC CHEMISTRY II (3 LEC., 4 LAB.)

Prerequisite: Chemistry 201. This course is for science and science-

related majors. It is a continuation of Chemistry 201. Topics include aliphatic and aromatic systems, polyfunctional compounds, amino acids, proteins, carbohydrates, sugars, and heterocyclic and related compounds. Instrumental techniques are used to identify compounds. Laboratory fee.

**CHEMISTRY (CHM) 203 (4)**
QUANTITATIVE ANALYSIS (2 LEC.,6 LAB.)

Prerequisite: Chemistry 102, Mathematics 101 or Mathematics 104 or the equivalent. Principles for quantitative determinations are presented. Topics include gravimetry, oxidation-reduction, indicators, and acid-base theory. Gravimetric and volumetric analysis is emphasized. Colorimetry is introduced. Laboratory fee.

**CHEMISTRY (CHM) 205 (2)**
CHEMICAL CALCULATIONS (2 LEC.)

Prerequisite: Chemistry 102. Chemical calculations are reviewed. Emphasis is on stoichiometry and chemical equilibrium.

**CHEMISTRY (CHM) 234 (4)**
INSTRUMENTAL ANALYSIS (2 LEC., 6 LAB.)

Prerequisite: Chemistry 203 or the consent of the instructor. The role of modern electronic instrumentation in analysis is explored. Topics include infrared and ultraviolet spectroscopy, gas chromatography, potentiometric titration, electrochemistry, continuous flow analysis, scintillation counting, eletrophoresis, flame photometry, and atomic absorption spectrophotometry as analytical tools. Laboratory fee.

**COLLEGE LEARNING SKILLS (CLS) 100 (1)**
COLLEGE LEARNING SKILLS (1 LEC.)

This course is for students who wish to extend their learning skills for academic or career programs. Individualized study and practice are provided in reading, study skills and composition. This course may be repeated for a maximum of three credits.

**COMMUNICATIONS (COM) 131 (3)**
APPLIED COMPOSITION AND SPEECH (3 LEC.)

Communication skills are studied as a means of preparing for one's vocation. Practice in writing letters, applications, resumes, and short reports is included.

**COMMUNICATIONS (COM) 132 (3)**
APPLIED COMPOSITION AND SPEECH (3 LEC.)

Prerequisite: Communications 131 or consent of instructor. The study of communication processes is continued. Emphasis is on written persuasion directly related to work. Expository techniques in business letters and documented reports are covered. Practice in oral communication is provided.

**DANCE (DAN) 150 (3)**
BEGINNING BALLET I (1 LEC., 3 LAB.)

This course explores basic ballet techniques. Included are posture, balance, coordination, rhythm, and flow of physical energy through the art form. Theory, terminology, ballet history, and current attitudes and events in ballet are also studied. Barre excercises and centre floor combinations are given. Laboratory fee.

**DANCE (DAN) 151 (3)**
BEGINNING BALLET II (1 LEC., 3 LAB.)

Prerequisite: Dance 150. This course is a continuation of Dance 150. Emphasis is on expansion of combinations at the barre. Connecting steps learned at centre are added. Jumps and pirouettes are introduced. Laboratory fee.

**DANCE (DAN) 155 (1)**
JAZZ I (3 LAB.)

The basic skills of jazz dance are introduced. Emphasis is on technique and development, rhythm awareness, jazz styles, and rhythmic combinations of movement. Laboratory fee.

**DANCE (DAN) 156 (1)**
JAZZ II (3 LAB.)

Prerequisite: Dance 155 or the consent of the instructor. Work on skills and style in jazz dance is continued. Technical skills, combinations of steps and skills into dance patterns, and exploration of composition in jazz form are emphasized. Laboratory fee.

**DANCE (DAN) 160 (3)**
INTRODUCTION TO DANCE HISTORY (3 LEC.)

A history of dance forms is presented. Primitive, classical, and contemporary forms are included.

**DANCE (DAN) 250 (3)**
INTERMEDIATE BALLET I (1 LEC., 3 LAB.)

Prerequisite: Dance 151. The development of ballet technique is continued. More complicated exercises at the barre and centre floor are included. Emphasis is on long series of movements, adagio and jumps. Precision of movement is stressed. Laboratory fee.

**DANCE (DAN) 251 (3)**
INTERMEDIATE BALLET II (1 LEC., 3 LAB.)

Prerequisite: Dance 250. This course begins pointe work for women. Specialized beats and tours are begun for men. Individual proficiency and technical virtuosity are developed. Laboratory fee.

**DANCE (DAN) 252 (1)**
COACHING AND REPERTOIRE (2 LAB.)

Prerequisite: Dance 251 and the consent of the instructor. Variations (male and female) and pas de deux from standard ballet repertoire are studied and notated. The dancer is given individual coaching, with special attention given to the correction of problems. This course may be repeated for credit. Laboratory fee.

**DEVELOPMENTAL COMMUNICATIONS (DC) 095 (3)**
COMMUNICATION SKILLS (3 LEC.)

This course focuses on strengthening language communications. Topics include grammer, paragraph structure, reading skills, and oral communication. Emphasis is on individual testing and needs.

**DEVELOPMENTAL COMMUNICATIONS (DC) 120 (3)**
COMMUNICATION SKILLS (2 LEC., 2 LAB.)

This course is for students with significant communication problems. It is organized around skill development, and students may enroll at any time (not just at the beginning of a semester) upon the referral of an instructor. Emphasis is on individual needs and personalized programs. Special attention is given to oral language. Contacts are made with other departments to provide other ways of learning for the students.

**DEVELOPMENTAL LEARNING (DL) 094 (1)**
LEARNING SKILLS IMPROVEMENT (2 LAB.)

Learning skills are strengthened. Emphasis is on individual needs and personalized programs. This course may be repeated for a maximum of three credits.

**DEVELOPMENTAL MATHEMATICS**

Developmental Mathematics Courses offer a review of mathematics skills. Developmental Mathematics 093 satisfies prerequisites for Mathematics 101, 104, 111, and 115. Developmental Mathematics 091 satisfies prerequisites for Mathematics 130, 139, and 195.

**DEVELOPMENTAL MATHEMATICS (DM) 060 (1)**
BASIC MATHEMATICS I (1 LEC.)

This course is designed to give an understanding of fundamental operations. Selected topics include whole numbers, decimals, and ratio and proportions.

**DEVELOPMENTAL MATHEMATICS (DM) 061 (1)**
BASIC MATHEMATICS II (1 LEC.)

This course is designed to give an understanding of fractions. Selected topics include primes, factors, least common multiples, percent, and basic operations with fractions.

**DEVELOPMENTAL MATHEMATICS (DM) 062 (1)**
PRE BUSINESS (1 LEC.)

This course is designed to introduce students to business mathematics. Selected topics include discounts and commissions, interest, metric and English measuring systems, area and volume.

**DEVELOPMENTAL MATHEMATICS (DM) 063 (1)**
PRE ALGEBRA (1 LEC.)

This course is designed to introduce students to the language of algebra with such topics as integers, metrics, equations, and properties of counting numbers.

**DEVELOPMENTAL MATHEMATICS (DM) 064 (1)**
NURSING (1 LEC.)

This course is designed to develop an understanding of the measurements and terminology in medicine and calculations used in problems dealing with solutions and dosages. It is designed primarily for students in the nursing program.

**DEVELOPMENTAL MATHEMATICS (DM) 070 (1)**
ELEMENTARY ALGEBRA I (1 LEC.)

Prerequisites: Developmental Mathematics 090, 063 or equivalent. This course is an introduction to algebra and includes selected topics such as basic principles and operations of sets, counting numbers and integers.

**DEVELOPMENTAL MATHEMATICS (DM) 071 (1)**
ELEMENTARY ALGEBRA II (1 LEC.)

Prerequisite: Developmental Mathematics 070 or equivalent. This course includes selected topics such as rational numbers, algebraic polynomials, factoring, and algebraic fractions.

**DEVELOPMENTAL MATHEMATICS (DM) 072 (1)**
ELEMENTARY ALGEBRA III (1 LEC.)

Prerequisite: Developmental Mathematics 071 or equivalent. This course includes selected topics such as fractional and quadratic equations, quadratic equations with irrational solutions, and systems of equations involving two variables.

**DEVELOPMENTAL MATHEMATICS (DM) 073 (1)**
INTRODUCTION TO GEOMETRY (1 LEC.)

This course introduces principles of geometry. Axioms, theorems, axiom systems, models of such systems, and methods of proof are stressed.

**DEVELOPMENTAL MATHEMATICS (DM) 080 (1)**
INTERMEDIATE ALGEBRA I (1 LEC.)

Prerequisites: Developmental Mathematics 072, 091 or equivalent. This course includes selected topics such as systems of rational numbers, real numbers, and complex numbers.

**DEVELOPMENTAL MATHEMATICS (DM) 081 (1)**
INTERMEDIATE ALGEBRA II (1 LEC.)

Prerequisite: Developmental Mathematics 080 or equivalent. This course includes selected topics such as sets, relations, functions, inequalities, and absolute values.

**DEVELOPMENTAL MATHEMATICS (DM) 082 (1)**
INTERMEDIATE ALGEBRA III (1 LEC.)

Prerequisite: Developmental Mathematics 081 or equivalent. This course includes selected topics such as graphing, exponents, and factoring.

**DEVELOPMENTAL MATHEMATICS (DM) 090 (3)**
PRE ALGEBRA MATHEMATICS (3 LEC.)

This course is designed to develop an understanding of addition, subtraction, multiplication, and division of whole numbers, fractions, decimals and percentages and to strengthen basic skills in mathematics. It is the most basic mathematics course and includes an introduction to algebra.

**DEVELOPMENTAL MATHEMATICS (DM) 091 (3)**
ELEMENTARY ALGEBRA (3 LEC.)

Prerequisite: Developmental Mathematics 090. This course is comparable to the first-year algebra course in high school. It includes special products and factoring,fractions, equations, graphs, functions, and an introduction to geometry.

**DEVELOPMENTAL MATHEMATICS (DM) 093 (3)**
INTERMEDIATE ALGEBRA (3 LEC.)

Prerequisite: One year of high school algebra or Developmental Mathematics 091. This course is comparable to the second-year algebra course in high school. It includes terminology of

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

**DEVELOPMENTAL READING**

Students can improve their performance in English courses 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 the catalog descriptions in reading for full course content.

**DEVELOPMENTAL READING (DR) 090 (3)**
TECHNIQUES OF READING/LEARNING (3 LEC.)

Comprehension, vocabulary development, and study skills are the focus of this course. Emphasis is on learning how to learn. Included are reading and learning experiences to strengthen the total educational background of each student. Meeting individual needs is stressed.

**DEVELOPMENTAL READING (DR) 091 (3)**
TECHNIQUES OF READING AND LEARNING (3 LEC.)

This course is a continuation of developmental reading 090. Meeting individual needs is stressed.

**DEVELOPMENTAL WRITING**

Students can improve their writing skills by taking Developmental Writing. These courses are offered for one to three hours of credit. Emphasis is on organization skills and research paper styles, and individual writing weaknesses.

**DEVELOPMENTAL WRITING (DW) 090 (3)**
WRITING (3 LEC.)

Basic writing skills are developed. Topics include spelling, grammar, and vocabulary improvement. Principles of sentence and paragraph structure are also included. Organization and composition are covered. Emphasis is on individual needs and strengthening the student's skills.

**DEVELOPMENTAL WRITING (DW) 091 (3)**
WRITING (3 LEC.)

This course is a sequel to Writing 090. It focuses on composition. Included are skills of organization, transition, and revision. Emphasis is on individual needs and personalized assignments. Brief, simple forms as well as more complex critical and research writing may be included.

**DEVELOPMENTAL WRITING (DW) 092 (1)**
WRITING LAB (3 LAB.)

This course is a writing workshop. Students are given instruction and supervision in written assignments. The research paper and editing are both included.

**EARTH SCIENCE (ES) 117 (4)**
EARTH SCIENCE (3 LEC., 3 LAB.)

This course is for the non-science major. It covers the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are included. Selected principles and concepts of the applied sciences are explored. Laboratory fee. (This course is offered on campus and may be offered via television.)

**ECOLOGY (ECY) 291 (3)**
PEOPLE AND THEIR ENVIRONMENT II (3 LEC.)

Environmental awareness and knowledge are emphasized. Topics include pollution, erosion, land use, energy resource depletion, overpopulation, and the effects of unguided technological development. Proper planning of societal and individual action in order to protect the natural environment is stressed. (This course may be offered via television.)

**ECONOMICS (ECO) 201 (3)**
PRINCIPLES OF ECONOMICS I (3 LEC.)

Sophomore standing is recommended. The principles of macroeconomics are presented. Topics include economic

organization, national income determination, money and banking, monetary and fiscal policy, economic fluctuations, and growth. (This course is offered on campus and may be offered via television.)

**ECONOMICS (ECO) 202 (3)**
PRINCIPLES OF ECONOMICS II (3 LEC.)

Prerequisite: Economics 201 or the consent of the instructor. The principles of microeconomics are presented. Topics include the theory of demand, supply, and price of factors. Income distribution and theory of the firm are also included. Emphasis is on international economics and contemporary economic problems.

**ENGINEERING (EGR) 101 (2)**
ENGINEERING ANALYSIS (2 LEC.)

Prerequisite: Two years of high school algebra or Developmental Mathematics 093 or the consent of the instructor. This course surveys the field of engineering. Topics include the role of the engineer in society and branches and specialties in engineering. Engineering analysis and computer programming are introduced. Practice is provided in analyzing and solving engineering problems. Computational methods and devices with an introduction to computer programming are also covered.

**ENGINEERING (EGR) 105 (3)**
ENGINEERING DESIGN GRAPHICS (2 LEC., 4 LAB.)

Graphic fundamentals are presented for engineering communications and engineering design. Topics include standard engineering graphical techniques, auxiliaries, sections, graphical analysis, and pictorial and working drawings. Laboratory fee.

**ENGINEERING (EGR) 106 (3)**
DESCRIPTIVE GEOMETRY (2 LEC., 4 LAB.)

Prerequisite: Drafting 183 or Engineering 105. This course provides training in the visualization of three-dimensional structures. Emphasis is on accurately representing these structures in drawings by analyzing the true relationship between points, lines, and planes. Included are the generation and classification of lines, surfaces, intersections, developments, auxiliaries, and revolutions. Laboratory fee.

**ENGINEERING (EGR) 107 (3)**
ENGINEERING MECHANICS I (3 LEC.)

Prerequisite: Credit or concurrent enrollment in Mathematics 126. This course is a study of the statics of particles and rigid bodies with vector mathematics in three-dimensional space. Topics include the equilibrium of forces and force systems, resultants, free body diagrams, friction, centroids and moments of inertia, virtual work, and potential energy. Distributed forces, centers of gravity, and analysis of structures, beams, and cables are also presented.

**ENGINEERING (EGR) 108 (3)**
COMPUTER METHODS IN ENGINEERING (3 LEC.)

Prerequisite: Credit or concurrent enrollment in Mathematics 126. Fundamental methods of numerical analysis with applications by computer programming are presented. Topics include computer programming, recursion formulas, successive approximations, error analysis, non-linear equations, and systems of linear equations and matrix methods. Probabilistic models, interpolation, determination of parameters, numerical integration, and solution of ordinary differential equations are also covered.

**ENGINEERING (EGR) 201 (3)**
ENGINEERING MECHANICS II (3 LEC.)

Prerequisites: Engineering 107 and credit or concurrent enrollment in Mathematics 227. This is a study of dynamics. Particles and rigid bodies are examined as they interact with applied forces. Both constrained and general motions are included. Space, time, mass, velocity, acceleration, work and energy, impulse, and momentum are covered.

**ENGINEERING (EGR) 202 (3)**
ENGINEERING MECHANICS OF MATERIALS (3 LEC.)

Prerequisites: Engineering 107 and

credit or concurrent enrollment in Mathematics 227. Simple structural elements are studied. Emphasis is on forces, deformation, and material properties. The 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 (EGR) 203 (3)**
ENGINEERING PRODUCTION (1 LEC., 5 LAB.)

Prerequisite: Engineering 105 or the consent of the instructor. The standard machining of metals is covered. Layout, turning, boring, shaping, drilling, threading, milling, and grinding are all included. The manufacturing of interchangeable parts, fixtures, and jigs with applications is studied. Laboratory fee.

**ENGINEERING (EGR) 204 (3)**
ELECTRICAL SYSTEMS ANALYSIS (3 LEC.)

Prerequisite: Credit of concurrent enrollment in Mathematics 227. Electrical science is introduced. Included are fundamental electrical systems and signals. Basic concepts of electricity and magnetism with mathematical representation and computation are also covered.

**ENGINEERING (EGR) 205 (3)**
PLANE SURVEYING (2 LEC., 4 LAB.)

Prerequisites: Mathematics 102 or 196 and Engineering 105 or Drafting 183. This course focuses on plane surveying. Topics include surveying instruments, basic measuring procedures, vertical and horizontal control, error analysis, and computations. Traverse, triangulation, route alignments, centerlines, profiles, mapping, route surveying, and land surveying are also included. Laboratory fee.

**ENGINEERING (EGR) 206 (1)**
ELECTRICAL ENGINEERING LABORATORY (3 LAB.)

Prerequisite: Credit or concurrent enrollment in Engineering 204. Various instruments are studied and used. These include the cathode ray oscilloscope, ammeters, voltmeters, ohmmeters, power supplies, signal generators, and bridges. Basic network laws, steady state and transient responses, and diode characteristics and applications are demonstrated. Computer simulation is introduced. Laboratory fee.

**ENGLISH**

(Also see Developmental Reading and Developmental Writing.) Additional instruction in writing and reading is available through the Learning Skills Center.

**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 (ENG) 101 (3)**
COMPOSITION AND EXPOSITORY READING (3 LEC.)

The development of skills is the focus of this course. Skills in writing and in the critical analysis of prose are included. (This course is offered on campus and may be offered via television.)

**ENGLISH (ENG) 102 (3)**
COMPOSITION AND LITERATURE (3 LEC.)

Prerequisite: English 101. This course continues the development of skills in writing. Emphasis is on analysis of literary readings, expository writing, and investigative methods of research. (This course is offered on campus and may be offered via television.)

**ENGLISH (ENG) 201 (3)**
BRITISH LITERATURE (3 LEC.)

Prerequisite: English 102. Significant works of British literature are studied. The Old English Period through the 18th century is covered.

**ENGLISH (ENG) 202 (3)**
BRITISH LITERATURE (3 LEC.)

Prerequisite: English 102. Significant works of British literature are studied. The Romantic Period to the present is covered.

**ENGLISH (ENG) 203 (3)**
WORLD LITERATURE (3 LEC.)

Prerequisite: English 102. Significant works of continental Europe are studied. The Greek Classical Period through the Renaissance is covered.

**ENGLISH (ENG) 204 (3)**
WORLD LITERATURE (3 LEC.)

Prerequisite: English 102. Significant works of continental Europe, England, and America are studied. The time period since the Renaissance is covered.

**ENGLISH (ENG) 205 (3)**
AMERICAN LITERATURE (3 LEC.)

Prerequisite: English 102. Significant works of American writers before Walt Whitman are studied. Emphasis is on the context of the writers' times.

**ENGLISH (ENG) 206 (3)**
AMERICAN LITERATURE (3 LEC.)

Prerequisite: English 102. Signigicant works of American writers from Walt Whitman to the present are studied.

**ENGLISH (ENG) 209 (3)**
CREATIVE WRITING (3 LEC.)

Prerequisite: English 102. The writing of fiction is the focus of this course. Included are the short story, poetry, and short drama.

**ENGLISH (ENG) 210 (3)**
TECHNICAL WRITING (3 LEC.)

Prerequisite: English 101 and 102 or Communications 131 and 132. The technical style of writing is introduced. Emphasis is on the writing of technical papers, reports, proposals, progress reports, and descriptions.

**ENGLISH (ENG) 215 (3)**
STUDIES IN LITERATURE (3 LEC.)

Prerequisite: English 102. Selections in literature are read, analyzed, and discussed. Selections are organized by genre, period, or geographical region. Course titles and descriptions are available each semester prior to registration. This course may be repeated for credit.

**ENGLISH (ENG) 216 (3)**
STUDIES IN LITERATURE (3 LEC.)

Prerequisite: English 102. Selections in literature are read, analyzed, and discussed. Selections are organized by theme, interdisciplinary content or major author. Course titles and descriptions are available each semester prior to registration. This course may be repeated for credit.

**FRENCH (FR) 101 (4)**
BEGINNING FRENCH (3 LEC., 2 LAB.)

The essentials of grammer and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee.

**FRENCH (FR) 102 (4)**
BEGINNING FRENCH (3 LEC., 2 LAB.)

Prerequisite: French 101 or the equivalent. This course is a continuation of French 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee.

**FRENCH (FR) 201 (3)**
INTERMEDIATE FRENCH (3 LEC.)

Prerequisite: French 102 or the equivalent. Reading, composition, and intense oral practice are covered in this course. Grammar is reviewed.

**FRENCH (FR) 202 (3)**
INTERMEDIATE FRENCH (3 LEC.)

Prerequisite: French 201 or the equivalent. This course is a continuation of French 201. Contemporary literature and composition are studied.

**FRENCH (FR) 203 (3)**
INTRODUCTION TO FRENCH LITERATURE (3 LEC.)

Prerequisite: French 202 or the consent of the instructor. This course is an introduction to French literature. It includes readings in French literature, history, culture, art, and civilization.

**FRENCH (FR) 204 (3)**
INTRODUCTION TO FRENCH LITERATURE (3 LEC.)

Prerequisite: French 202 or the consent of the instructor. This course is a continuation of French 203. It includes readings in French literature, history, culture, art, and civilization.

**GEOGRAPHY (GPY) 101 (3)**
PHYSICAL GEOGRAPHY (3 LEC.)

The physical composition of the earth is surveyed. Topics include weather, climate, topography, plant and animal life, land, and the sea. Emphasis is on the earth in space, use of maps and charts, and place geography.

**GEOGRAPHY (GPY) 102 (3)**
ECONOMIC GEOGRAPHY (3 LEC.)

The relation of humans to their environment is studied. Included is the use of natural resources. Problems of production, manufacturing, and distributing goods are explored. Primitive subsistence and commercialism are considered.

**GEOGRAPHY (GPY) 103 (3)**
CULTURAL GEOGRAPHY (3 LEC.)

This course focuses on the development of regional variations of culture. Topics include the distribution of races, religions, and languages. Aspects of material culture are also included. Emphasis is on origins and diffusion.

**GEOLOGY (GEO) 101 (4)**
PHYSICAL GEOLOGY (3 LEC., 3 LAB.)

This course is for science and non-science majors. It is a study of earth materials and processes. Included is an introduction to geochemistry, geophysics, the earth's interior, and magnetism. The earth's setting in space, minerals, rocks, structures, and geologic processes are also included. Laboratory fee.

**GEOLOGY (GEO) 102 (4)**
HISTORICAL GEOLOGY (3 LEC., 3 LAB.)

This course is for science and non-science majors. It is a study of earth materials and processes within a developmental time perspective. Fossils, geologic maps, and field studies are used to interpret geologic history. Laboratory fee.

**GEOLOGY (GEO) 202 (3)**
INTRODUCTION TO ROCK AND MINERAL IDENTIFICATION (1 LEC., 3 LAB.)

Prerequisites: Geology 101 and Geology 102. This course introduces crystallography, geochemistry, descriptive mineralogy, petrology, and phase equilibria. Crystal models and hand specimens are studied as an aid to rock and mineral identification. Laboratory fee.

**GEOLOGY (GEO) 205 (4)**
FIELD GEOLOGY (3 LEC., 3 LAB.)

Geological features, landforms, rocks, minerals, and fossils are surveyed. Map reading and interpretation are also included. Emphasis is on the identification, classification, and collection of specimens in the field. Laboratory fee.

**GERMAN (GER) 101 (4)**
BEGINNING GERMAN (3 LEC., 2 LAB.)

The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee.

**GERMAN (GER) 102 (4)**
BEGINNING GERMAN (3 LEC., 2 LAB.)

Prerequisite: German 101 or the equivalent. This course is a continuation of German 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee.

**GERMAN (GER) 201 (3)**
INTERMEDIATE GERMAN (3 LEC.)

Prerequisite: German 102 or the equivalent or the consent of the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed.

**GERMAN (GER) 202 (3)**
INTERMEDIATE GERMAN (3 LEC.)

Prerequisite: German 201 or the equivalent. This course is a continuation of German 201. Contemporary literature and composition are studied.

**GOVERNMENT (GVT) 201 (3)**
AMERICAN GOVERNMENT (3 LEC.)

Prerequisite: Sophomore standing recommended. This course is an introduction to the study of political science. Topics include the origin and development of constitional democracy (United States and Texas), federalism and intergovernmental relations, local government, parties, politics, and political behavior. The course satisfies requirements for Texas State Teacher's Certification. (This course is offered on campus and may be offered via television.)

**GOVERNMENT (GVT) 202 (3)**
AMERICAN GOVERNMENT (3 LEC.)

Prerequisite: Sophomore standing recommended. The three branches of the United States and Texas government are studied. Topics include the legislative process, the executive and bureaucratic structure, the judicial process, civil rights and liberties, and domestic policies. Other topics include foreign relations and national defense. This course satisfies requirements for Texas State Teacher's Certification. (This course is offered on campus and may be offered via television.)

**GOVERNMENT (GVT) 205 (3)**
STUDIES IN GOVERNMENT (3 LEC.)

Prerequisite: Sophomore standing and 6 hours of history or government. Selected topics in government are presented. The course may be repeatred once for credit when different topics are presented.

**GOVERNMENT (GVT) 231 (3)**
MUNICIPAL AND COUNTY GOVERNMENT (3 LEC.)

The structure of municipal and county government is examined. Topics include organs of government, administration, court systems, taxation, utilities and public works, education, welfare, and other public services. Presentations are given by local officials. Surveys of area problems are stressed.

**HISTORY (HST) 101 (3)**
HISTORY OF THE UNITED STATES (3 LEC.)

The history of the United States is presented, beginning 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. (This course is offered on campus and may be offered via television.)

**HISTORY (HST) 102 (3)**
HISTORY OF THE UNITED STATES (3 LEC.)

Prerequisite: History 101 recommended. This course is a continuation of History 101. The history of the United States is surveyed from the reconstruction era to the present day. The study includes social, economic, and political aspects of American life. The development of the United States as a world power is followed. (This course is offered on campus and may be offered via television.)

**HISTORY (HST) 105 (3)**
WESTERN CIVILIZATION (3 LEC.)

The civilization in the West from ancient time through the Enlightenment is surveyed. Topics include the Mediterranean world, including Greece and Rome, the Middle Ages, and the beginnings of modern history. Particular emphasis is on the Renaissance, Reformation, the rise of the national state, the development of parliamentary government, and the influences of European colonization.

**HISTORY (HST) 106 (3)**
WESTERN CIVILIZATION (3 LEC.)

This course is a continuation of History 105. It follows the development of civilization from the Enlightenment to current times. Topics include the Age of Revolution, the beginning of industrialism, the 19th century, the the social, economic, and political factors of recent world history.

**HISTORY (HST)110 (3)**
THE HERITAGE OF MEXICO (3 LEC.)

Students may register for either History 110 or Anthropology 110 but

may receive credit for only one of the two. This course (cross-listed as Anthropology 110) deals with the archaeology of Mexico beginning with the first humans to enter the North American Continent and culminating with the arrival of the Spanish in 1519 A.D. Emphasis is on archaic cultures, the Maya, Toltec, and Aztec empires.

**HISTORY (HST) 112 (3)**
LATIN AMERICAN HISTORY (3 LEC.)

This course presents developments and personalities which have influenced Latin American history. Topics include Indian cultures, the Conquistadors, Spanish administration, the wars of independence, and relations with the United States. A brief survey of contemporary problems concludes the course.

**HISTORY (HST) 120 (3)**
AFRO-AMERICAN HISTORY (3 LEC.)

The role of the Black in American history is studied. The slave trade and slavery in the United States are reviewed. Contributions of black Americans in the U.S. are described. Emphasis is on the political, economic, and sociological factors of the 20th century.

**HISTORY (HST) 204 (3)**
AMERICAN MINORITIES (3 LEC.)

Prerequisites: Sociology 101 or 6 hours of U.S. history recommended. Students may register for either History 204 or Sociology 204 but may receive credit for only one of the two. The principal minority groups in American society are the focus of this course. The sociological significance and historic contributions of the groups are presented. Emphasis is on current problems of intergroup relations, social movements, and related social changes.

**HISTORY (HST) 205 (3)**
STUDIES IN U.S. HISTORY (3 LEC.)

Prerequisite: Sophomore standing and 6 hours of American history. Selected topics in the history of the United States are presented. The course may be repeated once for credit when different topics are presented.

**HUMAN DEVELOPMENT (HD) 100 (1)**
EDUCATIONAL ALTERNATIVES (1 LEC.)

The learning environment is introduced. Career, personal study skills, educational planning, and skills for living are all included. Emphasis is on exploring career and educational alternatives and learning a systematic approach to decision-making. A wide range of learning alternatives is covered, and opportunity is provided to participate in personal skills seminars.

**HUMAN DEVELOPMENT (HD) 102 (1)**
ORIENTATION (1 LEC.)

This course helps the student be successful in college. The student makes an individual contract with the instructor. Student experiences include appropriate subject packages such as "improving your vocabulary", "how to take notes", "study skills", and "listening skills." An evaluation session with a counselor is also included. A package may be composed of programmed materials, filmstrips, tapes, slides, seminars, learning activities, or other appropriate materials.

**HUMAN DEVELOPMENT (HD) 104 (3)**
EDUCATIONAL AND CAREER PLANNING (3 LEC.)

This course is designed to teach students the on-going process of decision making as it relates to career/life and educational planning. Students identify the unique aspects of themselves (interests, skills, values). They investigate possible work environments and develop a plan for personal satisfaction. Job search and survival skills are also considered.

**HUMAN DEVELOPMENT (HD) 105 (3)**
BASIC PROCESSES OF INTERPERSONAL RELATIONSHIPS (3 LEC.)

Interpersonal relations are explored through an applied study of theory and concepts of small group processes. Students are given an opportunity to participate in experiences to increase

one's sensitivity to self and to others. A variety of activities is planned, partly by each class, to meet specific needs of the students in the class.

**HUMAN DEVELOPMENT (HD) 106 (3)**
PERSONAL AND SOCIAL GROWTH (3 LEC.)

The interaction between a person and society is explored. Topics include understanding of self, influences of society contributing to the development of self, and success of the individual within a society. Adjustment to family, school, and society is developed.

**HUMAN DEVELOPMENT (HD) 107 (3)**
DEVELOPING LEADERSHIP BEHAVIOR (3 LEC.)

The basic purpose of this course is to help the student develop leadership and human relation skills. Topics include individual and group productivity, value systems, appropriate communications skills, and positive attitudes in a group environment. The concepts of leadership are explored through both theory and practice. These leadership activities can be applied to the student's personal, business, and professional interactions.

**HUMANITIES (HUM) 101 (3)**
INTRODUCTION TO THE HUMANITIES (3 LEC.)

Related examples of humans' creative achievements are examined. Emphasis is on understanding the nature of humans and the values of human life. (This course is offered on campus and may be offered via television. Laboratory fee required for television course.)

**HUMANITIES (HUM) 102 (3)**
ADVANCED HUMANITIES (3 LEC.)

Prerequisite: Humanities 101 and/or the consent of the instructor. Human value choices are presented through the context of the humanities. Universal concerns are explored, such as a person's relationship to self and to others and the search for meaning. The human as a loving, believing and hating being is also studied. Emphasis is on the human as seen by artists, playwrights, filmmakers, musicians, dancers, philosophers, and theologians. The commonality of human experience across cultures and the premises for value choices are also stressed.

**JOURNALISM (JN) 101 (3)**
INTRODUCTION TO MASS COMMUNICATIONS (3 LEC.)

This course surveys the field of mass communications. Emphasis is on the role of mass media in modern society.

**JOURNALISM (JN) 102 (3)**
NEWS GATHERING AND WRITING (2 LEC., 3 LAB.)

Prerequisite: Typing ability. Beginning reporting is presented. Topics include types of news, leads, body treatment of a story, feature in the lead, facts, and background. A practice in writing straight news stories is provided.

**JOURNALISM (JN) 103 (3)**
NEWS GATHERING AND WRITING (2 LEC., 3 LAB.)

Prerequisite: Journalism 102. This course is a continuation of Journalism 102. Complex news stories are written. Specialized writing is covered for sports, police news, markets, finance, society, amusements, government, and women's stories. Laboratory work on the student newspaper is required.

**JOURNALISM (JN) 104 (1)**
STUDENT PUBLICATIONS (3 LAB.)

This course may not be taken for credit concurrently with Journalism 102 or 103. Individual staff assignments are made for the student newspaper. Assignments may be made in writing, advertising, photography, cartooning, or editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may be repeated for a total of three credits.

**JOURNALISM (JN) 105 (1)**
STUDENT PUBLICATIONS (3 LAB.)

This course may not be taken for credit concurrently with Journalism 102 or 103. The course is a continuation of Journalism 104.

**JOURNALISM (JN) 201 (3)**
EDITORIAL AND FEATURE WRITING (3 LEC.)

Prerequisites: 6 hours of journalism or the consent of the instructor. This course covers difficult news stories, editorials, and features. Research, interviewing techniques, and the development of feature stories for use in newspapers and magazines are emphasized.

**JOURNALISM (JN) 202 (1)**
STUDENT PUBLICATIONS (3 LAB.)

Prerequisite: The consent of the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. Individual staff assignments are made for the student newspaper. Assignments may be made in writing, advertising, photography, cartooning, or editing. Students are required to work at prescribed periods under supervision and must attend staff meetings.

**JOURNALISM (JN)203 (1)**
STUDENT PUBLICATIONS (3 LAB.)

This course may not be taken for credit concurrently with Journalism 102 or 103. The course is a continuation of Journalism 202.

**JOURNALISM (JN) 204 (3)**
NEWS EDITING AND COPY READING (3 LEC.)

Prerequisite: Journalism 102. This course focuses on editing news for newspaper, radio, and television. Emphasis is on writing headlines and laying out pages.

**LIBRARY SKILLS (LS) 101 (3)**
INTRODUCTION TO LIBRARY RESEARCH (3 LEC.)

In this course the student explores the various types of print and non-print sources of information and learns to document research. Emphasis is on practical skills with a great deal of hands-on experience. The course skills consist of lectures as well as the following learning experiences: (1) examination of the specific materials covered in the lecture, (2) completion of appropriate exercises designed to build basic skills used in research, and (3) conference with each student to determine rate of progress and to provide guidance on an individual basis.

**MATHEMATICS**

(See also Developmental Mathematics. Supplementary instruction in mathematics is available through the Learning Resources Center.)

**MATHEMATICS (MTH) 101 (3)**
COLLEGE ALGEBRA (3 LEC.)

Prerequisite: Two years of high school algebra or Developmental Mathematics 093. This course is a study of functions and relations, absolute values, 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 (MTH) 102 (3)**
PLANE TRIGONOMETRY (3 LEC.)

Prerequisite: Mathematics 101 or equivalent. This course is a study of angular measure, functions of angles, identities, solution of triangles, equations, inverse trigonometric functions, logarithms, and complex numbers.

**MATHEMATICS (MTH) 104 (5)**
ELEMENTARY FUNCTIONS AND COORDINATE GEOMETRY I (5 LEC.)

Prerequisites: Two years of high school algebra or Developmental Mathematics 093. This course includes the concept of function, polynomials of one or more variables, arithmetic and geometric sequences, combinations and the binomial theorem, rational functions, exponential functions, logarithmic functions, trigonometric functions, complex numbers, vectors, functions of two variables and analytical geometry which includes conics, transformation of coordinates, polar coordinates, parametric equations and three dimensional space.

**MATHEMATICS (MTH) 105 (5)**
ELEMENTARY FUNCTIONS AND COORDINATE GEOMETRY II (5 LEC.)

Prerequisite: Mathematics 104. This course is a continuing study of the topics of Mathematics 104.

**MATHEMATICS (MTH) 106 (5)**
ELEMENTARY FUNCTIONS AND COORDINATE GEOMETRY III (5 LEC.)

Prerequisites: Two years of high school algebra and one semester of trigonometry. This course is a study of the algebra of functions. It includes polynomial, rational, exponential, logarithmic and trigonometric functions, functions of two variables, complex numbers, vectors and analytic geometry which includes conics, transformation of coordinates, polar coordinates, and parametric equations.

**MATHEMATICS (MTH) 107 (3)**
FUNDAMENTALS OF COMPUTING (3 LEC.)

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

**MATHEMATICS (MTH) 111 (3)**
MATHEMATICS FOR BUSINESS AND ECONOMICS I (3 LEC.)

Prerequisite: Two years of high school algebra or Developmental Mathematics 093. This course includes equations, inequalities, matrices, linear programming, and linear, quadratic, polynomial, rational, exponential, and logarithmic functions. Applications to business and economics problems are emphasized.

**MATHEMATICS (MTH) 112 (3)**
MATHEMATICS FOR BUSINESS AND ECONOMICS II (3 LEC.)

Prerequisite: Mathematics 111. This course includes sequences and limits, differential calculus, integral calculus, and appropriate applications.

**MATHEMATICS (MTH) 115 (3)**
COLLEGE MATHEMATICS I (3 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. Designed for liberal arts students, this course includes the study of logic, mathematical patterns, mathematical recreations, systems of numeration, mathematical systems, sets and statements and sets of numbers. Historical aspects of selected topics are emphasized.

**MATHEMATICS (MTH) 116 (3)**
COLLEGE MATHEMATICS II (3 LEC.)

Prerequisite: One year of high school algebra and one year of high school geometry or two years of high school algebra or Developmental Mathematics 093. Designed for liberal arts students, this course includes the study of algebra, linear programming, permutations, combinations, probability and geometry. Historical aspects of selected topics are emphasized.

**MATHEMATICS (MTH) 117 (3)**
FUNDAMENTAL CONCEPTS OF MATHEMATICS FOR ELEMENTARY TEACHERS (3 LEC.)

This course includes the structure of the real number system, geometry, and mathematical analysis. Emphasis is on the development of mathematical reasoning needed for elementary teachers.

**MATHEMATICS 121 (3)**
ANALYTIC GEOMETRY (3 LEC.)

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

**MATHEMATICS (MTH) 126 (5)**
INTRODUCTORY CALCULUS (5 LEC.)

Prerequisite: Mathematics 105 or 106 or 121 or equivalent. This course is 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 (MTH) 130 (3)**
BUSINESS MATHEMATICS (3 LEC.)

Prerequisite: One year of high school algebra or Developmental Mathematics 091 or the equivalent. This course is intended primarily for students in specialized occupational programs. It is a study of simple and compound interest, bank discount, payrolls, taxes, insurance, mark up and mark down, corporate securities, depreciation, and purchase discounts.

**MATHEMATICS (MTH) 139 (3)**
APPLIED MATHEMATICS (3 LEC.)

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

**MATHEMATICS (MTH) 202 (3)**
INTRODUCTORY STATISTICS (3 LEC.)

Prerequisite: Two years of high school algebra or consent of instructor. This course is 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 application to various fields.

**MATHEMATICS (MTH) 207 (3)**
FORTRAN PROGRAMMING WITH APPLICATIONS (3 LEC.)

Prerequisites: Mathematics 107 or equivalent and Mathematics 101 or Mathematics 111 or Mathematics 104 or its equivalent. This course is a study of Fortran with emphasis on applications and programming of algorithmic language to solve numerical problems. Writing, testing, and executing typical Fortran programs are stressed. Emphasis is on applications for majors and minors in engineering, the sciences, mathematics, or business.

**MATHEMATICS (MTH) 209 (3)**
INTRODUCTORY APL PROGRAMMING (3 LEC.)

Prerequisites: Mathematics 101 or Mathematics 104 or Mathematics 111 and Mathematics 107 or consent of instructor. This course is a study of APL with emphasis on applications. It is designed for partial fulfillment of degree requirements in computer science.

**MATHEMATICS (MTH) 221 (3)**
LINEAR ALGEBRA (3 LEC.)

Prerequisite: Mathematics 126 or equivalent. This course is a study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, n-dimensional space, and linear transformation.

**MATHEMATICS (MTH) 222 (3)**
CALCULUS I (3 LEC.)

Prerequisite: Mathematics 121. This course includes limits, continuity, differentiation of algebraic and transcendental functions, and applications, maxima and minima, antiderivatives and indeterminate forms.

**MATHEMATICS (MTH) 223 (3)**
CALCULUS II (3 LEC.)

Prerequisite: Mathematics 222. This course includes the indefinite integral, definite integral, and applications, techniques of integration, improper integrals, and infinite series.

**MATHEMATICS (MTH) 224 (3)**
ADVANCED CALCULUS (3 LEC.)

Prerequisite: Mathematics 223. This course includes multiple integrals, partial differentiation, vector analysis, series and hyperbolic functions.

**MATHEMATICS (MTH) 227 (4)**
MATHEMATICAL ANALYSIS I (4 LEC.)

Prerequisite: Mathematics 126 or equivalent. This course is 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 (MTH) 228 (3)**
MATHEMATICAL ANALYSIS II (3 LEC.)

Prerequisite: Mathematics 227 or equivalent. This course is a continued study of vectors, functions of several variables, partial derivatives, multiple

integrals, indeterminate forms, infinite series, and an introduction to differential equations.

**MATHEMATICS (MTH) 230 (3)**
DIFFERENTIAL EQUATIONS (3 LEC.)

Prerequisite: Mathematics 227 or consent of instructor. This course is a study of ordinary differential equations, including 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 (MUS) 101 (4)**
FRESHMAN THEORY (3 LEC., 3 LAB.)

Musicianship skills are developed. Emphasis is on tonal and rhythmic perception and articulation. The essential elements of music are presented, and sight-singing, keyboard, and notation are introduced.

**MUSIC (MUS) 102 (4)**
FRESHMAN THEORY (3 LEC., 3 LAB.)

Prerequisite: Music 101 or the consent of the instructor. This course introduces part-writing and harmonization with triads and their inversions. Also included are the classification of chords, seventh chords, sight-singing, dictation, and keyboard harmony.

**MUSIC (MUS) 103 (1)**
GUITAR ENSEMBLE (3 LAB.)

Music composed and arranged for a guitar ensemble is performed. Works for a guitar and a different instrument or for guitar and a voice are also included. This course may be repeated for credit.

**MUSIC (MUS) 104 (3)**
MUSIC APPRECIATION (3 LEC.)

The basic elements of music are surveyed and examined in the music literature of western civiliazation, particularly from the Baroque Period to the present. Cultural influences on the music of each era are observed.

**MUSIC (MUS) 105 (1)**
ITALIAN DICTION (2 LAB.)

The phonetic sounds of the Italian language are studied. Included is selected vocabulary. This course is primarily for voice majors.

**MUSIC (MUS) 106 (1)**
FRENCH DICTION (2 LAB.)

The phonetic sounds of the French language are studied. Included is selected vocabulary. This course is primarily for voice majors.

**MUSIC (MUS) 107 (1)**
GERMAN DICTION (2 LAB.)

The phonetic sounds of the German language are studied. Included is selected vocabulary. This course is primarily for voice majors.

**MUSIC (MUS) 110 (3)**
MUSIC LITERATURE (3 LEC.)

The music of recognized composers in the major periods of music history is examined. Topics include the characteristics of sound, elements of music, performance media, and musical texture. Emphasis is on the music of the late Gothic, Renaissance and Baroque eras.

**MUSIC (MUS) 111 (3)**
MUSIC LITERATURE (3 LEC.)

Prerequisite: Music 110. This course is a continuation of Music 110. The compositional procedures and forms used by composers are studied. Emphasis is on the Classical, Romantic, and Modern periods.

**MUSIC (MUS) 112 (3)**
GUITAR LITERATURE AND MATERIALS (3 LEC.)

The body of music for the guitar is surveyed. Emphasis is on the repertoire of instruments in the guitar family, such as the lute. Transcription and arranging are studied as well as the selection of a program for public performance.

**MUSIC (MUS) 113 (3)**
FOUNDATIONS OF MUSIC I (3 LEC.)

This course focuses on participation and skills for satisfactory performance in singing, playing an instrument, listening, and creating rhythmic responses. The ability to manage notation (music reading) is developed.

**MUSIC (MUS) 114 (3)**
FOUNDATIONS IN MUSIC II (3 LEC.)

Prerequisite: Music 113. This course prepares students with limited music training for Music 101 and increases their general music understanding. Emphasis is on rhythmic and melodic training, chord functions, melody, textures, and basic analysis of music.

**MUSIC (MUS) 115 (2)**
JAZZ IMPROVISATION (1 LEC., 2 LAB.)

The art of improvisation is introduced. Basic materials, aural training, analysis, and common styles are presented. This course may be repeated for credit.

**MUSIC (MUS) 117 (1)**
PIANO CLASS I (2 LAB.)

This course is primarily for students with no knowledge of piano skills. It develops basic musicianship and piano skills. This course may be repeated for credit.

**MUSIC (MUS) 118 (1)**
PIANO CLASS II (2 LAB.)

The study of piano is continued. Included are techniques, skills, harmonization, transposition, improvisation, accompanying, sight-reading, and performing various styles of repertoire. This course may be repeated for credit.

**MUSIC (MUS) 119 (1)**
GUITAR CLASS I (2 LAB.)

This course is primarily for students with limited knowledge in reading music or playing the guitar. It develops basic guitar skills. This course may be repeated for credit.

**MUSIC (MUS) 120 (1)**
GUITAR CLASS II (2 LAB.)

Prerequisite Music 119 or the equivalent. This course is a continuation of Music 119. Emphasis is on classical guitar techniques and music reading skills. This course may be repeated for credit.

**MUSIC (MUS) 121-143 (1)**
APPLIED MUSIC-MINOR (1 LEC.)

This course is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the student's secondary area, and consists of a one half-hour lesson a week. Fee required. Private music may be repeated for credit.

**MUSIC (MUS) 150 (1)**
CHORUS (3 LAB.)

Prerequisite: Consent of instructor. A wide variety of music representing the literature of the great eras of music history is studied and performed. This course may be repeated for credit.

**MUSIC (MUS) 151 (1)**
VOICE CLASS I (2 LAB.)

This course is for non-voice majors. It presents the principles of breathing, voice production, tone control, enunciation, and phrasing in two group lessons a week. This course may be repeated for credit.

**MUSIC (MUS) 152 (1)**
VOICE CLASS II (2 LAB.)

This course is a continuation of Music 151. It is open to all non-voice majors. Emphasis is on solo singing, appearance in studio recital, stage deportment, and personality development. Two group lessons are given a week. This course may be repeated for credit.

**MUSIC (MUS) 155 (1)**
VOCAL ENSEMBLE (3 LAB.)

A group of mixed voices concentrates on excellence of performance. Membership is open to any student by audition. The director selects those who possess special interest and skill in the performance of advanced choral literature. This course may be repeated for credit.

**MUSIC (MUS) 156 (1)**
MADRIGAL SINGERS (3 LAB.)

A group of vocalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 160 (1)**
BAND (3 LAB.)

Prerequisite: The consent of the

instructor is required for non-wind instrument majors. The band studies and performs a wide variety of music in all areas of band literature. This course may be repeated for credit.

**MUSIC (MUS) 170 (1)**
ORCHESTRA (3 LAB.)

Experience is provided in performing and reading orchestral literature and in participating in the college orchestra. This course may be repeated for credit.

**MUSIC (MUS) 171 (1)**
WOODWIND ENSEMBLE (3 LAB.)

A group of woodwind instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 172 (1)**
BRASS ENSEMBLE (3 LAB.)

A group of brass instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 173 (1)**
PERCUSSION ENSEMBLE (3 LAB.)

A group of percussion instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeatd for credit.

**MUSIC (MUS) 174 (1)**
KEYBOARD ENSEMBLE (3 LAB.)

A group of keyboard instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 175 (1)**
STRING ENSEMBLE (3 LAB.)

A group of string instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 176 (1)**
SYMPHONIC WIND ENSEMBLE (3 LAB.)

In the symphonic wind ensemble students study and perform stylistic literature of all periods. This course may be repeated for credit.

**MUSIC (MUS) 177 (1)**
CHAMBER ENSEMBLE (3 LAB.)

A group of chamber instrumentalists or vocalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 181 (1)**
LAB BAND (3 LAB.)

Prerequisite: The consent of the instructor. In the Lab Band students study and perform all forms of commercial music, such as jazz, pop, avant-garde, and soul. Student arranging, composing, and conducting is encouraged. This course may be repeated for credit.

**MUSIC (MUS) 185 (1)**
STAGE BAND (3 LAB.)

Prerequisite: The consent of the instructor. In the Stage Band students study and perform a wide variety of music. Emphasis is on the jazz-oriented, big-band styles of the 1960's. This may be repeated for credit.

**MUSIC (MUS) 199 (1)**
RECITAL (2 LAB.)

Students of private lessons perform before an audience one period each week. Credit for this course does not apply to the Associate Degree. This course may be repeated for credit.

**MUSIC (MUS) 201 (4)**
SOPHOMORE THEORY (3 LEC., 3 LAB.)

Prerequisite: Music 101 and 102 or the consent of the instructor. This course is a continuation of the study of theory. Topics include larger forms, thematic development, chromatic chords such as the Neapolitan sixth and augmented sixth chords, and diatonic seventh chords. Advanced sight-singing, keyboard harmony, and ear training are also included.

**MUSIC (MUS) 202 (4)**
SOPHOMORE THEORY (3 LEC., 3 LAB.)

Prerequisite: Music 201 or the

equivalent or the consent of the instructor. This course is a continuation of Music 201. Topics include the sonata-allegro form and the ninth, eleventh, and thirteenth chords. New key schemes, impressionism, melody, harmony, tonality and formal processes of 20th century music are also included. Sight-singing, keyboard harmony, and ear training are developed further.

**MUSIC (MUS) 203 (3)**
COMPOSITION (3 LEC.)

Prerequisite: Music 101 and 102 or the consent of the instructor. This course covers composing in small forms for simple media in both traditional styles and styles of the student's choice. The course may be repeated for credit.

**MUSIC (MUS) 204 (2)**
GUITAR PEDAGOGY (2 LEC.)

Guitar method books are surveyed. Emphasis is on the strengths and weaknesses of each method. Structuring lessons and optimizing each individual teacher-student relationship are also discussed.

**MUSIC (MUS) 221-243 (2)**
APPLIED
MUSIC-CONCENTRATION (1 LEC.)

This course is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the area of the student's concentration, and consists of two half-hour lessons a week. Fee required. Private music may be repeated for credit.

**MUSIC (MUS) 251-270 (3)**
APPLIED MUSIC-MAJOR (1 LEC.)

This course is primarily for music performance majors and is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the area of the student's major instrument, and consists of two half-hour lessons a week. Fee required.

**APPLIED MUSIC**

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.

**PHILOSOPHY (PHI) 102 (3)**
INTRODUCTION TO
PHILOSOPHY (3 LEC.)

The fundamental problems in philosophy are surveyed. Methods to deal with the problems are discussed. Ancient and modern views are examined as possible solutions.

**PHILOSOPHY (PHI) 105 (3)**
LOGIC (3 LEC.)

The principles of logical thinking are analyzed. The methods and tools of logic are applied to real-life situations. Fallacies, definitions, analogies, syllogisms, Venn diagrams, and other topics are discussed.

**PHILOSOPHY (PHI) 202 (3)**
INTRODUCTION TO SOCIAL
AND POLITICAL PHILOSOPHY (3 LEC.)

The relationships of philosophical ideas to the community are presented. Emphasis is on concepts of natural rights, justice, education, freedom, and responsibility.

**PHILOSOPHY (PHI) 203 (3)**
ETHICS (3 LEC.)

The classical and modern theories of the moral nature of the human are surveyed. Alternative views of responsibilities to self and society are posed. Ethical issues and their metaphysical and epistemological bases are vivified. Emphasis is on applying ethical principles in life.

**PHILOSOPHY (PHI) 207 (3)**
HISTORY OF ANCIENT
PHILOSOPHY (3 LEC.)

The history of philosophy from pre-Socratic times to the Renaissance is examined. Connections are made between the pre-Socratics, Plato, and Aristotle. Stoicism, Epicureanism, and Scholasticism are considered.

**PHILOSOPHY (PHI) 208 (3)**
HISTORY OF MODERN
PHILOSOPHY (3 LEC.)

The history of philosophy from the Renaissance through the 19th century is examined. Emphasis is on continental rationalism, British empiricism, Kantian metaphysics and epistemology, and the Hegelian system as it relates to 20th century philosophies. The historical relationship between these schools of thought is explored.

**PHILOSOPHY (PHI) 210 (3)**
STUDIES IN PHILOSOPHY (3 LEC.)

Prerequisite: 3 hours of philosophy and the consent of the instructor. A philosophical problem, movement, or special topic is studied. The course topic changes each semester. This course may be repeated for credit.

**PHOTOGRAPHY (PHO) 110 (3)**
INTRODUCTION TO
PHOTOGRAPHY AND
PHOTO-JOURNALISM (2 LEC., 4 LAB.)

Photography and photo-jouranlism are introduced. Topics include the general mechanics of camera lenses and shutters and the general characteristics of photographic films, papers, and chemicals. Darkroom procedures are presented, including enlarging, processing, contact printing, and exposing films and papers. Artificial lighting is studied. Laboratory fee.

**PHOTOGRAPHY (PHO) 111 (3)**
ADVANCED PHOTOGRAPHY AND
PHOTO-JOURNALISM (2 LEC., 4 LAB.)

Techniques learned in Photography 110 are refined. Emphasis is on photographic communication. Laboratory fee.

**PHOTOGRAPHY (PHO) 120 (4)**
COMMERCIAL
PHOTOGRAPHY I (3 LEC., 3 LAB.)

Commercial or contract photography is studied. Field, studio, and darkroom experience for various kinds of photography is discussed. Included are social photography, portrait and studio photography, fashion and theatrical portfolio, publicity photography, and convention photography. The use of natural, stationary, flash, and strobe artificial lights is covered. Laboratory fee.

**PHOTOGRAPHY (PHO) 121 (4)**
COMMERCIAL
PHOTOGRAPHY II (3 LEC., 3 LAB.)

This course is a continuation of Photography 120. Publicity photography, architectual photography, interior photography, and advertising photography are included. The latest equipment, papers, films, and techniques are explored. Exchanges are made with sample clients, employers, studios, and agencies. Laboratory fee.

**PHYSICAL EDUCATION ACTIVITY COURSES**

The Physical Education Division provides opportunity for each student to become skilled in at least one physical activity for personal enjoyment of leisure time. Activity courses are open to both men and women. A laboratory fee is required. Students are urged to take advantage of the program by registering for a physical education activity course each semester.

**PHYSICAL EDUCATION NON-ACTIVITY COURSES**

PEH 101, 108, 109, 110, 144

**PHYSICAL EDUCATION (PEH) 100 (1)**
LIFETIME SPORTS
ACTIVITIES (3 LAB.)

Various lifetime sports are offered. Courses offered may include archery, badminton, bowling, golf, handball, racquetball, softball, swimming, tennis, and other sports. Activities may be offered singularly or in combinations. Instruction is presented at the beginner and advanced-beginner levels. Both men and women participate . This course may be repeated for credit when students select different activities. Laboratory fee.

**PHYSICAL EDUCATION (PEH) 101 (3)**
FUNDAMENTALS OF HEALTH (3 LEC.)

This course is for students majoring or

minoring in physical education or having other specific interest. Personal health and community health are studied. Emphasis is on the causes of mental and physical health and disease transmission and prevention.

**PHYSICAL EDUCATION**
**(PEH) 104 (1)**
TOUCH FOOTBALL/SOCCER (2 LAB.)

Touch football and soccer are taught and played. Emphasis is on skill development. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 108 (3)**
SOCIAL RECREATION (3 LEC.)

The methods and materials for social activities for different age groups are introduced. Planning, organizing, and conducting the activities are included.

**PHYSICAL EDUCATION**
**(PEH) 109 (3)**
OUTDOOR RECREATION (3 LEC.)

Outdoor recreation and organized camping are studied. Both the development of these activities and present trends are covered.

**PHYSICAL EDUCATION**
**(PEH) 110 (3)**
COMMUNITY RECREATION (3 LEC.)

This course is primarily for students majoring or minoring in health, physical education, or recreation. The principles, organization, and function of recreation in American society are covered.

**PHYSICAL EDUCATION**
**(PEH) 111 (1)**
BEGINNING WRESTLING (2 LAB.)

The fundamentals, techniques, rules, and strategy of wrestling are presented. Emphasis is also on spectator appreciation. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 112 (1)**
SOFTBALL AND SOCCER (2 LAB.)

Softball and soccer are taught and played. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 113 (1)**
HANDBALL AND RACQUETBALL (2 LAB.)

Handball and racquetball are taught and played. Emphasis is on the development of skills. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 114 (1)**
BEGINNING BADMINTON (2 LAB.)

The history, rules, and skills of badminton are taught. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 115 (1)**
PHYSICAL FITNESS (3 LAB.)

The student's physical condition is assessed. A program of exercise for life is prescribed. Much of the course work is carried on in the Physical Performance Laboratory. A uniform is required. This course may be repeated for credit. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 116 (1)**
INTRAMURAL ATHLETICS (2 LAB.)

Intramural competition in a variety of activities is offered for men and women. A uniform is required. This course may be repeated for credit. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 117 (1)**
BEGINNING ARCHERY (2 LAB.)

Beginning archery is taught and played. Equipment is furnished. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 118 (1)**
BEGINNING GOLF (2 LAB.)

Beginning golf is taught and played. Equipment is furnished. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 119 (1)**
BEGINNING TENNIS (2 LAB.)

This course is designed for the beginner. Tennis fundamentals are taught and played. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 120 (1)**
BEGINNING BOWLING (2 LAB.)

Beginning bowling is taught and played. Equipment is furnished. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 121 (1)**
FOLK DANCE (2 LAB.)

Participation is provided in a variety of folk dances from other lands. The study of cultural backgrounds and costumes is included. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 122 (1)**
BEGINNING GYMNASTICS (2 LAB.)

Beginning gymnastics is offered. Emphasis is on basic skills in tumbling and in the various apparatus events. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 123 (1)**
BEGINNING SWIMMING (2 LAB.)

This course teaches a non-swimmer to survive in the water. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 124 (1)**
SOCIAL DANCE (2 LAB.)

This course is for students who have limited experience in dance. Ballroom and social dancing are offered. Included are fundamental steps and rhythms of the fox-trot, waltz, tango, and recent dances. "Country" dancing includes the reel, square dance, and other dances. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 125 (1)**
CONDITIONING EXERCISE (3 LAB.)

This course focuses on understanding exercise and its effect on the body. Physical fitness is improved through a variety of conditioning activities. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 127 (1)**
BASKETBALL AND VOLLEYBALL (2 LAB.)

The techniques, rules, and strategy of basketball and volleyball are covered. Emphasis is on playing the games. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 128 (1)**
SOCIAL AND FOLK DANCE (2 LAB.)

Social and folk dance is introduced. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 129 (1)**
MODERN DANCE (2 LAB.)

This beginning course is designed to emphasis basic dance techniques, including body alignment and placement, floor work, locomotor patterns,and creative movements. A uniform is required.

**PHYSICAL EDUCATION**
**(PEH) 131 (1)**
WEIGHT TRAINING AND CONDITIONING (3 LAB.)

Instruction and training in weight training and conditioning techniques are offered. A uniform is required. This course may be repeated for credit. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 132 (1)**
SELF-DEFENSE (3 LAB.)

Various forms of self-defense are introduced. The history and philosophy of the martial arts are explored. The student should progress from no previous experience in self-defense to an adequate skill level covering basic self-defense situations. Both mental and physical aspects of the arts are stressed.

**PHYSICAL EDUCATION**
**(PEH) 134 (1)**
OUTDOOR EDUCATION (3 LAB.)

Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 144 (3)**
INTRODUCTION TO PHYSICAL EDUCATION (3 LEC.)

This course is for students majoring in physical education and is designed for professional orientation in physical education, health, and recreation. The history, philosophy, and modern trends of physical education are surveyed.

Topics include teacher qualifications, vocational opportunities, expected competencies, and skill testing.

**PHYSICAL EDUCATION**
**(PEH) 147 (3)**
SPORTS OFFICIATING I (2 LEC., 2 LAB.)

This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are football, basketball, and other sports as appropriate. Students are expected to officiate intramural games.

**PHYSICAL EDUCATION**
**(PEH) 148 (3)**
SPORTS OFFICIATING II (2 LEC., 2 LAB.)

This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are softball, track and field, baseball, and other sports as appropriate. Students are expected to officiate intramural games.

**PHYSICAL EDUCATION**
**(PEH) 200 (1)**
LIFETIME SPORTS
ACTIVITIES II (3 LAB.)

This course is a continuation of Physical Education 100. Students participate in selected activities. Instruction is at the intermediate and intermediate/advanced levels. This course may be repeated for credit. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 210 (3)**
SPORTS APPRECIATION FOR
THE SPECTATOR (3 LEC.)

This course is for students who desire a broader knowledge of major and minor sports. The rules, terminology, and philosophies of many sports are studied. Special emphasis is on football and basketball.

**PHYSICAL EDUCATION**
**(PEH) 217 (1)**
INTERMEDIATE ARCHERY (2 LAB.)

This course is for the student who has previous experience in archery. Target shooting and field archery are emphasized. The student must furnish equipment. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 218 (1)**
INTERMEDIATE GOLF (2 LAB.)

Prerequisite: The consent of the instructor. Skills and techniques in golf are developed beyond the "beginner" stage. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 219 (1)**
INTERMEDIATE TENNIS (2 LAB.)

Prerequisite: The consent of the instructor. Skills and techniques in tennis are developed beyond the "beginner" stage. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 222 (1)**
INTERMEDIATE GYMNASTICS (2 LAB.)

Prerequisite: Physical Education 122. Skills and techniques in gymnastics are developed beyond the "beginner" stage. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 223 (1)**
INTERMEDIATE SWIMMING (2 LAB.)

Prerequisite: Beginning swim certificate or deep water swimmer. This course advances the swimmer's skills. Stroke analysis, refinement, and endurance are emphasized. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 225 (2)**
SKIN AND SCUBA DIVING (1 LEC., 2 LAB.)

Prerequisite: Physical Education 223 or the consent of the instructor. This course includes the use of equipment, safety, physiology, and open water diving. All equipment is supplied except mask, fins, and snorkel. The student may rent needed equipment at the time on registration. Students completing course requirements receive certification as basic scuba divers from the Professional Association of Diving Instructors (PADI) or the National Association of Underwater Instructors (NAUI). Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 226 (1)**
ADVANCED LIFE SAVING (2 LAB.)

Prerequisite: Physical Education 223 or deep water swim ability. This course qualifies students for the Red Cross Advanced Lifesaving Certificate. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 234 (2)**
WATER SAFETY INSTRUCTOR (1 LEC., 2 LAB.)

Prerequisite: Current Advanced Life Saving card. The principles and techniques for instructors in water safety and life saving classes are covered. Completion of the course qualifies the student to test for certification by the Red Cross as a water safety instructor. A uniform is required. Laboratory fee.

**PHYSICAL EDUCATION**
**(PEH) 236 (3)**
THE COACHING OF FOOTBALL AND BASKETBALL (2 LEC., 2 LAB.)

The skills and techniques of coaching football and basketball are presented. Included are the history, theories, philosophies, rules, terminology, and finer points of the sports. Emphasis is on coaching techniques.

**PHYSICAL EDUCATION**
**(PEH) 238 (2)**
AQUATICS (1 LEC., 2 LAB.)

The techniques and procedures of selected water-related activities are studied. The use of the activities in recreation programs is included. Pool management, staff training, safety, and supervision of aquatics are also included.

**PHYSICAL EDUCATION**
**(PEH) 257 (3)**
ADVANCED FIRST AID AND EMERGENCY CARE (3 LEC.)

The Advanced First Aid and Emergency Care course of the American Red Cross is taught, presenting both theory and practice. Various aspects of safety education also are included.

**PHYSICAL SCIENCE**
**(PSC) 118 (4)**
PHYSICAL SCIENCE (3 LEC., 2 LAB.)

This course is primarily for non-science majors. It is a study of the basic principles and concepts of physics, chemistry, and nuclear science. The three basic sciences are related to the physical world at an introductory level. Laboratory fee.

**PHYSICAL SCIENCE**
**(PSC) 119 (4)**
PHYSICAL SCIENCE (3 LEC., 2 LAB.)

This course is for non-science majors. It focuses on the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are emphasized. Selected principles and concepts are explored. Laboratory fee.

**PHYSICS (PHY) 111 (4)**
INTRODUCTORY GENERAL PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Two years of high school algebra, including trigonometry, or the equivalent. This course is for pre-dental, biology, pre-medical, pre-pharmacy, and pre-architecture majors and other students who need a two-semester technical course in physics. Mechanics and heat are studied. Laboratory fee.

**PHYSICS (PHY) 112 (4)**
INTRODUCTORY GENERAL PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Physics 111. This course is a continuation of Physics 111. Electricity, magnetism, light, and sound are studied. Laboratory fee.

**PHYSICS (PHY) 117 (4)**
CONCEPTS IN PHYSICS (3 LEC., 3 LAB.)

This course is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on classical mechanics and thermodynamics. Historical developments and their impact on daily life are included. The principle of energy conservation is stressed, and current problems of world-wide energy production are examined. Laboratory fee.

**PHYSICS (PHY) 118 (4)**
CONCEPTS IN PHYSICS (3 LEC., 3 LAB.)

This is for non-science majors. It intro-

duces principles of physics and does not require a mathematical background. Emphasis is on modern developments in physics. Topics include acoustics, electricity and magnetism, light and the electromagnetic spectrum, atomic physics, and relativity. Laboratory fee.

**PHYSICS (PHY) 131 (4)**
APPLIED PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Mathematics 195 or concurrent enrollment in Mathematics 195. This course is primarily for students in technical programs. The properties of matter, mechanics, and heat are introduced. Emphasis is on uses and problem-solving. Laboratory fee.

**PHYSICS (PHY) 132 (4)**
APPLIED PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Physics 131. This course is a continuation of Physics 131. Concepts of sound, light, electricity, magnetism, and atomic theory are explained. Laboratory fee.

**PHYSICS (PHY) 201 (4)**
GENERAL PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Credit or concurrent enrollment in Mathematics 126 or 222. This course is designed primarily for physics, chemistry, mathematics, and engineering majors. The principles and applications of mechanics, wave motion, and sound are studied. Emphasis is on fundamental concepts, problem-solving, notation, and units. The laboratory includes a one-hour problem session. Laboratory fee.

**PHYSICS (PHY) 202 (4)**
GENERAL PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Physics 201 and credit or concurrent enrollment in Mathematics 223 or 227. This course presents the principles and applications of heat, electricity, magnetism, and optics. Emphasis is on fundamental concepts, problem solving, notation, and units. The laboratory includes a one-hour problem session. Laboratory fee.

**PHYSICS (PHY) 203 (4)**
INTRODUCTION TO MODERN PHYSICS (3 LEC., 3 LAB.)

Prerequisite: Physics 202. The principles of relativity, atomic physics, and nuclear physics are covered. Emphasis is on basic concepts, problem-solving, notation, and units. Laboratory fee.

**PSYCHOLOGY (PSY) 103 (3)**
SEX ROLES IN AMERICAN SOCIETY (3 LEC.)

Students may register for either Psychology 103 or Sociology 103 but receive credit for only one of the two. Human sexuality is studied. The physiological, psychological, and sociological aspects are included.

**PSYCHOLOGY (PSY) 105 (3)**
INTRODUCTION TO PSYCHOLOGY (3 LEC.)

Principles of human behavior and problems of human experience are presented. Topics include heredity and environment, the nervous system, motivation, learning, emotions, thinking, and intelligence. (This course is offered on campus and may be offered via television.)

**PSYCHOLOGY (PSY) 131 (3)**
HUMAN RELATIONS (3 LEC.)

Psychological principles are applied to human relations problems in business and industry. Topics include group dynamics and adjustment factors for employment and advancement.

**PSYCHOLOGY (PSY) 201 (3)**
DEVELOPMENTAL PSYCHOLOGY (3 LEC.)

Prerequisite: Psychology 105. This course is a study of human growth, development, and behavior. Emphasis is on psychological changes during life. Processes of life from prenatal beginnings through adulthood and aging are included. (This course is offered on campus and may be offered via television.)

**PSYCHOLOGY (PSY) 202 (3)**
APPLIED PSYCHOLOGY (3 LEC.)

Prerequisite: Psychology 105. Psychological facts and principles are applied to problems and activities of life. Emphasis is on observing, recording, and modifying human behavior. Some off-campus work may be required.

**PSYCHOLOGY (PSY) 205 (3)**
PSYCHOLOGY OF PERSONALITY (3 LEC.)

Prerequisite: Psychology 105. Important factors of successful human adjustment such as child parent relationships, adolescence, anxiety states, defense mechanisms, and psychotherapeutic concepts are considered. Methods of personality measurement are also included.

**PSYCHOLOGY (PSY) 207 (3)**
SOCIAL PSYCHOLOGY (3 LEC.)

Prerequisite: Psychology 105 or Sociology 101. Students may register for either Psychology 207 or Sociology 207 but may receive credit for only one. Theories of individual behavior in the social environment are surveyed. Topics include the socio-psychological process, attitude formation and change, interpersonal relations, and group processes.

**PSYCHOLOGY (PSY) 210 (3)**
SELECTED TOPICS IN PSYCHOLOGY (3 LEC.)

Prerequisite: Psychology 105. An elective course designed to deal with specific topics in psychology. Examples of topics might include "adult development," "adolescent psychology," and "behavioral research." Course may be repeated once for credit.

**READING (RD) 101 (3)**
EFFECTIVE COLLEGE READING (3 LEC.)

Comprehension techniques for reading fiction and non-fiction are presented. Critical reading skills are addressed. Analysis, critique, and evaluation of written material are included. Reading comprehension and flexibility of reading rate are stressed. Advanced learning techniques are developed in listening, note-taking, underlining, concentrating, and reading in specialized academic areas.

**READING (RD) 102 (3)**
SPEED READING AND LEARNING (3 LEC.)

Reading and learning skills are addressed. Speed reading techniques and comprehension are emphasized. Learning and memory skills are also covered.

**RELIGION (REL) 101 (3)**
RELIGION IN AMERICAN CULTURE (3 LEC.)

This course examines the nature of religion in America. It covers important influences from the past and characteristics of current religious groups and movements. Emphasis is on understanding the role of religion in American life.

**RELIGION (REL) 102 (3)**
CONTEMPORARY RELIGIOUS PROBLEMS (3 LEC.)

Both classic and recent issues are explored. Such topics as the nature of religion, the existance of God, world religions, mysticism, sexuality and religion, and the interpretation of death are included. This course may be offered with emphasis on a specific topic, such as death and dying.

**RELIGION (REL) 201 (3)**
MAJOR WORLD RELIGIONS (3 LEC.)

This course.surveys the major world religions. Hinduism, Buddhism, Judaism, Islam, and Christianity are included. The history of religions is covered, but the major emphasis is on current beliefs. Other topics may also be included, such as the nature of religion, tribal religion, and alternatives to religion.

**SOCIAL SCIENCE (SS) 131 (3)**
AMERICAN CIVILIZATION (3 LEC.)

Theories and institutions of modern society are introduced. Psychological, historical, sociocultural, political, and economic factors are considered. The nature of the human being and the relationships of the individual are examined. Emphasis is on the national, state, and local experiences which affect daily life.

**SOCIAL SCIENCES (SS) 132 (3)**
AMERICAN CIVILIZATION (3 LEC.)

Prerequisite: Social Science 131. Topical studies are made of the theories and institutions of modern society.Psychological, historical, sociocultural, political, and economic

factors are all considered. Emphasis is on analyzing and applying theory to life experiences.

**SOCIOLOGY (SOC) 101 (3)**
INTRODUCTION TO SOCIOLOGY (3 LEC.)

This course is a study of the nature of society and the foundations of group life. Topics include institutions, social change, processes, and problems.

**SOCIOLOGY (SOC) 102 (3)**
SOCIAL PROBLEMS (3 LEC.)

Prerequisite: Sociology 101 or the consent of the instructor. Current group relationships in society are studied. The background, emergence, and scope of relationships are included. Emphasis is on the total community environment.

**SOCIOLOGY (SOC) 103 (3)**
SEX ROLES IN AMERICAN SOCIETY (3 LEC.)

Students may register for either Sociology 103 or Psychology 103 but may receive credit for only one. Human sexuality is presented. Topics include physiological, psychological, and sociological aspects.

**SOCIOLOGY (SOC) 203 (3)**
MARRIAGE AND FAMILY (3 LEC.)

Prerequisite: Sociology 101 recommended. Courtship patterns and marriage are analyzed. Family forms, relationships, and functions are included. Sociocultural differences in family behavior are also included.

**SOCIOLOGY (SOC) 204 (3)**
AMERICAN MINORITIES (3 LEC.)

Prerequisite: Sociology 101 or 6 hours of U.S. history recommended. Students may register for either History 204 or Sociology 204 but may receive credit for only one. The principal minority groups in American society are the focus of this course. The sociological significance and historic contributions of the groups are presented. Emphasis is on current problems of intergroup relations, social movements, and related social changes.

**SOCIOLOGY (SOC) 205 (3)**
INTRODUCTION TO SOCIAL RESEARCH (3 LEC.)

Prerequisite: Sociology 101, Developmental Mathematics 091, or the equivalent. Principles and procedures in social research are presented. Topics include sources of data, techniques of collection, analysis, and statistical description.

**SOCIOLOGY (SOC) 206 (3)**
INTRODUCTION TO SOCIAL WORK (3 LEC.)

The development of the field of social work is studied. Topics include the techniques of social work and the requirements for training in social work.

**SOCIOLOGY (SOC) 207 (3)**
SOCIAL PSYCHOLOGY (3 LEC.)

Students may register for either Psychology 207 or Sociology 207 but may receive credit for one. Theories of individual behavior in the social environment are surveyed. Topics include the socio-psychological process, attitude formation and change,interpersonal relations, and group processes.

**SOCIOLOGY (SOC) 210 (3)**
FIELD STUDIES IN AMERICAN MINORITIES (3 LEC.)

Prerequisite: Sociology 101 or Sociology 204. Experience is provided in Indian, Black, and Mexican-American community centers. Work is under professional supervision in a task-oriented setting.

**SOCIOLOGY (SOC) 231 (3)**
URBAN SOCIAL PROBLEMS (3 LEC.)

The sociology of social institutions is studied. Topics include urbanization. Theories of formation, and the impact of urbanization on the individual.

**SPANISH (SPA) 101 (4)**
BEGINNING SPANISH (3 LEC., 2 LAB.)

The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee.

**SPANISH (SPA) 102 (4)**
BEGINNING SPANISH (3 LEC., 2 LAB.)

Prerequisite: Spanish 101 or the equivalent. This course is a continuation of Spanish 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee.

**SPANISH (SPA) 201 (3)**
INTERMEDIATE SPANISH (3 LEC.)

Prerequisite: Spanish 102 or the equivalent or the consent of the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed.

**SPANISH (SPA) 202 (3)**
INTERMEDIATE SPANISH (3 LEC.)

Prerequisite: Spanish 201 or the equivalent. This course is a continuation of Spanish 201. Contemporary literature and composition are studied.

**SPANISH (SPA) 203 (3)**
INTRODUCTION TO SPANISH LITERATURE (3 LEC.)

Prerequisite: Spanish 202 or the equivalent or the consent of the instructor. This course is an introduction to Spanish literature. It includes readings in Spanish literature, history, culture, art, and civilization.

**SPANISH (SPA) 204 (3)**
INTRODUCTION TO SPANISH LITERATURE (3 LEC.)

Prerequisite: Spanish 202 or the equivalent or the consent of the instructor. This course is a continuation of Spanish 203. It includes readings in Spanish literature, history, culture, art, and civilization.

**SPEECH (SPE) 100 (1)**
SPEECH LABORATORY (3 LAB.)

This course focuses on preparing speeches, reading dialogue from literature, and debating propositions. Presentations are made throughout the community. This course may be repeated for credit each semester.

**SPEECH (SPE) 105 (3)**
FUNDAMENTALS OF PUBLIC SPEAKING (3 LEC.)

Public speaking is introduced. Topics include the principles of reasoning, audience analysis, collection of materials, and outlining. Emphasis is on giving well prepared speeches.

**SPEECH (SPE) 109 (3)**
VOICE AND ARTICULATION (3 LEC.)

Students may register for either Speech 109 or Theatre 109 but may receive credit for only one of the two. The mechanics of speech are studied. Emphasis is on improving voice and pronunciation.

**SPEECH (SPE) 110 (1)**
FORENSIC WORKSHOP (2 LAB.)

This course focuses on preparing speeches, readings, and debate propositions. Presentations are made in competition and before select audiences. This course may be repeated for credit.

**SPEECH (SPE) 201 (1)**
FORENSIC WORKSHOP (2 LAB.)

This course focuses on preparing speeches, readings, and debate propositions. Presentations are made in competition and before select audiences. This course may be repeated for credit.

**SPEECH (SPE) 205 (3)**
DISCUSSION AND DEBATE (3 LEC.)

Public discussion and argumentation are studied. Both theories and techniques are covered. Emphasis is on evaluation, analysis, and logical thinking.

**SPEECH (SPE) 206 (3)**
ORAL INTERPRETATION (3 LEC.)

Techniques of analyzing various types of literature are examined. Practice is provided in preparing and presenting selections orally. Emphasis is on individual improvement.

**SPEECH (SPE) 208 (3)**
GROUP INTERPRETATION (3 LEC.)

Prerequisite: Speech 105 and 206. Various types of literature are studied for group presentation. Emphasis is on selecting, cutting and arranging prose and poetry, and applying reader's theatre techniques to the group performance of the literature. Although not an acting class, practical experience in sharing selections from fiction and non-fiction with audiences will be offered.

**THEATRE (THE) 100 (1)**
REHEARSAL AND PERFORMANCE (4 LAB.)

Prerequisite: To enroll in this course, a student must be accepted as a member of the cast or crew of a major production. Participation in the class will include the rehearsal and performance of the current theatrical presentation of the division. This course may be repeated for credit.

**THEATRE (THE) 101 (3)**
INTRODUCTION TO THE THEATRE (3 LEC.)

The various aspects of theatre are surveyed. Topics include plays, playwrights, directing, acting, theatres, artists, and technicians.

**THEATRE (THE) 102 (3)**
COMTEMPORARY THEATRE (3 LEC.)

This course is a study of the modern theatre and cinema as art forms. The historical background and traditions of each form are included. Emphasis is on understanding the social, cultural, and aesthetic significance of each form. A number of modern plays are read, and selected films are viewed.

**THEATRE (THE) 103 (3)**
STAGECRAFT I (2 LEC., 3 LAB.)

The technical aspects of play production are studied. Topics include set design and construction, stage lighting, make-up, costuming, and related areas.

**THEATRE (THE) 104 (3)**
STAGECRAFT II (2 LEC., 3 LAB.)

Prerequisite: Theatre 103 or the consent of the instructor. This course is a continuation of theatre 103. Emphasis is on individual projects in set and lighting design and construction. The technical aspects of play production are explored further.

**THEATRE (THE) 105 (3)**
MAKE-UP FOR THE STAGE (3 LEC.)

The craft of make-up is explored. Both theory and practice are included. Laboratory fee.

**THEATRE (THE) 106 (3)**
ACTING I (2 LEC., 3 LAB.)

The theory of acting and various exercises are presented. Body control, voice, pantomime, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied for stage presentation.

**THEATRE (THE) 107 (3)**
ACTING II (2 LEC., 3 LAB.)

Prerequisite: Theatre 106 or the consent of the instructor. This course is a continuation of Theatre 106. Emphasis is on complex characterization, ensemble acting, stylized acting, and acting in period plays.

**THEATRE (THE) 108 (3)**
MOVEMENT FOR THE STAGE (2 LEC., 3 LAB.)

Movement is studied as both a pure form and as a part of the theatre arts. It is also presented as a technique to control balance, rhythm, strength, and flexibility. Movement in all the theatrical forms and in the development of characterization is explored. This course may be repeated for credit.

**THEATRE (THE) 109 (3)**
VOICE AND ARTICULATION (3 LEC.)

Students may register for either Speech 109 or Theatre 109 but may receive credit for only one of the two. Emphasis is on improving voice and pronunciation.

**THEATRE (THE) 110 (3)**
HISTORY OF THEATRE I (3 LEC.)

Theatre is surveyed from its beginning through the 16th century. The theatre is studied in each period as a part of the total culture of the period.

**THEATRE (THE) 111 (3)**
HISTORY OF THEATRE II (3 LEC.)

Theatre is surveyed from the 17th century through the 20th century. The theatre is studied in each as a part of the total culture of the period.

**THEATRE (THE) 112 (3)**
BEGINNING DANCE TECHNIQUE IN THEATRE (2 LEC., 3 LAB.)

Basic movements of the dance are explored. Emphasis is on swing movements, circular motion, fall and recovery, contraction and release, and contrast of literal and abstract movements. Body balance, manipulation of trunk and limbs, and the rhythmic flow of physical energy are developed.

**THEATRE (THE) 113 (3)**
INTERMEDIATE DANCE (2 LEC., 3 LAB.)

Prerequisite: Theatre 112 or the consent of the instructor. Various aspects of dance are surveyed. Topics include the role of dance in total theatre, the evolution of dance styles, and the jazz style. Emphasis is on the flow of movement, body placement, dynamic intensity, level, focus, and direction.

**THEATRE (THE) 115 (2)**
MIME (1 LEC., 2 LAB.)

Prerequisite: Theatre 108. Mime is studied. Both the expressive significance and techniques of mime are included.

**THEATRE (THE) 199 (1)**
DEMONSTRATION LAB (1 LAB.)

This course provides practice before a live audience of theory learned in theatre class. Scenes studied in various drama classes are used to show contrast and different perspectives.

**THEATRE (THE) 201 (3)**
TELEVISION PRODUCTION I (2 LEC., 3 LAB.)

Station organization, studio operation, and the use of studio equipment are introduced. Topics include continuity, camera, sound, lights, and video-tape recording.

**THEATRE (THE) 202 (3)**
TELEVISION PRODUCTION II (2 LEC., 3 LAB.)

Prerequisite: Theatre 201. This course is a continuation of Theatre 201. Emphasis is on the concept and technique of production in practical situations.

**THEATRE (THE) 203 (3)**
BROADCASTING COMMUNCIATIONS I (3 LEC., 2 LAB.)

The nature and practice of broadcasting are covered. Basic techniques of radio and television studio operations are introduced.

**THEATRE (THE) 204 (3)**
BROADCASTING COMMUNICATIONS II (3 LEC., 2 LAB.)

This course is a continuation of Theatre 203. Emphasis is on radio and television as mass media and practical applications in both radio and television.

**THEATRE (THE) 205 (3)**
SCENE STUDY I (2 LEC., 3 LAB.)

Prerequisite: Theatre 106 and 107. This course is a continuation of Theatre 107. Emphasis is on developing dramatic action through detailed study of the script. Students deal with stylistic problems presented by the staging of period plays and the developent of realism. Rehearsals are used to prepare for scene work.

**THEATRE (THE) 207 (3)**
SCENE STUDY II (2 LEC., 3 LAB.)

Prerequisite: Theatre 205. This course is a continuation of Theatre 205. Emphasis is on individual needs of the performer. Rehearsals are used to prepare for scene work.

**THEATRE (THE) 208 (3)**
INTRODUCTION TO TECHNICAL DRAWING (2 LEC., 3 LAB.)

Basic techniques of drafting are studied. Isometrics, orthographic projections, and other standard procedures are included. The emphasis is on theatrical drafting, including groundplans, vertical sections, construction elevations, and spider perspective.

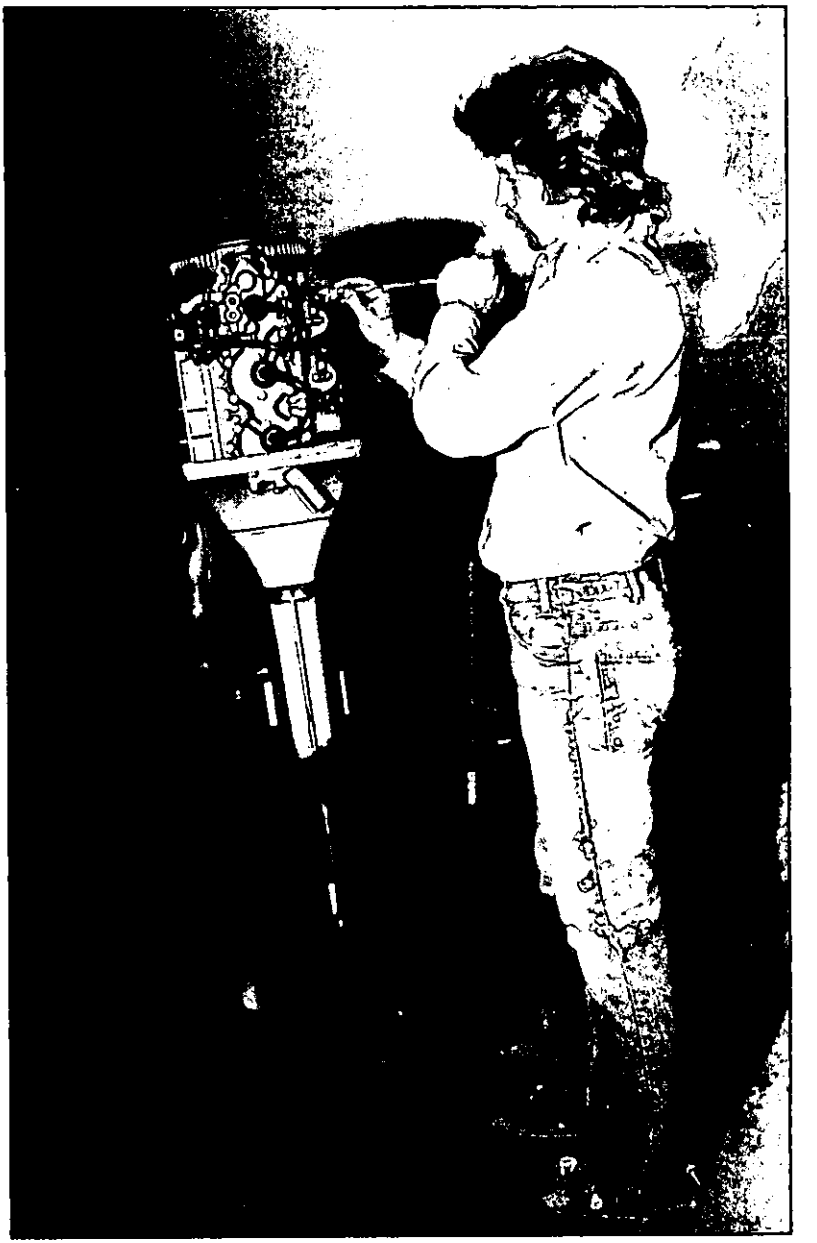
**THEATRE (THE) 209 (3)**
LIGHTING DESIGN (2 LEC., 3 LAB.)

Prerequisite: Theatre 103 and 104. The design and techniques of lighting are covered. Practical experience in departmental productions is required for one semester.

**THEATRE (THE) 235 (3)**
COSTUME HISTORY (3 LEC.)

Fashion costume and social customs are examined. The Egyptian, Greek, Roman, Gothic, Elizabethan, Victorian, and Modern periods are included.

# Technical/Occupational Programs and Course Descriptions



## DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

| Occupational Education Programs 80-81 | BHC | CVC | EFC | ECC | MVC | NLC | RLC |
|---|---|---|---|---|---|---|---|
| Accounting Associate | x | x | x | x | x | x | x |
| Accounting Technician | x | x | x | x | x | x | x |
| Advertising Art | x | | | | | | |
| Air Conditioning & Refrigeration | | x | x | | | x | |
| Commercial | | x | | | | x | |
| Residential | | x | | | | x | |
| Animal Medical Technology | | x | | | | | |
| Apparel Design | | | | x | | | |
| Architecture Technology | | | | x | | | |
| Auto Body | | | x | | | | |
| Auto Body Repair & Painting | x | | | | | | |
| Automotive Technology Apprenticeship | | x | | | | | |
| Automotive Machinist | x | | | | | | |
| Automotive Mechanics | x | x | x | | | | |
| Automotive Parts Counter Assistant | x | | | | | | |
| Automotive Parts Sales & Service | x | | | | | | |
| Automotive Technology | x | x | x | | | | |
| Aviation Maintenance Technology | | | | | x | | |
| Airframe | | | | | x | | |
| Powerplant | | | | | x | | |
| Aviation Technology | | | | | x | | |
| Air Cargo Transport | | | | | x | | |
| Aircraft Dispatcher | | | | | x | | |
| Airline Marketing | | | | | x | | |
| Career Pilot | | | | | x | | |
| Fixed Base Operations/Airport Management | | | | | x | | |
| Avionics Technology | | | | | x | | |
| Banking & Finance | | | | x | | x | x |
| Banking Option | | | | x | | x | x |
| Credit and Financial Management | | | | x | | x | x |
| Credit Union Option | | | | x | | x | x |
| Savings and Loan Option | | | | x | | x | x |
| Building Trade Options | | | | | | x | |
| Carpentry | | | | | | x | |
| Electricity | | | | | | x | |
| Child Development Administrative | x | | | | | | |
| Child Development Assistant | x | | x | | | | |
| Child Development Associate | x | | x | | | | |
| Child Development, Infant and Toddler | x | | x | | | | |
| Commercial Music | | x | | | | | |
| Arranger/Composer/Copyist | | x | | | | | |
| Music Retailing | | x | | | | | |
| Performing Musician | | x | | | | | |
| Construction Management and Technology | | | | | | | x |
| Data Processing | | | | x | | | |
| Data Processing Operator | | | | x | | | |
| Data Processing Programmer | | | | x | | | |
| Information Systems | | | | x | | | |
| Key Entry/Data Control | | | | x | | | |
| Small Computer Systems Information Specialist | | | | x | | | |
| Diesel Mechanics | | | | | | x | |
| Digital Electronics Technology | | | x | | | | |
| Distribution Technology | | | | | | x | |
| Drafting and Design Technology | | | x | x | x | | |
| Educational Paraprofessional | | | | x | x | | x |
| Electronics Technology | | | | | x | | |
| Radio/TV Repair | | | | | x | | |
| Engineering Technology | | | | | | | x |
| Electric Power | | | | | | | x |
| Electro-Mechanical | | | | | | | x |

| Occupational Education Programs 80-81 | BHC | CVC | EFC | ECC | MVC | NLC | RLC |
|---|---|---|---|---|---|---|---|
| Fluid Power | | | | | | | x |
| Quality Control | | | | | | | x |
| Fire Protection Technology | | | | x | | | |
| Food Service | | | | x | | | |
| Dietetic Assistant | | | | x | | | |
| Food Service Operations | | | | x | | | |
| School Food Service | | | | x | | | |
| Graphic Arts | | | x | | | | |
| Graphic Communications | | | x | | | | |
| Horology | | | | | x | | |
| Hotel/Motel Operations | | | | x | | | |
| Human Services Associate | | | | | | | x |
| Mental Health Assistant | | | | | | | x |
| Social Work Assistant | | | | | | | x |
| Interior Design | | | | x | | | |
| Legal Assistant | | | | x | | | |
| Machine Shop | | | | | x | | |
| Major Appliance Repair | | x | | | | | |
| Medical: Associate Degree Nursing | | | | x | | | |
| Dental Assistant Technology | | | | x | | | |
| Medical Assistant Technology | | | | x | | | |
| Medical Lab Technician | | | | x | | | |
| Medical Transcriptionist | | | | x | | | |
| Radiography Technology | | | | x | | | |
| Respiratory Therapy Assistant | | | | x | | | |
| Respiratory Therapy Technology | | | | x | | | |
| Surgical Technology | | | | x | | | |
| Vocational Nursing | | | | x | | | |
| Mid-Management | x | x | x | x | x | x | x |
| Small Business Management | | x | x | x | x | x | x |
| Motorcycle Mechanics | | x | | | | | |
| Office Careers: General Office Occupations | | x | x | x | x | x | x |
| Insurance Office Careers | | | | | | | x |
| Office Skills and Systems | | | x | | x | | x |
| Optical Technology | | | | | | x | |
| Ornamental Horticulture Technology: Florist | | | | | | | x |
| Greenhouse Florist | | | | | | | x |
| Landscape Gardener | | | | | | | x |
| Landscape Nursery | | | | | | | x |
| Outboard Marine Engine Mechanics | | x | | | | | |
| Pattern Design | | | | x | | | |
| Police Science | | | | x | | | |
| Postal Service Administration | | | | | x | | |
| Real Estate | | | | | | x | x |
| Retail Distribution and Marketing and Technology | x | x | | | | | |
| Commercial Design & Advertising | | x | | | | | |
| Fashion Merchandising | x | x | | | | | |
| Retail Management | x | x | | | | | |
| Secretarial Careers | x | x | x | x | x | x | x |
| Administrative Secretary | | | x | | | | |
| Educational Secretary | | | | | | | x |
| General Secretary | x | x | x | x | x | x | x |
| Legal Secretary | | x | | | | x | |
| Professional Secretary | x | x | x | x | x | x | x |
| Small Engine Mechanics | | x | | | | | |
| Social Work Associate | | | x | | | | |
| Solar Energy Technology | | | | | | x | |
| Training Paraprofessionals for the Deaf | | | x | | | | |
| Transportation Technology | | | x | | | | |
| Welding Technology | | | x | | x | | |

BHC Brookhaven College CVC Cedar Valley College EFC Eastfield College ECC El Centro College
MVC Mountain View College NLC North Lake College RLC Richland College

## SYMBOL GUIDE

| PROGRAM OR COURSE | PREFIX |
|---|---|
| Accounting Associate | ACC |
| Air Conditioning & Refrigeration | AC |
| Animal Medical Technology | AMT |
| Anthropology | ANP |
| Art | ART |
| Astronomy | AST |
| Automotive Technology | AT |
| Biology | BIO |
| Blueprint Reading | BPR |
| Business | BUS |
| Chemistry | CHM |
| College Learning Skills | CLS |
| Communications | COM |
| Computing Science | CS |
| Cooperative Work Experience | Program Prefix Used |
| Design | DES |
| Developmental Communications | DC |
| Developmental Learning | DL |
| Developmental Mathematics | DM |
| Developmental Reading | DR |
| Developmental Writing | DW |
| Drafting | DFT |
| Earth Science | ES |
| Ecology | ECY |
| Economics | ECO |
| Engine Mechanics | EM |
| English | ENG |

| PROGRAM OR COURSE | PREFIX |
|---|---|
| French | FR |
| Geography | GPY |
| Geology | GEO |
| Government | GVT |
| History | HST |
| Human Development | HD |
| Humanities | HUM |
| Journalism | JN |
| Major Appliance Repair | MAR |
| Mathematics | MTH |
| Mid-Management | MM |
| Motorcycle Mechanics | MM |
| Music | MUS |
| Outboard Engines | OE |
| Photography | PHO |
| Physical Education | PEH |
| Physical Science | PSC |
| Physics | PHY |
| Psychology | PSY |
| Reading | RD |
| Religion | REL |
| Retail Distribution & Marketing | RDM |
| Secretarial | OFC |
| Small Engines | SE |
| Sociology | SOC |
| Spanish | SPA |
| Speech | SPE |
| Theatre | THE |

**DCCCD PROGRAMS**

The following programs offered by Dallas County Community College District may be taken by Tarrant County residents at in-county tuition rates:

| Program | Campus |
|---|---|
| Advertising Art | BHC |
| Animal Medical Technology | CVC |
| Apparel Design | ECC |
| Audio-Video Technician | MVC |
| Aviation Technology | MVC |
| Air Cargo | MVC |
| Aircraft Dispatcher | MVC |
| Airline Marketing | MVC |
| Career Pilot | MVC |
| Fixed Base Operations | MVC |
| Avionics | MVC |
| Automotive Parts | BHC |
| Automotive Machinist | BHC |
| Building Trades | |
| Carpentry | NLC |
| Electrical | NLC |
| Chemical Quality Control | |
| Paint and Coatings Control Technician | MVC |
| Water Quality Control Tech. | MVC |
| Commercial Music | CVC |
| Construction Management | RLC |
| Diesel Mechanics | NLC |
| Distribution Technology | NLC |
| Engineering Technology | RLC |
| Electro Mechanical | RLC |
| Fluid Power | RLC |
| Quality Control | RLC |
| Food Service Operations | ECC |
| Graphic Communications | EFC |
| Horology | MVC |
| Hotel/Motel Operations | ECC |
| Human Services | EFC, RLC |
| Interior Design | ECC |
| Legal Assistant | ECC |
| Motorcycle & Marine, Small Engine Mechanics | CVC |
| Pattern Design | ECC |
| Optical Technology | NLC |
| Retail Distribution Mktg. | |
| Commercial Design and Advertising | CVC |
| Retail Management | BHC, CVC |
| Solar Energy Technology | NLC |
| Vocational Nursing | ECC |

**TCJC PROGRAMS**

The following programs offered by Tarrant County Junior College may be taken by Dallas County residents at in-county tuition rates:

| Program | Campus* |
|---|---|
| Agribusiness | NW |
| Civil/Construction Technology | NE |
| Dental Hygiene | NE |
| Emergency Medical Technology | NE |
| Food Store Marketing | NE |
| Industrial Supervision | S |
| Labor Studies | NE |
| Mechanical Technology | S |
| Cast Metals Technology | S |
| Nondestructive Evaluation | S |
| Power Transmission | S |
| Media Technology | NE |
| Medical Records Technology | NE |
| Physical Therapist Assistant | NE |

*NE-Northeast Campus, NW-Northwest Campus, S-South Campus.

## CEDAR VALLEY COLLEGE CAREER PROGRAMS

An important function of Cedar Valley College is the offering of technical/occupational career programs.

The purpose of these programs is to meet the needs of students who desire to enter immediately into technical/occupational employment areas. All career programs offered at Cedar Valley College are designed to meet job level skills as determined by consultation with occupational advisory committees. Members of these committees are leaders in business and industry in the metroplex area. The career programs reflect the needs of business and industry in the Dallas area for trained personnel and the desire of students in the area for specific career programs.

Several options are available to students. They may take those courses that lead to a Certificate of Completion or to an Associate of Applied Arts and Sciences Degree. Another option may be to take one course or a sequence of courses within a career program that would result in job upgrading, skill improvement, or simply personal satisfaction. Students should consult with a faculty advisor for more specific information about particular career programs.

The career programs available at Cedar Valley College and the certificate and/or degree requirements for each program follow.

CAREER PROGRAMS
AT CEDAR VALLEY COLLEGE

- Accounting Associate
- Accounting Technician
- Air Conditioning and Refrigeration
  - Commercial
  - Residential
- Animal Medical Technology
- Automotive Technology
- Automotive Technology Apprenticeship
- Commercial Music
  - Composer/Arranger/Copyist
  - Music Retailing
  - Performing Musician
  - Recording Technician
- Major Appliance Repair
- Mid-Management
  - Small Business Management
- Motorcycle Mechanics
- Office Occupations
  - General Office Careers
  - Secretarial Careers
- Outboard Marine Engine Mechanics
- Retail Distribution and Marketing Technology
  - Commercial Design and Advertising
  - Fashion Merchandising
  - Retail Management
- Small Engine Mechanics

## STUDENTS CONSIDERING TRANSFER TO A FOUR-YEAR INSTITUTION

The following programs have been designated to provide marketable skills in varied occupations. All courses in these technical/occupational programs are credit courses leading to an associate degree. Some courses are transferable to four-year institutions. Students who plan to transfer are advised to consult with a counselor to develop a technical/occupational course plan which best meets the degree requirements of the chosen four-year college or university.

**ACCOUNTING ASSOCIATE**

(Associate Degree Program)

This two-year program is designed to prepare the students for a career as a junior accountant in business, industry, and government. Emphasis will be placed on internal accounting procedures and generally accepted accounting principles.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| BUS 105 | Introduction to Business | 3 |
| OFC 160 | Office Machines | 3 |
| ACC 201 | Principles of Accounting I | 3 |
| MTH 130 | Business Mathematics, or | 3 |
| MTH 111 | Mathematics for Business & Economics I | 3 |
| COM 131 | Applied Composition and Speech, or | 3 |
| ENG 101 | Composition and Expository Reading | 3 |
| | | 15 |
| SECOND SEMESTER | | |
| MGT 136 | Principles of Management | 3 |
| ACC 202 | Principles of Accounting II | 3 |
| CS 175 | Introduction to Computer Sciences | 3 |
| COM 132 | Applied Composition and Speech, or | 3 |
| ENG 102 | Composition and Literature | 3 |
| OFC 172 | Beginning Typewriting, or | 3 |
| ACC 703 | Work Experience, or | 3 |
| ACC 704 | Work Experience | 4 |
| | | 15-16 |
| THIRD SEMESTER | | |
| ACC 203 | Intermediate Accounting | 3 |
| ACC 238 | Cost Accounting, or | 3 |
| ACC 239 | Income Tax Accounting | 3 |
| GVT 201 | American Government | 3 |
| ECO 201 | Principles of Economics I | 3 |
| | *Elective | 3-4 |
| | | 15-16 |
| FOURTH SEMESTER | | |
| ACC 204 | Managerial Accounting | 3 |
| OFC 231 | Business Correspondence | 3 |
| BUS 234 | Business Law | 3 |
| BUS 237 | Organizational Behavior | 3 |
| ECO 202 | Principles of Economics II | 3 |
| | *Elective | 3-4 |
| | | 18-19 |

*Continued*

*SUGGESTED ELECTIVES

| | | |
|---|---|---|
| BUS 143 | Personal Finance | 3 |
| ACC 205 | Business Finance | 3 |
| MGT 206 | Principles of Marketing | 3 |
| PSY 105 | Introduction to Psychology | 3 |
| PSY 131 | Human Relations | 3 |
| ACC 803 | Cooperative Work Experience | 3 |
| ACC 804 | Cooperative Work Experience | 4 |
| ACC 813 | Cooperative Work Experience | 3 |
| ACC 814 | Cooperative Work Experience | 4 |

**ACCOUNTING TECHNICIAN**

(Certificate Program)

This program will provide students with a knowledge of bookkeeping procedures which are currently used in business. Students will also be introduced to accounting principles which support bookkeeping procedures, and acquire practical bookkeeping experience through problem solving.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| BUS 105 | Introduction to Business | 3 |
| ACC 131 | Bookkeeping I | 3 |
| OFC 172 | Beginning Typewriting, or | 3 |
| OFC 174 | Intermediate Typewriting | 2 |
| COM 131 | Applied Composition and Speech | 3 |
| MTH 130 | Business Mathematics | 3 |
| | | 14-15 |
| SECOND SEMESTER | | |
| ACC 132 | Bookkeeping II | 3 |
| OFC 160 | Office Machines | 3 |
| COM 132 | Applied Composition and Speech | 3 |
| CS 175 | Introduction to Computer Sciences | 3 |
| | *Elective | 3 |
| | | 15 |

*SUGGESTED ELECTIVES (Three Hours Required.)

| | | |
|---|---|---|
| OFC 162 | Office Procedures | 3 |
| OFC 231 | Business Correspondence | 3 |
| BUS 234 | Business Law | 3 |
| PSY 131 | Human Relations | 3 |

**AIR CONDITIONING — RESIDENTIAL**

(Certificate Program)

This program is designed to train students to meet entry level requirements in the field of Residential Air Conditioning. This will include the installation, repair, and maintenance of residential air conditioning equipment. Included in this program is the study of residential air conditioners, gas and electric furnaces, humidifiers, and the design of residential systems. Throughout the entire program an emphasis is placed on current techniques as used by residential air conditioning technicians.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| AC 150 | Basic Principles of Electricity | 3 |
| AC 160 | Basic Principles of Refrigeration | 3 |
| MTH 195 | Technical Mathematics | 3 |
| PHY 131 | Applied Physics | 4 |
| | | 13 |
| SECOND SEMESTER | | |
| AC 155 | Advanced Electrical Circuits | 3 |
| AC 165 | Vapor Compression Systems | 3 |
| AC 170 | Pipefitting Procedures | 3 |
| AC 175 | Residential Load Calculations | 3 |
| | | 12 |
| THIRD SEMESTER | | |
| AC 180 | Residential Cooling Systems | 3 |
| AC 185 | Residential Heating Systems | 3 |
| AC 240 | Air Distribution Systems | 3 |
| AC 245 | Residential Systems Service | 3 |
| ACR 703 | Cooperative Work Experience, or | 3 |
| ACR 704 | Cooperative Work Experience, or | 4 |
| *Elective | | 3-4 |
| | | 15-16 |

| (Associate Degree Program) | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| AC 150 | Basic Principles of Electricity | 3 |
| AC 160 | Basic Principles of Refrigeration | 3 |
| MTH 195 | Technical Mathematics | 3 |
| PHY 131 | Applied Physics | 4 |
| | | 13 |
| SECOND SEMESTER | | |
| AC 155 | Advanced Electrical Circuits | 3 |
| AC 165 | Vapor Compression Systems | 3 |
| AC 170 | Pipefitting Procedures | 3 |
| AC 175 | Residential Load Calculations | 3 |
| SS 131 | American Civilization | 3 |
| | | 15 |

*Continued*

THIRD SEMESTER

| | | |
|---|---|---|
| AC 180 | Residential Cooling Systems | 3 |
| AC 185 | Residential Heating Systems | 3 |
| AC 240 | Air Distribution Systems | 3 |
| BPR 177 | Blueprint Reading | 2 |
| COM 131 | Applied Communications & Speech | 3 |
| MAR 235 | Professional Service Skills, or | |
| PSY 131 | Human Relations | 3 |
| | | 17 |

FOURTH SEMESTER

| | | |
|---|---|---|
| AC 245 | Residential Systems Service | 3 |
| AC 250 | Air-Conditioning Equipment Selection | 3 |
| AC 255 | Air Distribution Systems Design | 3 |
| AC 703 | Cooperative Work Experience | 3 |
| AC 704 | Cooperative Work Experience | 4 |
| | *Elective | 3-4 |
| | | 15-17 |

*ELECTIVES

Three hours of electives are required for the Residential AC Certificate, or the Residential AC Associate Degree. Following is a list of recommended electives.

| | | |
|---|---|---|
| AC 280 | Industrial Air-Conditioning Systems | 3 |
| ACR 803 | Cooperative Work Experience | 3 |
| ACR 804 | Cooperative Work Experience | 4 |
| BUS 105 | Introduction to Business | 3 |
| ACC 131 | Bookkeeping | 3 |
| MGT 136 | Principles of Management | 3 |
| COM 132 | Applied Communications & Speech | 3 |
| MAR 235 | Professional Service Skills | 3 |
| PSY 131 | Human Relations | 3 |

MAR 235 or PSY 131 required in the Associate Degree Program.

**ANIMAL MEDICAL TECHNOLOGY**

(Associate Degree Program)

This program is designed to help meet the need for graduate animal technicians as indicated by the Texas Veterinary Medical Association. The American Veterinary Medical Association (AVMA) describes an "Animal Technician" as "a person knowledgeable in the care and handling of animals, in basic principles of normal and abnormal life processes, and in routine laboratory and clinical procedures". He is primarily an assistant to veterinarians, biological research workers and other scientists. The AMT curriculum is designed to provide the graduate with information, experience and skills needed to perform all technical duties in a practice excluding diagnosis, prescription and surgery and whose performance of such duties is not in conflict with the state practice act.

Admission in the AMT program is limited and applicants will be screened for approval. Students are encouraged to develop a strong academic background in the sciences, including mathematics, biology and chemistry.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER — FALL | | |
| AMT 101 | Medical Terminology for Animal Technicians | 1 |
| AMT 110 | Animal Care and Sanitation | 2 |
| AMT 130 | Introduction to AMT | 4 |
| AMT 137 | Anatomy and Physiology I | 4 |
| AMT 138 | Biochemistry | 5 |
| MTH 139 | Applied Mathematics | 3 |
| | | 19 |
| SECOND SEMESTER — SPRING | | |
| AMT 111 | Animal Care and Sanitation | 2 |
| AMT 231 | Anatomy and Physiology II | 4 |
| AMT 241 | Clinical Pathology I | 5 |
| AMT 139 | Pharmacology | 3 |
| COM 131 | Composition and Speech | 3 |
| | | 17 |
| SUMMER SESSION | | |
| AMT 112 | Animal Care and Sanitation | 2 |
| AMT 230 | Anesthetic and Surgical Assisting Techniques | 3 |
| AMT 243 | Clinical Pathology II | 5 |
| AMT 244 | Large Animal Assisting Techniques | 4 |
| PSY 131 | Human Relations | 3 |
| | | 17 |
| THIRD SEMESTER — FALL | | |
| AMT 703 | Cooperative Work Experience | 3 |
| *Elective | | 2-4 |
| | | 5-7 |
| FOURTH SEMESTER — SPRING | | |
| AMT 210 | Animal Care and Sanitation | 2 |
| AMT 237 | Radiography | 3 |
| AMT 242 | Exotic and Laboratory Animal Medicine | 3 |
| AMT 249 | Animal Hospital Nursing | 4 |
| MGT 153 | Small Business Management | 3 |
| | | 15 |
| *SUGGESTED ELECTIVES | | |
| AMT 245 | Senior Clinical Seminar | 2 |
| AMT 250 | Special Projects in AMT | 2 |
| OFC 172 | Beginning Typing | 3 |
| ACC 131 | Bookkeeping I | 3 |
| HUM 101 | Introduction to Humanities | 3 |
| SS 131 | American Civilization | 3 |
| SS 132 | American Civilization | 3 |
| Physical Education | | |
| AMT 702 | Cooperative Work Experience | 2 |
| AMT 703 | Cooperative Work Experience | 3 |

**AUTOMOTIVE TECHNOLOGY**

(Associate Degree Program)

This program is designed to train students to meet entry level requirements in the field of Automotive Technology. This will include theory, diagnosis, repair, overhaul, and maintenance of automobiles. Included in this program is the study of automotive engines, front suspension, steering, brakes, power trains, standard and automatic transmissions, electrical and ignition systems, and tune-up procedures. Throughout the entire program an emphasis is placed on accepted shop techniques used throughout the automotive service industry.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| AT 140 | Automotive Services | 6 |
| MTH 195 | Technical Mathematics | 3 |
| *Elective | | 3 |
| | | 12 |
| SECOND SEMESTER | | |
| AT 150 | Front Suspension, Steering & Brakes | 6 |
| AT 160 | Automotive Engines | 6 |
| COM 131 | Applied Communications & Speech | 3 |
| | | 15 |
| SUMMER SESSION | | |
| PSY 131 | Applied Physics | 4 |
| THIRD SEMESTER | | |
| AT 170 | Automotive Systems | 6 |
| AT 260 | Power Trains | 6 |
| | *Elective | 3 |
| | | 15 |
| FOURTH SEMESTER | | |
| AT 270 | Automatic Transmissions | 6 |
| AT 280 | Automotive Tune-up | 6 |
| SS 131 | American Civilization | 3 |
| | | 15 |

| (Certificate Program) | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| AT 140 | Automotive Services | 6 |
| MTH 195 | Technical Mathematics | 3 |
| | | 9 |
| SECOND SEMESTER | | |
| AT 150 | Front Suspension, Steering & Brakes | 6 |
| AT 160 | Automotive Engines | 6 |
| | | 12 |
| THIRD SEMESTER | | |
| AT 170 | Automotive Systems | 6 |
| AT 260 | Power Trains | 6 |
| | | 12 |

| | | |
|---|---|---|
| FOURTH SEMESTER | | |
| AT 270 | Automatic Transmissions | 6 |
| AT 280 | Automotive Tune-up | 6 |
| | | 12 |

*ELECTIVES (Six hours required, selected from the following.)

| | | |
|---|---|---|
| COM 132 | Applied Composition & Speech | 3 |
| PSY 131 | Human Relations | 3 |
| BPR 177 | Blueprint Reading | 2 |
| BUS 105 | Introduction to Business | 3 |
| ACC 131 | Bookkeeping | 3 |
| MGT 136 | Principles of Management | 3 |
| MGT 153 | Small Business Management | 3 |
| AT 713 | Work Experience | 3 |
| AT 714 | Work Experience | 4 |
| AT 813 | Work Experience | 3 |
| AT 814 | Work Experience | 4 |

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP**

(Associate Degree Program)

The Automotive Technology Apprenticeship program is offered in cooperation with the National Automobile Dealer Association, and the Bureau of Apprenticeship Training, U.S. Department of Labor. This is a three year program that provides full time "on-the-job" apprenticeship training along with college credit courses. Upon successful completion of the program, the apprentice will receive an Associate of Applied Arts and Science degree.

ADMISSION TO THE PROGRAM

1. Admission is by individual application.
2. Personal interview with Automotive Technology Apprenticeship instructor.
3. Personal interview and acceptance as an apprentice by automotive dealership.
4. Applicants must demonstrate a sincere desire to become a professional automotive service technician.
5. Fulfill all requirements for admission to the college.

For further information, contact: Division of Industrial Technology.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| ATA 100 | Automotive Fundamentals | 3 |
| MTH 195 | Technical Mathematics | 3 |
| ATA 191 | Internship I | 3 |
| | | 9 |
| SECOND SEMESTER | | |
| ATA 101 | Basic Electrical Systems | 3 |
| ATA 102 | Suspension, Steering, & Brake Systems | 3 |
| ATA 192 | Internship II | 3 |
| | | 9 |
| FIRST SUMMER SESSION | | |
| PHY 131 | Applied Physics I | 4 |
| COM 131 | Applied Composition & Speech | 3 |
| | | 7 |

*Continued*

| | | |
|---|---|---|
| THIRD SEMESTER | | |
| ATA 103 | Advanced Electrical Systems | 3 |
| ATA 104 | Engine Tune-up Procedures | 3 |
| ATA 193 | Internship III | 3 |
| | | 9 |
| FOURTH SEMESTER | | |
| ATA 105 | Basic Engine Repair | 3 |
| ATA 200 | Engine Overhaul Procedures | 3 |
| ATA 294 | Internship IV | 3 |
| | | 9 |
| SECOND SUMMER SESSION | | |
| ATA 201 | Automotive Air Conditioning & Heating System | 3 |
| SS 131 | American Civilization | 3 |
| | | 6 |
| FIFTH SEMESTER | | |
| ATA 202 | Clutches, Differentials, & Drive Shafts | 3 |
| ATA 203 | Transmissions | 3 |
| ATA 295 | Internship V | 3 |
| | | 9 |
| SIXTH SEMESTER | | |
| ATA 204 | Automotive Service Department Management | 3 |
| ATA 205 | Automotive Parts Department Management | 3 |
| ATA 296 | Internship VI | 3 |
| | | 9 |

**COMMERCIAL MUSIC — ARRANGER/COMPOSER/COPYIST**

(Associate Degree Program)

This program is designed to prepare the student majoring in Arranging/Composing/Copying to demonstrate writing skills required for arranging and composition for small and large instrumental and vocal groups in all areas of commercial music; i.e., jazz, rock, "pop", country/western etc. Knowledge of standard engraving techniques will make possible professional copying of the student's work and of other arrangers and composers. Experience is stressed through actual writing for campus organizations and composing of jingles and background music for all campus productions.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| MUS 101 | Freshman Theory | 4 |
| MUS 117 | Piano Class I | 1 |
| MUS 121-243 | Applied Music | 1-2 |
| MUS 155 | Vocal Ensemble, or | 1 |
| MUS 181 | Lab Band | 1 |
| MUS 192 | Music in America | 3 |
| MUS 193 | Improvisation | 3 |
| MUS 199 | Recital | 1 |
| | | 14-16 |

SECOND SEMESTER

| | | |
|---|---|---|
| MUS 102 | Freshman Theory | 4 |
| MUS 118 | Piano Class II | 1 |
| MUS 121-243 | Applied Music | 1-2 |
| MUS 155 | Vocal Ensemble, or | 1 |
| MUS 181 | Lab Band | 1 |
| MUS 194 | Jazz Workshop | 3 |
| MUS 196 | Business of Music | 3 |
| MUS 199 | Recital | 1 |
| BUS 105 | Introduction to Business | 3 |
| | | 17-18 |

SUMMER SESSIONS

| | | |
|---|---|---|
| COM 131 | Applied Composition & Speech, or | 3 |
| ENG 101 | Composition & Expository Reading | 3 |
| COM 132 | Applied Composition & Speech, or | 3 |
| ENG 102 | Composition & Literature | 3 |
| | | 6 |

THIRD SEMESTER

| | | |
|---|---|---|
| MUS 221-243 | Applied Music | 2 |
| MUS 155 | Vocal Ensemble, or | 1 |
| MUS 181 | Lab Band | 1 |
| MUS 195 | Introduction to Synthesizer | 2 |
| MUS 199 | Recital | 1 |
| MUS 290 | Recording Techniques | 2 |
| MUS 292 | Arranging/Orchestration | 3 |
| MUS 293 | Independent Study, or | 3-4 |
| MUS 701-711; 801-811 | Work Experience, or | 1 |
| MUS 702-712; 802-812 | Work Experience, or | 2 |
| MUS 703-713; 803-813 | Work Experience, or | 3 |
| MUS 704-714; 804-814 | Work Experience | 4 |
| *Elective | | 2-4 |
| | | 16-19 |

FOURTH SEMESTER

| | | |
|---|---|---|
| MUS 221-243 | Applied Music | 2 |
| MUS 155 | Vocal Ensemble, or | 1 |
| MUS 181 | Lab Band | 1 |
| MUS 199 | Recital | 1 |
| MUS 203 | Composition | 3 |
| MUS 293 | Independent Study | 3-4 |
| MUS 701-711; 801-811 | Work Experience, or | 1 |
| MUS 702-712; 802-812 | Work Experience, or | 2 |
| MUS 703-713; 803-813 | Work Experience, or | 3 |
| MUS 704-714; 804-814 | Work Experience | 4 |
| *Elective | | 2-4 |
| | | 12-15 |

*SUGGESTED ELECTIVES

| | | |
|---|---|---|
| MUS 291 | Advanced Recording Techniques | 2 |
| MUS 295 | Advanced Synthesizer Techniques | 2 |
| BUS 234 | Business Law | 3 |
| ECO 201 | Principles of Economics I | 3 |
| MUS 110 | Music Literature | 3 |
| MUS 111 | Music Literature | 3 |

**COMMERCIAL MUSIC — MUSIC RETAILING**

(Certificate Program)

This program is designed to prepare the music major in retailing for the music industry job market. To include music skills necessary as well as knowledge of the business world, i.e., business law, salesmanship, small business management, culminating in work experience coordinated through local merchants who have expressed interest in this area.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| MUS 101 | Freshman Theory | 4 |
| MUS 117 | Piano Class I | 1 |
| MUS 121-143 | Applied Music | 1 |
| MUS 155 | Vocal Ensemble, or | 1 |
| MUS 181 | Lab Band | 1 |
| MUS 192 | Music in America | 3 |
| MUS 199 | Recital | 1 |
| COM 131 | Applied Composition and Speech, or | 3 |
| ENG 101 | Composition and Expository Reading | 3 |
| BUS 105 | Introduction to Business | 3 |
| | | 17 |
| SECOND SEMESTER | | |
| MUS 102 | Freshman Theory | 4 |
| MUS 118 | Piano Class II | 1 |
| MUS 121-143 | Applied Music | 1 |
| MUS 155 | Vocal Ensemble, or | 1 |
| MUS 181 | Lab Band | 1 |
| MUS 199 | Recital | 1 |
| COM 132 | Applied Communication and Speech, or | 3 |
| ENG 102 | Composition and Literature | 3 |
| MGT 137 | Principles of Retailing | 3 |
| MGT 153 | Small Business Management | 3 |
| MGT 230 | Salesmanship | 3 |
| | | 20 |

(Associate Degree Program)

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| MUS 101 | Freshman Theory | 4 |
| MUS 117 | Piano Class I | 1 |
| MUS 121-143 | Applied Music | 1 |
| MUS 155 | Vocal Ensemble, or | 1 |
| MUS 181 | Lab Band | 1 |
| MUS 192 | Music in America | 3 |
| MUS 199 | Recital | 1 |
| COM 131 | Applied Composition and Speech, or | 3 |
| ENG 101 | Composition and Expository Reading | 3 |
| BUS 105 | Introduction to Business | 3 |
| | | 17 |

SECOND SEMESTER

| | | |
|---|---|---|
| MUS 102 | Freshman Theory | 4 |
| MUS 118 | Piano Class II | 1 |
| MUS 121-143 | Applied Music | 1 |
| MUS 155 | Vocal Ensemble, or | 1 |
| MUS 181 | Lab Band | 1 |
| MUS 199 | Recital | 1 |
| BUS 137 | Principles of Retailing | 3 |
| BUS 230 | Salesmanship | 3 |
| MGT 153 | Small Business Management | 3 |
| COM 132 | Applied Communication and Speech, or | 3 |
| ENG 102 | Composition and Literature | 3 |
| | | 20 |

THIRD SEMESTER

| | | |
|---|---|---|
| MUS 121-143 | Applied Music-Minor | 1 |
| MUS 199 | Recital | 1 |
| MUS 701-711; 801-811 | Work Experience, or | 1 |
| MUS 702-712; 802-812 | Work Experience, or | 2 |
| MUS 703-713; 803-813 | Work Experience, or | 3 |
| MUS 704-714; 804-814 | Work Experience | 4 |
| PSY 131 | Human Relations | 3 |
| BUS 234 | Business Law | 3 |
| *Elective | | 3 |
| | | 14-15 |

FOURTH SEMESTER

| | | |
|---|---|---|
| MUS 121-243 | Applied Music | 2 |
| MUS 199 | Recital | 1 |
| MUS 701-711; 801-811 | Work Experience, or | 1 |
| MUS 702-712; 802-812 | Work Experience, or | 2 |
| MUS 703-713; 803-813 | Work Experience, or | 3 |
| MUS 704-714; 804-814 | Work Experience | 4 |
| ACC 201 | Principles of Accounting | 3 |
| *Elective | | 3 |
| | | 12-13 |

*SUGGESTED ELECTIVES (Six Hours Required)

| | | |
|---|---|---|
| ECO 201 | Principles of Economics | 3 |
| SOC 204 | American Minorities | 3 |
| SPE 105 | Fundamentals of Public Speaking | 3 |
| | Foreign Language | 7 |

**COMMERCIAL MUSIC — PERFORMING MUSICIAN**

(Associate Degree Program)

This program is designed to prepare the instrumental and vocal student for performance in commercial music, to include jazz, rock, "pop", country/western, etc. This will cover performance practices, styles, solo and ensemble work, repertoire for small and large groups, culminating in actual performance situations in cooperation with local performing groups.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| MUS 101 | Freshman Theory | 4 |
| MUS 117 | Piano Class I | 1 |
| MUS 121-243 | Applied Music | 1-2 |
| MUS 155 | Vocal Ensemble, or | 1 |
| MUS 181 | Lab Band | 1 |
| MUS 192 | Music in America | 3 |
| MUS 193 | Improvisation | 3 |
| MUS 199 | Recital | 1 |
| | | 14-15 |
| SECOND SEMESTER | | |
| MUS 102 | Freshman Theory | 4 |
| MUS 118 | Piano Class II | 1 |
| MUS 121-243 | Applied Music | 1-2 |
| MUS 155 | Vocal Ensemble, or | 1 |
| MUS 181 | Lab Band | 1 |
| MUS 194 | Jazz Workshop | 3 |
| MUS 196 | Business of Music | 3 |
| MUS 199 | Recital | 1 |
| BUS 105 | Introduction to Business | 3 |
| | | 17-18 |
| SUMMER SESSIONS | | |
| COM 131 | Applied Composition & Speech, or | 3 |
| ENG 101 | Composition & Expository Reading | 3 |
| COM 132 | Applied Composition & Speech, or | 3 |
| ENG 102 | Composition & Literature | 3 |
| | | 6 |
| THIRD SEMESTER | | |
| MUS 221-243 | Applied Music | 1-2 |
| MUS 155 | Vocal Ensemble, or | 1 |
| MUS 181 | Lab Band | 1 |
| MUS 199 | Recital | 1 |
| MUS 290 | Recording Techniques | 2 |
| MUS 292 | Arranging/Orchestration | 3 |
| MUS 293 | Independent Study, or | 3 |
| MUS 701-711; 801-811 | Work Experience, or | 1 |
| MUS 702-712; 802-812 | Work Experience, or | 2 |
| MUS 703-713; 803-813 | Work Experience, or | 3 |
| MUS 704-714; 804-814 | Work Experience | 4 |
| *Elective | | 2-4 |
| | | 14-17 |

| | | |
|---|---|---|
| FOURTH SEMESTER | | |
| MUS 121-243 | Applied Music | 1-2 |
| MUS 155 | Vocal Ensemble, or | 1 |
| MUS 181 | Lab Band | 1 |
| MUS 199 | Recital | 1 |
| MUS 291 | Advanced Recording Techniques | 2 |
| MUS 701-711; 801-811 | Work Experience, or | 1 |
| MUS 702-712; 802-812 | Work Experience, or | 2 |
| MUS 703-713; 803-813 | Work Experience, or | 3 |
| MUS 704-714; 804-814 | Work Experience | 4 |
| *Elective | | 2-4 |
| | | 10-14 |

*SUGGESTED ELECTIVES

| | | |
|---|---|---|
| MUS 110 | Music Literature | 3 |
| MUS 111 | Music Literature | 3 |
| MUS 201 | Sophomore Theory | 4 |
| MUS 202 | Sophomore Theory | 4 |
| MUS 203 | Composition | 3 |
| MUS 295 | Advanced Synthesizer Techniques | 2 |
| | Social Science and/or | 6 |
| | Foreign Language | |

**MAJOR APPLIANCE REPAIR**

(Certificate Program)

This program is designed to train students to meet entry level requirements in the field of Major Appliance Repair. This will include the installation, repair, and maintenance of the major appliances found in most homes. Included in this program is the study of domestic refrigerators and freezers, clothes washers and dryers, dishwashers, trash compactors, disposers, and gas and electric ranges. Throughout the entire program an emphasis is placed on current techniques as used by major appliance repair technicians.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| AC 150 | Basic Electricity | 6 |
| MTH 195 | Technical Mathematics | 3 |
| | | 9 |
| SECOND SEMESTER | | |
| AC 160 | Basic Refrigeration | 10 |
| THIRD SEMESTER | | |
| MAR 200 | Domestic Refrigerators & Freezers | 6 |
| MAR 210 | Domestic Dishwashers, Disposers, & Trash Compactors | 6 |
| | | 12 |
| FOURTH SEMESTER | | |
| MAR 220 | Domestic Laundry Equipment | 6 |
| MAR 230 | Domestic Cooking Equipment | 6 |
| MAR 240 | Professional Service Skills | 3 |
| | | 15 |

(Associate Degree Program)

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| AC 150 | Basic Electricity | 6 |
| MTH 195 | Technical Mathematics | 3 |
| SS 131 | American Civilization | 3 |
| | | 12 |
| SECOND SEMESTER | | |
| AC 160 | Basic Refrigeration | 10 |
| COM 131 | Applied Communications & Speech | 3 |
| | | 13 |
| SUMMER SESSION | | |
| PHY 131 | Applied Physics | 4 |
| | *Elective | 3 |
| | | 7 |
| THIRD SEMESTER | | |
| MAR 200 | Domestic Refrigerators & Freezers | 6 |
| MAR 210 | Domestic Dishwashers, Disposers & Trash Compactors | 6 |
| | *Elective | 3 |
| | | 15 |
| FOURTH SEMESTER | | |
| MAR 220 | Domestic Laundry Equipment | 6 |
| MAR 230 | Domestic Cooking Equipment | 6 |
| MAR 240 | Professional Service Skills | 3 |
| | | 15 |
| *ELECTIVES (Six hours required from the following.) | | |
| COM 132 | Applied Communications & Speech | 3 |
| PSY 131 | Human Relations | 3 |
| BUS 105 | Introduction to Business | 3 |
| ACC 131 | Bookkeeping | 3 |
| MGT 136 | Principles of Management | 3 |
| MGT 153 | Small Business Management | 3 |
| BPR 177 | Blueprint Reading | 2 |
| AC 713 | Work Experience | 3 |
| AC 714 | Work Experience | 4 |
| AC 813 | Work Experience | 3 |
| AC 814 | Work Experience | 4 |

## MANAGEMENT CAREERS

This business management program offers several options of study 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 Degree in Applied Arts and Sciences.

| CORE COURSES (Required for all options) | | CR. HRS. |
|---|---|---|
| BUS 105 | Introduction to Business | 3 |
| ACC 201 | Principles of Accounting I or | 3 |
| ACC 131 | Bookkeeping I and | (3) |
| ACC 132 | Bookkeeping II | (3) |
| ECO 201 | Principles of Economics I | 3 |
| ECO 202 | Principles of Economics II | 3 |
| CS 175 | Introduction to Computer Science | 3 |
| MGT 136 | Principles of Management | 3 |
| PSY 131 | Human Relations | 3 |
| HUM 101 | Introduction to the Humanities | 3 |
| | | 27 |

| SUPPORT COURSES (Required for all options) | | |
|---|---|---|
| COM 131 | Applied Composition and Speech* | 3 |
| COM 132 | Applied Composition and Speech* | 3 |
| | Social Science elective or Humanities elective | 3 |
| MTH 111 | Math. for Business & Economics I or | 3 |
| MTH 112 | Math. for Business & Economics II or | |
| MTH 130 | Business Math | |
| | | 12 |

### ADMINISTRATIVE MANAGEMENT OPTION

The Administrative Management option offers a continuation of the traditional management and business studies begun in the required core courses.

| | | CR. HRS. |
|---|---|---|
| ACC 202 | Principles of Accounting II | 3 |
| MGT 206 | Principles of Marketing | 3 |
| BUS 234 | Business Law | 3 |
| MGT 242 | Personnel Administration | 3 |
| BUS 237 | Organizational Behavior | 3 |
| OFC 231 | Business Communication | 3 |
| Electives | | 9 |
| | | 27 |

**MID-MANAGEMENT OPTION**

The Mid-Management option is a cooperative plan with members of the business community to prepare students for career opportunities in management. During the option, students will take courses in business and related areas, while working in a paid or part-time position in a sponsoring organization.

Admission to this Option

1. Admission is by individual application only.
2. Personal interview with any Mid-Management instructor.
3. Applicants should demonstrate a sincere desire for a management career in business.
4. Fulfill all requirements for admission to the college.

| | | CR. HRS. |
|---|---|---|
| MGT 150 | Management Training | 4 |
| MGT 154 | Management Seminar: Role of Supervision | 2 |
| MGT 151 | Management Training | 4 |
| MGT 155 | Management Seminar: Personnel Management | 2 |
| MGT 250 | Management Training | 4 |
| MGT 254 | Management Seminar: Organizational Development | 2 |
| MGT 251 | Management Training | 4 |
| MGT 255 | Management Seminar: Business Strategy, the Decision Process & Problem Solving | 2 |
| Elective | | 3 |
| | | 27 |

**SALES, MARKETING, AND RETAIL MANAGEMENT OPTION**

The Sales, Marketing, and Retail Management option is designed to prepare students for career opportunities in retail management, sales, or marketing. During the first year, students take the management core courses. During the second year, students will specialize in courses in retail management, sales, and marketing. Students also will have the opportunity to work in sales, marketing, or retail areas through a sponsoring business firm.

| | | Total Contact Hours | Credit Hours |
|---|---|---|---|
| MGT 137 | Principles of Retailing | 48 | 3 |
| MGT 206 | Principles of Marketing | 48 | 3 |
| MGT 230 | Salesmanship | 48 | 3 |
| MGT 233 | Advertising & Sales Promotion | 48 | 3 |
| RDM 245 | Sales Management | 48 | 3 |
| RDM 246 | Management & Marketing Cases | 48 | 3 |
| RDM 703, 713 Cooperative Work Experience or RDM 803, 813 Cooperative Work Experience | | 96-128 | 6-8 |
| Elective | | | 3 |
| | | | 27 |

**SMALL BUSINESS MANAGEMENT OPTION**

The Small Business Management option is a cooperative plan with members of the business community to prepare students for career opportunities in management. During the option, students will take courses in business and related areas, while working in a paid or part-time position in a sponsoring organization. In this particular option an emphasis will be placed on the operation of small business.

Admission to the Option

1. Admission is by individual application only.
2. Personal interview with any Management instructor.
3. Applicants should demonstrate a sincere desire for a management career in business.
4. Fulfill all requirements for admission to the College.

| | | CR. HRS. |
|---|---|---|
| MGT 206 | Principles of Marketing | 3 |
| MGT 153 | Small Business Management | 3 |
| MGT 157 | Small Business Bookkeeping & Accounting Practices | 3 |
| MGT 210 | Small Business Organization, Acquisition & Finance | 3 |
| MGT 211 | Small Business Operations | 3 |
| MGT 234 | Business Law | 3 |
| Electives | | 9 |
| | | 27 |

*Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. Students must take Speech 105 as an elective when substituting ENG 101 and 102.

**MOTORCYCLE MECHANICS**

(Certificate Program)

This program is designed to train students to meet entry level requirements in the field of Motorcycle Mechanics. This will include diagnosis, repair, and maintenance of foreign and domestic motorcycles. Included in this program is the study of carburetion, ignition, and electrical systems, engine overhaul and tune-up, and motorcycle chassis. Throughout the entire program an emphasis is placed on the latest factory recommended techniques.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| EM 100 | Shop Practices | 3 |
| EM 110 | Engine Fundamentals | 6 |
| MTH 195 | Technical Mathematics | 3 |
| | | 12 |
| SECOND SEMESTER | | |
| MM 120 | Motorcycle Carburetion | 3 |
| MM 130 | Motorcycle Ignition Systems | 3 |
| MM 140 | Motorcycle Electrical Systems | 3 |
| | | 9 |

*Continued*

| | | |
|---|---|---|
| THIRD SEMESTER | | |
| MM 200 | Motorcycle Drive Systems | 3 |
| MM 205 | Two Stroke Engine Overhaul | 3 |
| MM 210 | Four Stroke Single & Twin Cylinder Engine Overhaul | 3 |
| | | 9 |
| FOURTH SEMESTER | | |
| MM 215 | Four Stroke Multi-Cylinder Engine Overhaul | 3 |
| MM 220 | Motorcycle Chassis Systems | 3 |
| | | 6 |

| (Associate Degree Program) | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| EM 100 | Shop Practices | 3 |
| EM 110 | Engine Fundamentals | 6 |
| MTH 195 | Technical Mathematics | 3 |
| | | 12 |
| SECOND SEMESTER | | |
| MM 120 | Motorcycle Carburetion | 3 |
| MM 130 | Motorcycle Ignition Systems | 3 |
| MM 140 | Motorcycle Electrical Systems | 3 |
| COM 131 | Applied Composition & Speech | 3 |
| | | 12 |
| SUMMER SESSION | | |
| PHY 131 | Applied Physics | 4 |
| *Electives | | 9 |
| | | 13 |
| THIRD SEMESTER | | |
| MM 200 | Motorcycle Drive Systems | 3 |
| MM 205 | Two Stroke Engine Overhaul | 3 |
| MM 210 | Four Stroke Single & Twin Cylinder Engine Overhaul | 3 |
| *Elective | | 3 |
| | | 12 |
| FOURTH SEMESTER | | |
| MM 215 | Four Stroke Multi-Cylinder Engine Overhaul | 3 |
| MM 220 | Motorcycle Chassis Systems | 3 |
| SS 131 | American Civilization | 3 |
| *Electives | | 6 |
| | | 15 |

*ELECTIVES (Fifteen hours required from the following.)

| | | |
|---|---|---|
| COM 132 | Applied Composition & Speech | 3 |
| PSY 131 | Human Relations | 3 |
| BUS 105 | Introduction to Business | 3 |
| ACC 131 | Bookkeeping | 3 |
| MGT 136 | Principles of Management | 3 |
| MGT 153 | Small Business Management | 3 |
| BPR 177 | Blueprint Reading | 2 |
| EM 713 | Work Experience | 3 |
| EM 714 | Work Experience | 4 |
| EM 813 | Work Experience | 3 |
| EM 814 | Work Experience | 4 |

**OFFICE CAREERS**

(Certificate Program)

The purpose of this program is to provide students with the basic skills necessary to enter the general office field in a minimum amount of time. Intensive training in the basic office skills is provided — including office machines, typewriting, records management, and other related business subjects.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| BUS 105 | Introduction to Business | 3 |
| ACC 131 | Bookkeeping I, or | 3 |
| ACC 201 | Principles of Accounting I | 3 |
| OFC 160 | Office Machines | 3 |
| OFC 172 | Beginning Typewriting | 3 |
| COM 131 | Applied Composition and Speech, or | 3 |
| ENG 101 | Composition and Expository Reading | 3 |
| | | 15 |
| SECOND SEMESTER | | |
| OFC 162 | Office Procedures | 3 |
| OFC 165 | Introduction to Word Processing | 3 |
| OFC 174 | Intermediate Typewriting | 2 |
| OFC 231 | Business Correspondence | 3 |
| COM 132 | Applied Composition and Speech, or | 3 |
| ENG 102 | Composition and Literature | 3 |
| MTH 130 | Business Math | 3 |
| | | 17 |

(Associate Degree Program)

This two-year program is designed to train students for positions in the general office field such as clerk-typist, file clerk, receptionist, and word processing operator. There is a general orientation to the business world plus intensive training in typewriting, office machines, bookkeeping, and word processing. Management principles and human relations skills are also stressed.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| BUS 105 | Introduction to Business | 3 |
| ACC 131 | Bookkeeping I, or | 3 |
| ACC 201 | Principles of Accounting I | 3 |
| OFC 160 | Office Machines | 3 |
| OFC 172 | Beginning Typewriting | 3 |
| COM 131 | Applied Composition and Speech, or | 3 |
| ENG 101 | Composition and Expository Reading | 3 |
| | | 15 |
| SECOND SEMESTER | | |
| OFC 162 | Office Procedures | 3 |
| OFC 174 | Intermediate Typewriting | 2 |
| OFC 231 | Business Correspondence | 3 |
| HUM 101 | Introduction to Humanities | 3 |
| COM 132 | Applied Composition and Speech, or | 3 |
| ENG 102 | Composition and Literature | 3 |
| MTH 130 | Business Math | 3 |
| | | 17 |

*Continued*

| | | |
|---|---|---|
| THIRD SEMESTER | | |
| ACC 132 | Bookkeeping II, or | 3 |
| ACC 202 | Principles of Accounting II | 3 |
| OFC 165 | Introduction to Word Processing | 3 |
| BUS 234 | Business Law | 3 |
| OFC 273 | Advanced Typewriting | 2 |
| PSY 131 | Human Relations | 3 |
| | | 17 |
| FOURTH SEMESTER | | |
| BUS 237 | Organizational Behavior | 3 |
| OFC 256 | Office Management | 3 |
| OFC 265 | Word Processing Practices & Procedures | 3 |
| OFC 275 | Secretarial Procedures | 3 |
| *Elective | | 3 |
| | | 15 |

*SUGGESTED ELECTIVES (Three hours required.)

| | | |
|---|---|---|
| MGT 136 | Principles of Management | 3 |
| OFC 803 | Cooperative Work Experience, or | 3 |
| OFC 813 | Cooperative Work Experience | 3 |
| CS 175 | Introduction to Computer Science | 3 |
| ECO 201 | Principles of Economics I | 3 |
| PSY 105 | Introduction to Psychology | 3 |
| SOC 101 | Introduction to Sociology | 3 |

**OUTBOARD MARINE ENGINE MECHANICS**

(Certificate Program)

This program is designed to train students to meet entry level requirements in the field of Outboard Marine Engine Mechanics. This will include theory, diagnosis, repair, overhaul, and maintenance of outboard marine engines. Included in this program is the study of outboard marine engine fuel, electrical, and ignition systems, engine overhaul and tune-up, and lower units. Throughout the entire program an emphasis is placed on accepted shop techniques used throughout the outboard marine engine service industry.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| EM 100 | Shop Practices | 3 |
| EM 110 | Engine Fundamentals | 6 |
| MTH 195 | Technical Mathematics | 3 |
| | | 12 |
| SECOND SEMESTER | | |
| OE 150 | Marine Engine Fuel Systems | 3 |
| OE 160 | Marine Engine Ignition Systems | 3 |
| OE 170 | Marine Engine Electrical Systems | 3 |
| | | 9 |
| THIRD SEMESTER | | |
| OE 230 | Single & Twin Cylinder Powerheads | 3 |
| OE 235 | In Line Multi-Cylinder Powerheads | 3 |
| OE 240 | "V" Multi-Cylinder Powerheads | 3 |
| | | 9 |

| | | |
|---|---|---|
| FOURTH SEMESTER | | |
| OE 245 | Manual Shift Lower Units | 3 |
| OE 250 | Electrical Shift Lower Units | 3 |
| OE 255 | Marine Engine Auxiliary Systems | 3 |
| | | 9 |

| (Associate Degree Program) | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| EM 100 | Shop Practices | 3 |
| EM 110 | Engine Fundamentals | 6 |
| MTH 195 | Technical Mathematics | 3 |
| | | 12 |
| SECOND SEMESTER | | |
| OE 150 | Marine Engine Fuel Systems | 3 |
| OE 160 | Marine Engine Ignition Systems | 3 |
| OE 170 | Marine Engine Electrical Systems | 3 |
| *Elective | | 3 |
| | | 12 |
| SUMMER SESSION | | |
| PHY 131 | Applied Physics | 4 |
| THIRD SEMESTER | | |
| OE 230 | Single & Twin Cylinder Powerheads | 3 |
| OE 235 | In Line Multi-Cylinder Powerheads | 3 |
| OE 240 | "V" Multi-Cylinder Powerheads | 3 |
| *Elective | | 3 |
| | | 12 |
| FOURTH SEMESTER | | |
| OE 245 | Manual Shift Lower Units | 3 |
| OE 250 | Electrical Shift Lower Units | 3 |
| OE 255 | Marine Engine Auxiliary Systems | 3 |
| *Electives | | 6 |
| | | 15 |
| SUMMER SESSION | | |
| COM 131 | Applied Composition & Speech | 3 |
| SS 131 | American Civilization | 3 |
| | | 6 |

*ELECTIVES (Twelve hours required, selected from the following.)

| | | |
|---|---|---|
| COM 132 | Applied Composition & Speech | 3 |
| PSY 131 | Human Relations | 3 |
| BUS 105 | Introduction to Business | 3 |
| ACC 131 | Bookkeeping | 3 |
| MGT 136 | Principles of Management | 3 |
| MGT 153 | Small Business Management | 3 |
| BPR 177 | Blueprint Reading | 2 |
| EM 713 | Work Experience | 3 |
| EM 714 | Work Experience | 4 |
| EM 813 | Work Experience | 3 |
| EM 814 | Work Experience | 4 |

**RETAIL DISTRIBUTION AND MARKETING**
**COMMERCIAL DESIGN AND ADVERTISING**

(Associate Degree Program)

This two-year program is designed to prepare students for employment as a graphic artist in the fields of advertising, display, illustration, publications, packaging design, and software production. During the first year of the program, students will take basic courses in drawing and design, plus courses in business, communications, economics, and psychology. In the second year, students will be studying courses in commercial art in addition to business courses and also have the option of working in the commerical art area through a sponsoring business firm.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| ART 110 | Design I | 3 |
| ART 114 | Drawing I | 3 |
| MATH 130 | Business Math, or | 3 |
| ACC 201 | Accounting, or | 3 |
| ACC 131 | Bookkeeping | 3 |
| COM 131 | Applied Composition and Speech, or | 3 |
| ENG 101 | Composition and Expository Reading | 3 |
| PSY 131 | Human Relations | 3 |
| | | 15 |
| SECOND SEMESTER | | |
| ART 111 | Design II | 3 |
| ART 115 | Drawing II | 3 |
| COM 132 | Applied Composition and Speech, or | 3 |
| ENG 102 | Composition and Literature | 3 |
| CS 175 | Introduction to Computer Sciences | 3 |
| ECO 201 | Principles of Economics I | 3 |
| | | 15 |
| THIRD SEMESTER | | |
| ART 122 | Advertising Design | 3 |
| ART 210 | Commercial Art I | 3 |
| MGT 206 | Principles of Marketing | 3 |
| RDM 703 | Work Experience, or | 3 |
| RDM 247 | Simulated Business Training I | 3 |
| SPE 105 | Fundamentals of Public Speaking | 3 |
| | | 15 |
| FOURTH SEMESTER | | |
| ART 211 | Commercial Art II | 3 |
| ART 213 | Commercial Design Group | 3 |
| MGT 230 | Salesmanship | 3 |
| MGT 233 | Advertising and Sales Promotion | 3 |
| RDM 713 | Work Experience, or | 3 |
| RDM 248 | Simulated Business Training II | 3 |
| *Elective | | 3 |
| | | 18 |
| *SUGGESTED ELECTIVES | | |
| MGT 136 | Principles of Management | 3 |
| MGT 137 | Principles of Retailing | 3 |
| RDM 246 | Marketing and Management Cases | 3 |

**RETAIL DISTRIBUTION AND MARKETING**
**FASHION MERCHANDISING**

(Associate Degree Program)

This two-year program is designed to prepare students for career opportunities in the field of fashion merchandising. During the first year of the program, students will take basic courses in business, communications, economics, and psychology. During the second year, students will be studying specialized courses in fashion buying, merchandising, and design and also have the option of working in the fashion merchandising area through a sponsoring business firm.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| MGT 137 | Principles of Retailing | 3 |
| COM 131 | Applied Composition and Speech, or | 3 |
| ENG 101 | Composition and Expository Reading | 3 |
| MTH 130 | Business Math, or | 3 |
| ACC 201 | Accounting, or | 3 |
| ACC 131 | Bookkeeping | 3 |
| PSY 131 | Human Relations | 3 |
| *Elective | | 3 |
| | | 15 |
| SECOND SEMESTER | | |
| MGT 230 | Salesmanship | 3 |
| COM 132 | Applied Composition and Speech, or | 3 |
| ENG 102 | Composition and Literature | 3 |
| CS 175 | Introduction to Computer Sciences | 3 |
| ECO 201 | Principles of Economics I | 3 |
| *Elective | | 3 |
| | | 15 |
| THIRD SEMESTER | | |
| MGT 206 | Principles of Marketing | 3 |
| RDM 290 | Fashion Buying | 3 |
| RDM 291 | Fashion Merchandising | 3 |
| RDM 703 | Work Experience, or | 3 |
| RDM 247 | Simulated Business Training I | 3 |
| *Elective | | 3 |
| | | 15 |
| FOURTH SEMESTER | | |
| MGT 233 | Advertising and Sales Promotion | 3 |
| RDM 292 | Fashion Design | 3 |
| DES 135 | Textiles | 3 |
| RDM 713 | Work Experience, or | 3 |
| RDM 248 | Simulated Business Training II | 3 |
| SPE 105 | Fundamentals of Public Speaking | 3 |
| *Elective | | 3 |
| | | 18 |
| *SUGGESTED ELECTIVES (Twelve hours required.) | | |
| MGT 136 | Principles of Management | 3 |
| MGT 242 | Personnel Administration | 3 |
| RDM 245 | Sales Management | 3 |
| RDM 246 | Marketing and Management Cases | 3 |

**SECRETARIAL CAREERS**

(Certificate Program)

The purpose of this program is to provide students with the basic skills necessary to enter the secretarial field in a minimum amount of time. Intensive training is provided in the basic secretarial skills such as shorthand, typewriting, and office machines. Emphasis is also placed on English and math skills.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| BUS 105 | Introduction to Business | 3 |
| ACC 131 | Bookkeeping I, or | 3 |
| ACC 201 | Principles of Accounting I | 3 |
| OFC 159 | Beginning Shorthand, or | 4 |
| OFC 103 | Speedwriting Theory | 4 |
| OFC 172 | Beginning Typewriting | 3 |
| MTH 130 | Business Mathematics | 3 |
| | | 16 |
| SECOND SEMESTER | | |
| OFC 162 | Office Procedures | 3 |
| OFC 165 | Introduction to Word Processing | 3 |
| OFC 166 | Intermediate Shorthand, or | 4 |
| OFC 104 | Speedwriting Dictation | 3 |
| OFC 174 | Intermediate Typewriting | 2 |
| OFC 231 | Business Correspondence | 3 |
| | | 14-15 |
| SUMMER SESSION | | |
| OFC 160 | Office Machines | 3 |
| COM 131 | Applied Composition and Speech, or | 3 |
| ENG 101 | Composition and Expository Reading | 3 |
| | | 6 |

(Associate Degree Program)

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. Extensive training is provided in the basic secretarial skills such as shorthand, typewriting, office machines, and word processing. Emphasis is also placed on English, math, and human relations skills. Decision making skills are stressed during the advanced courses.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| BUS 105 | Introduction to Business | 3 |
| ACC 131 | Bookkeeping I, or | 3 |
| ACC 201 | Principles of Accounting I | 3 |
| OFC 159 | Beginning Shorthand | 4 |
| OFC 172 | Beginning Typewriting | 3 |
| MTH 130 | Business Mathematics | 3 |
| | | 16 |
| SECOND SEMESTER | | |
| OFC 162 | Office Procedures | 3 |
| OFC 166 | Intermediate Shorthand | 4 |
| OFC 174 | Intermediate Typewriting | 2 |
| OFC 231 | Business Correspondence | 3 |
| HUM 101 | Introduction to Humanities | 3 |
| | | 15 |
| SUMMER SESSION | | |
| OFC 160 | Office Machines | 3 |
| COM 131 | Applied Composition and Speech, or | 3 |
| ENG 101 | Composition and Expository Reading | 3 |
| | | 6 |
| THIRD SEMESTER | | |
| OFC 165 | Introduction to Word Processing | 3 |
| OFC 266 | Advanced Shorthand | 4 |
| OFC 273 | Advanced Typewriting | 2 |
| COM 132 | Applied Composition and Speech, or | 3 |
| ENG 102 | Composition and Literature | 3 |
| *Elective | | 3-4 |
| | | 15-16 |
| FOURTH SEMESTER | | |
| OFC 265 | Word Processing Practices & Procedures | 3 |
| OFC 275 | Secretarial Procedures | 3 |
| PSY 131 | Human Relations | 3 |
| CS 175 | Introduction to Computer Sciences | 3 |
| *Elective | | 3-4 |
| | | 15-16 |
| *SUGGESTED ELECTIVES (A minimum of six hours of electives are required.) | | |
| MGT 136 | Principles of Management | 3 |
| BUS 143 | Personal Finance | 3 |
| BUS 234 | Business Law | 3 |
| BUS 237 | Organizational Behavior | 3 |
| OFC 256 | Office Management | 3 |
| PSY 105 | Introduction to Psychology | 3 |
| SPE 105 | Fundamentals of Public Speaking | 3 |
| OFC 803 | Cooperative Work Experience | 3 |
| OFC 804 | Cooperative Work Experience | 4 |
| OFC 813 | Cooperative Work Experience | 3 |
| OFC 814 | Cooperative Work Experience | 4 |

## LEGAL SECRETARY

(Associate Degree Program)

The Legal Secretary Program is designed to prepare the student for a legal secretarial career. Intensive training is provided in secretarial skills such as typewriting, shorthand, word processing, and office machines. Emphasis is also placed on English, math, and human relations skills. In addition, students receive specialized training in legal secretarial procedures and legal terminology and transcription. Upon satisfactory completion of the program, students will receive an Associate in Applied Arts and Sciences Degree.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| BUS 105 | Introduction to Business | 3 |
| ACC 131 | Bookkeeping I, or | 3 |
| ACC 201 | Principles of Accounting I | 3 |
| OFC 159 | Beginning Shorthand | 4 |
| OFC 172 | Beginning Typewriting | 3 |
| MTH 130 | Business Mathematics | 3 |
| | | 16 |
| SECOND SEMESTER | | |
| OFC 162 | Office Procedures | 3 |
| OFC 166 | Intermediate Shorthand | 4 |
| OFC 174 | Intermediate Typewriting | 2 |
| OFC 231 | Business Correspondence | 3 |
| HUM 101 | Introduction to Humanities | 3 |
| | | 15 |
| SUMMER SESSION | | |
| OFC 160 | Office Machines | 3 |
| COM 131 | Applied Composition and Speech, or | 3 |
| ENG 101 | Composition and Expository Reading | 3 |
| | | 6 |
| THIRD SEMESTER | | |
| OFC 165 | Introduction to Word Processing | 3 |
| OFC 167 | Legal Terminology and Transcription | 3 |
| OFC 273 | Advanced Typewriting | 2 |
| COM 132 | Applied Composition and Speech, or | 3 |
| ENG 102 | Composition and Literature | 3 |
| OFC 266 | Advanced Shorthand | 4 |
| | | 15 |
| FOURTH SEMESTER | | |
| OFC 265 | Word Processing Practices & Procedures | 3 |
| OFC 275 | Secretarial Procedures | 3 |
| OFC 274 | Legal Secretarial Procedures | 3 |
| PSY 131 | Human Relations | 3 |
| CS 175 | Introduction to Computer Sciences | 3 |
| | | 15 |

CPS CREDIT

Credit toward the Associate in Applied Arts and Sciences Degree may be granted upon successful completion of all parts of the Certified Professional Secretary (CPS) Exam. The courses for which credit may be granted are:

| | | |
|---|---|---|
| ACC 131 | Bookkeeping I | 3 |
| OFC 159 | Beginning Shorthand | 4 |
| OFC 162 | Office Procedures | 3 |
| OFC 166 | Intermediate Shorthand | 4 |
| OFC 172 | Beginning Typewriting | 3 |
| OFC 174 | Intermediate Typewriting | 2 |
| OFC 231 | Business Correspondence | 3 |
| BUS 234 | Business Law | 3 |
| OFC 275 | Secretarial Procedures | 3 |
| PSY 131 | Human Relations | 3 |
| | | 31 |

In order to receive credit, the applicant must:

1 Request direct notification be given to the Registrar of the College by the Institute for Certifying Secretaries that the applicant has passed all sections of the exam within the last 10 years;
2. Earned 12 hours credit for courses at Cedar Valley before the advanced standing credit is posted on the applicant's record.

**SMALL ENGINE MECHANICS**

(Certificate Program)

This program is designed to train students to meet entry level requirements in the field of Small Engine Mechanics. This will include theory, diagnosis, repair, overhaul and maintenance of small engines used on lawn mowers, garden tractors, and other small equipment. Included in this program is the study of small engine carburetion and electrical systems, engine overhaul and tune-up, and belt, chain, and direct drive power systems. Throughout the entire program an emphasis is placed on accepted shop techniques used throughout the small engine powered equipment industry.

| | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| EM 100 | Shop Practices | 3 |
| EM 110 | Engine Fundamentals | 6 |
| MTH 195 | Technical Mathematics | 3 |
| | | 12 |
| SECOND SEMESTER | | |
| SE 180 | Small Engine Carburetion | 3 |
| SE 260 | Small Engine Electrical Systems | 3 |
| SE 280 | Power Transfer Systems | 3 |
| | | 9 |
| THIRD SEMESTER | | |
| SE 270 | Engine Overhaul & Tune-Up | 6 |

| (Associate Degree Program) | | CR. HRS. |
|---|---|---|
| FIRST SEMESTER | | |
| EM 100 | Shop Practices | 3 |
| EM 110 | Engine Fundamentals | 6 |
| MTH 195 | Technical Mathematics | 3 |
| | | 12 |
| SECOND SEMESTER | | |
| SE 180 | Small Engine Carburetion | 3 |
| SE 260 | Small Engine Electrical Systems | 3 |
| *Electives | | 6 |
| | | 12 |
| SUMMER SESSION | | |
| PHY 131 | Applied Physics | 4 |
| THIRD SEMESTER | | |
| SE 270 | Engine Overhaul & Tune-Up | 6 |
| COM 131 | Applied Composition & Speech | 3 |
| *Elective | | 3 |
| | | 12 |
| FOURTH SEMESTER | | |
| SE 280 | Power Transfer Systems | 3 |
| SE 131 | American Civilization | 3 |
| *Electives | | 9 |
| | | 15 |
| SUMMER SESSION | | |
| *Electives | | 6 |

*ELECTIVES

Electives required to complete the Associate Degree shall be selected from the following:

| | | |
|---|---|---|
| COM 132 | Applied Composition and Speech | 3 |
| PSY 131 | Human Relations | 3 |
| BUS 105 | Introduction to Business | 3 |
| ACC 131 | Bookkeeping | 3 |
| MGT 136 | Principles of Management | 3 |
| MGT 153 | Small Business Management | 3 |
| EM 713 | Work Experience | 3 |
| EM 714 | Work Experience | 4 |
| EM 803 | Work Experience | 3 |
| EM 804 | Work Experience | 4 |
| EM 813 | Work Experience | 3 |
| EM 814 | Work Experience | 4 |

**ACCOUNTING (ACC) 131 (3)**
BOOKKEEPING I (3 LEC.)

The fundamental principles of double-entry bookkeeping are presented and applied to practical business situations. Emphasis is on financial statements, trial balances, work sheets, special journals, and adjusting and closing entries. A practice set of books covering the entire business cycle is completed.

**ACCOUNTING (ACC) 132 (3)**
BOOKKEEPING II (3 LEC.)

Prerequisite: Accounting 131. This course covers accruals, bad debts, taxes, depreciation, controlling accounts, and business vouchers. Bookkeeping for partnerships and corporations is introduced.

**ACCOUNTING (ACC) 201 (3)**
PRINCIPLES OF ACCOUNTING I (3 LEC.)

This course covers the theory and practice of measuring and interpreting financial data for business units. Topics include depreciation, inventory valuation, credit losses, the operating cycle, and the preparation of financial statements. (This course is offered on campus and may be offered via television.)

**ACCOUNTING (ACC) 202 (3)**
PRINCIPLES OF ACCOUNTING II (3 LEC.)

Prerequisite: Accounting 201. Accounting procedures and practices for partnerships and corporations are studied. Topics include cost data and budget controls. Financial reports are analyzed for use by creditors, investors, and management.

**ACCOUNTING (ACC) 203 (3)**
INTERMEDIATE ACCOUNTING I (3 LEC.)

Prerequisite: Accounting 202. This course is an intensive study of the concepts, principles, and practice of modern financial accounting. Included are the purposes and procedures underlying financial statements.

**ACCOUNTING (ACC) 204 (3)**
MANAGERIAL ACCOUNTING (3 LEC.)

Prerequisite: Accounting 202. This course is a study of accounting practices and procedures used to provide information for business management. Emphasis is on the preparation and internal use of financial statements and budgets. Systems, information, and procedures used in management planning and control are also covered.

**ACCOUNTING (ACC) 205 (3)**
BUSINESS FINANCE (3 LEC.)

Prerequisite: Economics 201 or 202 and Accounting 201. This course focuses on the financial structure in the free enterprise system. Topics include interest rates, value analysis, the financing of business firms and government, and security markets. Financial requirements for decision-making and capital formation are analyzed.

**ACCOUNTING**
**(ACC) 703, 803, 815 (3)**
(See Cooperative Work Experience)

**(ACC) 704, 804, 814 (4)**
(See Cooperative Work Experience)

**AIR CONDITIONING/**
**REFRIGERATION (AC) 150 (3)**
BASIC PRINCIPLES OF
ELECTRICITY (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 151, 152, and 153. Students may register in the comprehensive course or any of the inclusive courses. This course is a study of the principles of electricity as applied in simple circuits and circuit components. Included are basic electrical units and test instruments. Laboratory fee.

**AIR CONDITIONING/**
**REFRIGERATION (AC) 151 (1)**
BASIC ELECTRICAL UNITS (30 CONTACT HOURS)

Basic electrical units are covered. Volts, ohms, amperes and watts are calculated and measured. Laboratory fee.

**AIR CONDITIONING/**
**REFRIGERATION (AC) 152 (1)**
SIMPLE CIRCUITS (30 CONTACT HOURS)

This course focuses on simple circuits. Topics include the interpretation of simple schematic and combination circuits with resistive loads. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 153 (1)**
CIRCUIT COMPONENTS (30 CONTACT HOURS)

Components of circuits are examined. Circuits are constructed using switches, relays, solenoids, basic control and protective devices.

**AIR CONDITIONING/ REFRIGERATION (AC) 155 (3)**
ADVANCED ELECTRICAL CIRCUITS (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 156 and 157. Students may register in the comprehensive course or either of the inclusive courses. Advanced electrical circuits are presented. Basic electrical principles are applied to the construction and diagnosis of complex electrical circuits and alternating current motors. Laboratory fee.

**AIR CONDITIONING/ REFIGERATION (AC) 156 (2)**
COMPLEX CIRCUITS (60 CONTACT HOURS)

This course is an advanced study of complex circuits. Included are the construction and interpretation of complex schematics and the construction and diagonsis of complex electrical circuits with resistive, inductive and capacitive loads. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 157 (1)**
A.C. MOTOR FUNDAMENTALS (30 CONTACT HOURS)

Magnetic principles as applied in AC motors are covered. Wiring, diagnosis, and service of AC motors are included, as well as starting and protective devices commonly used in the air conditioning industry.

**AIR CONDITIONING/ REFRIGERATION (AC)160 (3)**
BASIC PRINCIPLES OF REFRIGERATION (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 161, 162, and 163. Students may register in the comprehensive course or any of the inclusive courses. Principles of physics as applied to refrigeration systems are studied. Topics include thermodynamics, gas laws, heat transfer, and properties of air and refrigerants. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 161 (1)**
ELEMENTARY PHYSICS AND THERMODYNAMICS (30 CONTACT HOURS)

This course presents the principles of thermodynamics, physics, and gas laws as applied to basic refrigeration systems. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 162 (1)**
HEAT TRANSFER AND AIR PROPERTIES (30 CONTACT HOURS)

Principles of heat flow and heat transfer are covered. Included are simple load calculations, air properties and basic psychrometric chart construction.

**AIR CONDITIONING/ REFRIGERATION (AC) 163 (1)**
REFRIGERANT PROPERTIES (30 CONTACT HOURS)

Common refrigerant types are identified. Basic refrigerant properties are compared and the pressure-enthalpy diagram is constructed.

**AIR CONDITIONING/ REFRIGERATION (AC) 165 (3)**
VAPOR COMPRESSION SYSTEMS (90 CONTACT HOURS)

This course covers the various features of vapor compression systems. The major components, their function, and relationship are examined. Also presented are the four processes of the vapor compression and system service, including evacuation and charging.

**AIR CONDITIONING/ REFRIGERATION (AC) 170 (3)**
PIPEFITTING PROCEDURES (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 171 and 172. Students may register in the comprehensive course or either of the inclusive courses. Piping practices are studied. Topics include pipe size selection and techniques of soldering,

silver-soldering and silver-brazing. Leak detection, and repair methods are also covered. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 171 (2)**
PIPE AND FITTINGS (60 CONTACT HOURS)

This course presents piping practices. Topics include the identification and selection of correct pipe sizes and fittings and the construction of piping circuits using proper soft-solder, silver-solder, and silver-brazing techniques. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 172 (3)**
LEAK DETECTION AND REPAIR (30 CONTACT HOURS)

The location and repair of refrigeration system leaks are covered. Correct repair methods and materials are emphasized. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 175 (3)**
RESIDENTIAL LOAD CALCULATIONS (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 176, 177, and 178. Students may register in the comprehensive course or any of the inclusive courses. This course is a study of heating and cooling load calculations for psychrometric chart construction and interpretation. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 176 (1)**
COOLING LOAD CALCULATIONS (30 CONTACT HOURS)

Cooling load calculations for residences are presented. Topics include the identification of heat sources, calculation of heat transfer coefficients and calculation of the cooling load. Emphasis is on energy conservation. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 177 (1)**
HEATING LOAD CALCULATIONS— RESIDENTIAL (30 CONTACT HOURS)

Heating load calculations for residences are presented. Topics include the identification of sources of heat loss, calculation of heat transfer coefficients, and calculation of the heating load. Emphasis is on energy conservation. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 178 (1)**
AIR PROPERTIES— RESIDENTIAL (30 CONTACT HOURS)

Measurement of residential air properties is covered. Included are the plotting and interpretation of psychrometic charts and identification of methods of humidity control. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 180 (3)**
RESIDENTIAL COOLING SYSTEMS (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 181, 182, and 183. Students may register in the comprehensive course or any of the inclusive courses. This course presents principles of refrigeration for residential cooling systems. Emphasis is on compressors, condensers, evaporators, metering devices, electrical components, and the reverse cycle system (heat pump). Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 181 (1)**
REFRIGERATION SYSTEMS- RESIDENTIAL (30 CONTACT HOURS)

Types of cooling systems for residences are covered. Major components are included, such as compressors, evaporators, condensers, and metering devices with emphasis on acceptable piping practices. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 182 (1)**
ELECTRICAL SYSTEMS- RESIDENTIAL COOLING (30 CONTACT HOURS)

The componets of the electrical system for residential cooling are presented. Topics include electrical control devices, protective devices and AC motors. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 183 (1)**
REVERSE CYCLE SYSTEMS (30 CONTACT HOURS)

This course is a study of the residential heat pump and its use in summer/ winter air conditioning. The electrical and mechanical system is included. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 185 (3)**
RESIDENTIAL HEATING SYSTEMS (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/ Refrigeration 186, 187, and 188. Students may register in the comprehensive course or any of the inclusive courses. Principles and procedures used in residential heating systems are studied. Emphasis is on the gas and electric warm-air furnace. Included are the mechanical and electrical components of the heating systems. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 186 (1)**
WARM-AIR FURNACE— GAS (30 CONTACT HOURS)

The gas warm-air furnace is examined. Included are the diagnosis and service of heat exchangers, burner assemblies and gas valves. The combustion process, vent systems and safety procedures are also studied. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 187 (1)**
WARM-AIR FURNACE— ELECTRIC (30 CONTACT HOURS)

The electric warm-air furnace is examined. Included are the principles and practices of resistance heating, the components of the system, and their relationship. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 188 (1)**
ELECTRICAL SYSTEMS— HEATING (30 CONTACT HOURS)

The electric heating systems are examined. Included are the identification and diagnosis of individual components of the electrical system and the relationship of the components to the system. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 190 (3)**
COMMERCIAL REFRIGERATION SYSTEMS (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/ Refrigeration 191, 192, and 193. Students may register in the comprehensive courses or in any of the inclusive courses. This course is a study of commerical refrigeration systems. Topics include system components such as flow-control and pressure control devices, defrost systems and humidity control. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 191 (1)**
INTRODUCTION TO COMMERCIAL REFRIGERATION SYSTEMS (30 CONTACT HOURS)

Commercial refrigeration systems are presented. Emphasis is on systems common to light commerical fixtures. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 192 (1)**
SYSTEM COMPONENTS— COMMERCIAL REFRIGERATION (30 CONTACT HOURS)

Major components of commercial systems are studied. Included are compressors, flow control, pressure control devices and the relationship of the components to the total system. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 193 (1)**
DEFROST SYSTEMS AND HUMIDITY CONTROL (30 CONTACT HOURS)

This course covers the diagnosis, service, repair and replacement of components of defrost systems. Air properties and humidity control are included. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC)195 (3)**
COMMERCIAL REFRIGERATION SYSTEMS SERVICE (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/ Refrigeration 196, 197, and 198. Students may register in the comprehensive course or in the inclusive courses. This course presents the service of commerical refrigeration systems. Topics include the principles and practices for fixture installations, pipe-fitting procedures, leak detection and repair, evacuation and system charging for peak performance, system lubrication at low temperatures, and diagnosis and service of electrical system components. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 196 (1)**
INSTALLATION PROCEDURES— COMMERCIAL REFRIGERATION (30 CONTACT HOURS)

Principles and practices for fixture installation are studied. Included are pipe-fitting procedures with emphasis on oil return. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 197 (1)**
SYSTEM SERVICE AND REPAIR— COMMERCIAL REFRIGERATION (30 CONTACT HOURS)

System leaks are located and repaired. Also included are system evacuation and the refrigerant charge for peak performance. The diagnosis, and service of system components, such as compressors, evaporators, condensers, metering devices, and defrost mechanisms, are covered. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 198 (1)**
ELECTRICAL SYSTEMS SERVICE— COMMERCIAL REFRIGERATION (30 CONTACT HOURS)

This course focuses on the servicing of electrical systems in commercial refrigeration. Included are the diagnosis, service, repair and replacement of components of electrical systems. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 240 (3)**
AIR DISTRIBUTION SYSTEM— RESIDENTIAL (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 241, 242 and 243. Students may register in the comprehensive course or any of the inclusive courses. Principles and practices of acceptable air distribution systems are presented. Topics include flow patterns, velocity volume and stratification for heating and cooling applications. Filter service, electronic air cleaners and humidifiers are also studied. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 241 (1)**
AIR DISTRIBUTION— COOLING (30 CONTACT HOURS)

Air distribution for residential cooling is studied. Topics include air flow, velocity, volume, flow patterns, methods of air distribution and system balance for best performance. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 242 (1)**
AIR DISTRIBUTION— HEATING (30 CONTACT HOURS)

Air distribution for residential heating is studied. Topics include air flow, velocity, volume, flow patterns, methods of air distribution and system balance for best performance. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 243 (1)**
ELECTRONIC AIR CLEANERS AND HUMIDIFIERS (30 CONTACT HOURS)

This course examines the principles of electronic air cleaners and humidifiers. Included are the service and adjustment of air cleaners and humidifiers and their use in environmental conditioning. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 245 (3)**
RESIDENTIAL SYSTEMS SERVICE (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 246 and 247. Students may register in the comprehensive course or either of the inclusive courses. The servicing of residential air conditioning systems is presented. Topics include the service, adjustment, repair and replacement of system components. Installation procedures are also covered. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 246 (2)**
SYSTEMS SERVICE AND REPAIR— RESIDENTIAL (60 CONTACT HOURS)

This course focuses on the diagnosis, service, repair and replacement of air conditioning system components. Included are leak detection and repair, evaluation and charging procedures and adjustment of systems for peak performance. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 247 (1)**
INSTALLATION PROCEDURES— RESIDENTIAL (30 CONTACT HOURS)

This course focuses on the installation of air conditioning systems. Included is the application of correct piping principles. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 250 (3)**
AIR CONDITIONING EQUIPMENT SELECTION (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 251 and 252. Students may register in the comprehensive course or in either of the inclusive courses. Selection of the proper air conditioning equipment is presented. Topics include the calculation of residential cooling and heating loads using approved forms and the selection of equipment required for the calculated loads. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 251 (2)**
ADVANCED LOAD CALACULATIONS (60 CONTACT HOURS)

This course focuses on the calulation of residential cooling and heating loads using the approved forms. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 252 (1)**
PROCESS EQUIPMENT SELECTION (30 CONTACT HOURS)

This course focuses on the selection of residential air conditioning equipment to meet the calculated loads. Included is selection of the condensing unit, evaporator coil, and warm-air furnace (or heat pump). Emphasis is on energy conservation. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 255 (3)**
AIR DISTRIBUTION SYSTEMS DESIGN (90 CONTACT HOURS)

This course is a comprehensive course that includes Air Conditioning/ Refrigeration 256 and 257. Students may register in the comprehensive course or either of the inclusive courses. The custom design of air distribution systems according to the particular needs of the structure is covered. Included are advanced psychrometrics, duct design, diffuser selection and air-flow patterns. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 256 (1)**
ADVANCED PSYCHROMETRICS— RESIDENTIAL (30 CONTACT HOURS)

This course is the specific study of advanced psychrometrics for residential use. Included are use of the psychrometric chart in air mixtures problems, apparatus dew point and bypass factor selection, air properties and the determination of actual system performance. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 257 (2)**
AIR DISTRIBUTION EQUIPMENT SELECTION (60 CONTACT HOURS)

This course is the specific study of equipment selection as indicated by

calculated heating and cooling loads. Topics include the selection of air distribution duct systems, diffusers and air-flow patterns. Emphasis is on energy conservation. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 260 (3)**
SPECIAL COMMERCIAL REFRIGERATION APPLICATIONS (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 261, 262 and 263. Students may register in the comprehensive course or in any of the inclusive courses. Commercial refrigeration principles are applied to special cases. Included are ice makers (flakers and cubers), beverages coolers and special display cases. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 261 (1)**
ICE MAKERS—
FLAKERS (30 CONTACT HOURS)

This course focuses on ice makers (flakers). Topics include the diagnosis, service, repair and replacement of components of ice makers (flakers). Emphasis is on mechanical and control systems. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 262 (1)**
ICE MAKERS—
CUBERS (30 CONTACT HOURS)

This course focuses on ice makers (cubers). Topics include the diagnosis, service, repair and replacement of components of ice makers (cubers). Emphasis is on harvest methods and control systems. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 263 (1)**
BEVERAGE COOLERS AND SPECIAL DESPLAY CASES (30 CONTACT HOURS)

This course focuses on beverage coolers and special display cases. Topics include the diagnosis and service of beverage coolers, water fountains, dairy cases and special display cases that require close temperature and/or humidity ranges. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 265 (3)**
ADVANCED COMMERCIAL REFRIGERATION SYSTEMS (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 266 and 267. Students may regeister in the comprehensive course or in either of the inclusive courses. Advanced commercial refrigeration systems are presented. Included are multiple compressors, evaporators, condensers and metering devices. Product and structural loads are calculated and analyzed. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 267 (2)**
PRODUCT AND STRUCTURAL LOAD ANALYSIS (60 CONTACT HOURS)

This course covers the calculation and analysis of product and structrual loads. The relationship of these loads to the total environmental system is included. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 270 (3)**
INDUSTRIAL AIR CONDITIONING SYSTEMS (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 271, 272 and 273. Students may register in the comprehensive course or in any of the inclusive courses. Industrial air conditioning systems are surveyed. Topics include the principles and operation of water-cooled condensing systems, water-treatment, water towers and piping. Also included are centrifugal and reciprocating compression systems. Absorption system principles are applied to industrial air conditioning. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 271 (1)**
WATER-COOLED CONDENSING SYSTEM (30 CONTACT HOURS)

This course examnes water-cooled condensing systems, water towers and water treatment. Applicable principles, pipe-sizing and piping practices are covered. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 272 (1)**
CENTRIFUGAL AND RECIPROCATING COMPRESSOR SYSTEMS (30 CONTACT HOURS)

This course examines the principles and operation of centrifugal and large reciprocating compressor systems. Emphasis is on the compressor components. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 273 (1)**
PRINCIPLES OF ABSORPTION SYSTEMS (30 CONTACT HOURS)

This course examines the principles of absorption systems. Topics include the identification of components, operational theory of absorption systems and advantages and disadvantages of industrial absorption systems. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 275 (3)**
INDUSTRIAL AIR CONDITIONING SERVICE (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 276, 277, and 278. Students may register in the comprehensive course or any of the inclusive courses. The servicing of industrial air conditioning systems is presented. Included are the service, repair and replacement of capacity control systems and lubrication systems. Also covered are principles and practices of refrigerant circuit piping, leak detection and repair, evacuation and system charging for best performance, and preventive maintenance and schedules.

**AIR CONDITIONING/ REFRIGERATION (AC) 276 (1)**
CAPACITY CONTROL AND LUBRICATION SYSTEMS (30 CONTACT HOURS)

This course focuses on the adjustment, service, repair, and replacement of components of capacity control systems. Lubrication systems and oil pressure control devices are included. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 277 (1)**
REFRIGERANT CIRCUIT SERVICE (30 CONTACT HOURS)

This course focuses on refrigerant circuit service. Included are leak detection and repairs, evacuation, charging procedures for best system performance and piping principles and practices. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 278 (1)**
PREVENTIVE MAINTENANCE PROCEDURES (30 CONTACT HOURS)

This course focuses on system components requiring preventive maintenance. The preparation of preventive maintenance schedules is covered. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 280 (3)**
HYDRONIC SYSTEMS (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 281 and 282. Students may register in the comprehensive course or in either of the inclusive courses. Hydronic air conditioning systems are studied. Water chiller, and low-pressure boiler systems are included. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 281 (1)**
WATER CHILLERS (30 CONTACT HOURS)

This course covers specifically the principles of operation and service of systems using water chillers as a secondary refrigerant. Control and protective devices are included. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 282 (2)**
LOW-PRESSURE BOILERS (60 CONTACT HOURS)

This course covers specifically low-pressure boilers. Included are the combustion process, burner assemblies, fuel circuit devices, heat exchanger control and protection devices. The electrical system is also studied. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 285 (3)**
ADVANCED INDUSTRIAL AIR CONDITIONING SYSTEMS (90 CONTACT HOURS)

This is a comprehensive course that includes Air Conditioning/Refrigeration 286, 287, and 288. Students may register in the comprehensive course or in any of the inclusive courses. Advanced industrial air conditioning systems are presented. Applied psychrometrics in air mixtures, coil by-pass factors, evaporator coil dew point, total system load are included. Multi-zone systems, air distribution systems, and air balancing are covered. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 286 (1)**
ADVANCED PSYCHROMETRICS— INDUSTRIAL AIR CONDITIONING (30 CONTACT HOURS)

Use of the psychrometric chart and air-measuring instruments in air mixtures, evaporator coil performance, calculating total system load and balancing system components. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 287 (1)**
MULTI-ZONE SYSTEMS (30 CONTACT HOURS)

This course examines multi-zone systems. Topics include components of the multi-zone system, operational and diagnostic procedures, and balancing system performance. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 288 (1)**
AIR DISTRIBUTION SYSTEMS AND AIR BALANCING (30 CONTACT HOURS)

This course examines air distribution systems and air balancing. Principles of industrial air conditioning distribution systems, flow patterns, face and by-pass dampers are included as well as air balancing for total system performance. Laboratory fee.

**AIR CONDITIONING/ REFRIGERATION (AC) 290 (3)**
INDUSTRIAL AIR CONDITIONING CONTROL SYSTEMS (90 CONTACT HOURS)

Control systems for industrial air conditioning are presented. Included are the diagnosis, service, repair and replacement of components of electrical, pneumatic, and electronic control systems. Emphasis is on control system principles. Laboratory fee.

**AIR CONDITIONING (AC) 703, 713, 803, 813 (3)**
(See Cooperative Work Experience)

**AIR CONDITIONING (AC) 704, 714, 804, 814 (4)**
(See Cooperative Work Experience)

**ANIMAL MEDICAL TECHNOLOGY (AMT) 101 (1)**
MEDICAL TERMINOLOGY FOR TECHNICIANS (1 LEC.)

The fundamentals of medical terminology are covered, with emphasis on prefixes, suffixes and root words and the meaning of the most commonly used words in medical areas, as they apply to the technician in daily practice.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 110 (2)**
ANIMAL CARE AND SANITATION: CANINE (1 LEC., 2 LAB.)

This course covers the common diseases of the canine species and diseases of public health importance, disease transmission and the proper procedures for their prevention. The lab requires the students to help maintain the animals used by the Animal Medical Technology Program for various courses. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 111 (2)**
ANIMAL CARE AND SANITATION: FELINE, PORCINE (1 LEC., 2 LAB.)

This course covers the common diseases of the feline and porcine species and diseases of public health importance, disease transmission and the proper procedures for prevention.

The lab requires the students to help maintain the animals used by the Animal Medical Technology Program for various courses. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 112 (2)**
ANIMAL CARE AND SANITATION: EQUINE (1 LEC., 2 LAB.)

This course covers the common diseases of the equine and diseases of public health importance, disease transmission and the proper procedures for their prevention. The lab requires the students to help maintain the animals used by the Animal Medical Technology Program for various courses. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 130 (4)**
INTRODUCTION TO ANIMAL MEDICAL TERMINOLOGY (3 LEC., 3 LAB.)

This course is an introduction to employment areas, ethical and professional requirements, terminology and basic animal handling and care. Included are a survey of common breeds of domestic livestock, pets and research animals and an outline of sanitation and disease principles. Laboratories provide experience and observation in restraint, behavior, grooming and basic animal nursing practices. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 137 (4)**
COMPARATIVE MAMMALIAN ANATOMY AND PHYSIOLOGY (3 LEC., 3 LAB.)

Mammalian structure is presented on a comparative basis. A histological and gross study of selected organ systems is made using the dog, cat and selected organs of the cow. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 138 (5)**
APPLIED BIOCHEMISTRY (4 LEC., 3 LAB.)

This course surveys animal cell structure and function. Emphasis is on the relationship of carbohydrate, protein and lipid utilization. Physiochemical laws involved in cellular homeostatic maintenance are used. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 139 (3)**
PHARMACOLOGY FOR TECHNICIANS (3 LEC.)

Prerequisite: Animal Medical Technology 138. Various chemicals and drugs used in veterinary practice are studied. Topics include the measurement of drugs, common routes of administration, proper handling and storage, principles of efficient ordering, dispensing and inventory control. Requirements of narcotic, stimulant and depressant drug control are emphasized. Basic drug categories and their use in relation to disease treatment are outlined.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 210 (2)**
ANIMAL CARE AND SANITATION: BOVINE (1 LEC., 2 LAB.)

The course covers the common diseases of the bovine and diseases of public health importance, disease transmission and the proper procedures for their prevention. The lab requires the students to help maintain the animals used by the Animal Medical Technology Program for various courses. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 230 (4)**
ANESTHETIC AND SURGICAL ASSISTING TECHNIQUES (3 LEC., 3 LAB.)

Prerequisite: Animal Medical Technology 137. This course introduces commonly employed preanesthetic and general anesthetic agents, their methods of administration, patient monitoring while under the effects of these agents and handling of anesthetic emergencies. Principles and techniques of animal, personnel and instrument preparation for surgery, surgical assisting and post operative care are also emphasized. Laboratory periods involve individual practice in anesthetizing and monitoring animal patients and preparing for assisting the veterinarian during surgery. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 231 (4)**
COMPARATIVE MAMMALIAN ANATOMY AND PHYSIOLOGY II (3 LEC., 3 LAB.)

Prerequisite: Animal Technology 137. This course is a continuation of Animal Medical Technology 137. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 237 (3)**
PRINCIPLES AND PRACTICE OF RADIOGRAPHY (2 LEC., 3 LAB.)

Prerequisite: Animal Medical Technology 230. Lectures present the theory behind the production of X-rays, machine operation and maintenance, technique chart development, factors involved in producing diagnostic quality radiographs and radiation safety procedures and precautions. Laboratory sessions focus on techniques and practice in proper positioning of the patient, calculation of correct KV and MAS settings for adequate radiographic exposure, manual processing of exposed radiographic film, quality analysis and film storage and handling. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 241 (5)**
CLINICAL PATHOLOGY TECHNIQUES AND PRACTICES I (3 LEC., 6 LAB.)

Prerequisite: Credit or concurrent enrollment in Animal Medical Technology 231. Clinical laboratory methods are covered. Topics include parasitological, microbiological and tissue sample collection, analysis, identification and reporting to the veterinarian. Laboratory emphasis on identification of common parasites, morphology, cultural and staining characteristics of pathogenic bacteria and preparation of routine microbiological culture media. Blood analysis is introduced, including preparation of routine microbiological culture media, preparation of blood smears, differential cell counts, hemoglobin and packed cell volume determinations. The importance of understanding parasite life cycles and spread of disease by bacteria as well as host tissue changes occurring is stressed. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 242 (3)**
EXOTIC AND RESEARCH ANIMAL CARE AND MANAGEMENT (2 LEC., 3 LAB.)

Prerequisite: Animal Medical Technology 130 and 231. This course introduces handling, restraint, sexing and uses of the common research laboratory and exotic animal species. Methods of husbandry and management to control or prevent common diseases species in each of the species considered. Techniques of rodent anesthesia and surgery are presented and practiced. The purpose, concepts and theory of gnotobiotics and axenic techniques are explained. The ethical differences in functional responsibility occurring between animal medical technicians employed in research institutions as compared to employment in veterinary hospitals are emphasized. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 243 (5)**
CLINICAL PATHOLOGY TECHNIQUES AND PRACTICE II (3 LEC., 6 LAB.)

Prerequisite: Animal Medical Technology 241. This course continues the study and practice of lab methods for blood analysis. Included are red and white cell counts, reticulocyte counts, clotting time, sedimentation rates, cross-matching, serology and various blood chemistry analyses. Practice is provided in urine collection, chemical analysis, and urinary sediment and cellular identification. Emphasis is placed on correlating sample data with changes in affected physiological parameters. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 244 (3)**
LARGE ANIMAL ASSISTING TECHNIQUES (2 LEC., 4 LAB.)

This course covers the skills and knowledge needed to support and assist large animal practitioners. Emphasis is on principles and techniques in basic history, physical exams (T.P.R.), administration of drugs on veterinarian's prescription, surgical assistance, bleeding and fluid admin-

istration, mastitis control, foot and hoof care, reproductive management assisting and record-keeping. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 245 (2)**
CLINICAL SEMINAR (2 LEC.)

This course is designed to allow the student to receive on-the-job instruction from an authorized veterinarian concerning daily routine procedures.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 249 (4)**
ANIMAL HOSPITAL NURSING (3 LEC., 3 LAB.)

This course integrates and brings into sharp focus skills, techniques and knowledge acquired in earlier courses. In addition, new material, concepts and methods are presented in the areas of infectious and non-infectious disease pet animal nursing, emergency first aid, intensive care techniques, dental problems and prophylaxis and client management and relations. Laboratory fee.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 250 (2)**
SPECIAL PROJECTS IN AMT (3 LEC.)

This course provides for individual study in some special interest area of the student's major field. The study is under the guidance of a specific faculty member who acts as advisor and performance evaluator. At the discretion of the student's advisor, a technical paper may be required together with an oral presentation for student information and discussion. Professional staff members may be invited to any special project presentation to aid in discussion of the topic presented. It is the responsibility of the faculty advisor to provide proper liaison and coordination with personnel in the Learning Resources Center if the student's special project involves software production of specialized animal medical techniques.

**ANIMAL MEDICAL TECHNOLOGY (AMT) 702 (2)**
(See Cooperative Work Experience)

**ANIMAL MEDICAL TECHNOLOGY (AMT) 703 (3)**
(See Cooperative Work Experience)

**ART (ART) 122 (3)**
ADVERTISING DESIGN (2 LEC., 4 LAB.)

Prerequisite: Art 110, Art 111, Art 115, or the consent of the instructor. Advertising concepts are presented. Emphasis is on the development of logo designs, magazine ads, TV story boards, posters, letterheads and envelopes.

**ART (ART) 213 (3)**
COMMERCIAL DESIGN GROUP (2 LEC., 4 LAB.)

Prerequisite: Art 210. Students operate a design studio and work directly with clients to solve their particular visual communication needs. They create graphic art products, such as brochures, identity programs and posters. Printed samples for portfolios may be acquired.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 100 (3)**
AUTOMOTIVE FUNDAMENTALS
(48 CONTACT HOURS)

This course introduces general auto maintenance procedures. Topics include shop safety, hand tools, shop equipment, and manuals and schematics. Apprentices who believe they are qualified by experience or previous training may take and examination to establish credit for this course.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 101 (3)**
BASIC ELECTRICAL SYSTEMS
(48 CONTACT HOURS)

The theory and principles of electrical systems are presented. Batteries, starters, charging systems, and ignition systems are studied. Testing and basic service procedures are also included.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 102 (3)**
AUTOMOTIVE SERVICE DEPARTMENT MANAGEMENT (48 CONTACT HOURS)

This course examines the auto service department. Topics include organizational structure, operation, marketing and promotional methods, management, and financial aspects.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 103 (3)**
SUSPENSION, STEERING AND BRAKE SYSTEMS (48 CONTACT HOURS)

Suspension, steering, and brake systems are covered. Disc and drum brakes, front and rear suspension systems, and manual and power steering systems are included. Tires, wheels, and alignment are also studied. Emphasis is on inspection, diagnosis, and service techniques. Upon successful completion of this course, the apprentice is prepared for the N.I.A.S.E. Front End and Brake Systems Examinations (2).

**ATUOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 104 (3)**
AUTOMOTIVE PARTS DEPARTMENT MANAGEMENT (48 CONTACT HOURS)

This course examines the auto parts department. Topics include organizational structure, catalog interpretation, terminology, inventory control, warehousing, and distribution.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 105 (3)**
ENGINE TUNE-UP PROCEDURES (48 CONTACT HOURS)

Prerequisite: Automotive Technology Apprenticeship 101. Tune-up procedures are presented. The fuel system, carburetor, ignition system, and emission control systems are covered. Emphasis is on precision diagnosis by use of the engine analyzer as well as troubleshooting procedures. Upon successful completion of this course, the apprentice is prepared for the N.I.A.S.E. Engine Tune-Up Examination.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 191 (3)**
INTERNSHIP I (640 CONTACT HOURS)

Supervised, on-the-job training, coordinated with classroom activities.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 192 (3)**
INTERNSHIP II (640 CONTACT HOURS)

Supervised, on-the-job training, coordinated with classroom activities.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 193 (3)**
INTERNSHIP III (640 CONTACT HOURS)

Supervised, on-the-job training coordinated with classroom activities.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 200 (3)**
ADVANCED ELECTRICAL SYSTEMS (48 CONTACT HOURS)

Prerequisite: Automotive Technology Apprenticeship 101. Advanced electrical systems are presented. Topics include chassis electrical systems, integrated circuits, instrument panel controls, wiring vacuum systems, and accessory controls. Emphasis is on interpretation of diagrams and schematics. Systematic troubleshooting procedures are also stressed. Upon completion of this course, the apprentice is prepared for the N.I.A.S.E. Electrical Systems Examination.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 201 (3)**
AUTOMOTIVE AIR CONDITIONING AND HEATING SYSTEMS (48 CONTACT HOURS)

This course covers basic thermodynamics principles and heating and air conditioning systems. Topics include systems components, systems testing, diagnosis, and servicing. Also included are control systems. Upon completion of this course, the apprentice is prepared for the N.I.A.S.E. Heating and Air Conditioning Systems Examination.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 202 (3)**
BASIC ENGINE REPAIR (48 CONTACT HOURS)

The study and repair of engines are the focus of this course. Four-cycle, two-cycle, rotary, and diesel engines are all included. Cooling and lubrication systems, valves and valve trains, cylinder head reconditioning, and the diagnosis of engine problems are studied.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 203 (3)**
ENGINE OVERHAUL PROCEDURES (48 CONTACT HOURS)

Prerequisite: Automative Technology Apprenticeship 202. Procedures to remove, disassemble, rebuild,assemble, and install the engine are covered. Emphasis is on precision measuring techniques. Also included are tune-up and road testing. Upon completion of this course, the apprentice is prepared for the N.I.A.S.E. Engine Repair Examination.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 204 (3)**
CLUTCHES, DIFFERENTIALS, AND DRIVE SHAFTS (48 CONTACT HOURS)

Release clutches, drive lines, and differential assemblies are studied. Included are the design, operation, diagnosis, and repair of these parts. Emphasis is on differential diagnosis and repair.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA)205 (3)**
TRANSMISSIONS (48 CONTACT HOURS)

This course is an introduction to transmissions and gear trains. Included are conventional 3-speed transmissions, synchronized 3-, 4- and 5-speed transmissions. Emphasis is on diagnostic procedures and servicing. Upon completion of this course and Automotive Technology Apprenticeship 204, the apprentice is prepared for the N.I.A.S.E. Automatic and Standard Transmissions Examinations (2).

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 294 (3)**
INTERNSHIP IV (640 CONTACT HOURS)

Supervised on-the-job training, coordinated with classroom activities.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 295 (3)**
INTERNSHIP V (640 CONTACT HOURS)

Supervised on-the-job training, coordinated with classroom activities.

**AUTOMOTIVE TECHNOLOGY APPRENTICESHIP (ATA) 296 (3)**
INTERNSHIP VI (640 CONTACT HOURS)

Supervised on-the-job training, coordinated with classroom activities.

**AUTOMOTIVE TECHNOLOGY (AT) 140 (6)**
AUTOMOTIVE SERVICES (180 CONTACT HOURS)

This is a comprehensive course that incorporates Automotive Technology 141, 142, 143 and 144. Students may enroll in the comprehensive course or any of the inclusive courses. Fundamentals of automotive services are covered. Safety, hand tools, shop equipment and general maintenance procedures are included. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY (AT) 141 (6)**
AUTOMOTIVE SHOP SAFETY (30 CONTACT HOURS)

This course focuses on shop safety. Topics include vehicle lifting procedures, electrical and fire hazards and vehicle moving. The proper use of storage of tools and equipment are also covered. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY (AT) 142 (2)**
AUTOMOTIVE FUNDAMENTALS (60 CONTACT HOURS)

This course focuses on automotive fundamentals. Topics include the engine, standard and automatic transmission, drive line and front end. The cooling, electrical and fuel systems are covered. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 143 (2)**
SHOP EQUIPMENT AND
PROCEDURES (60 CONTACT HOURS)

This course focuses on equipment and procedures. Topics include the selection, use and care of tools and equipment. Ths use of service invoices, time and labor guides and shop manuals are also covered. Basic arc welding and oxyacetylene welding, soldering and brazing are introduced. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 144 (1)**
LUBRICATION MAINTENANCE
PROCEDURES (30 CONTACT HOURS)

This course focuses on lubrication and maintenance. Topics include lubricants, vehicle requirements for lubrication, greasing procedures, battery servicing and cooling system maintenance. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 150 (6)**
FRONT SUSPENSION, STEERING
AND BRAKES (180 CONTACT HOURS)

This is a comprehensive course that incorporates Automotive Technology 151, 152, 153 and 154. Students may enroll in the comprehensive course or any of the inclusive courses. The steering, front suspension and disc or drum brake systems are studied. Also included are alignment and balancing procedures. Emphasis is on diagnosis, service, repair and replacement. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 151 (2)**
SUSPENSION, STEERING AND FRONT END
ALIGNMENT (60 CONTACT HOURS)

The course is the specific study of suspension, steering and front end alignment. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 152 (2)**
DISC BRAKES (60 CONTACT HOURS)

This course is the specific study of disc brakes. Topics include disc brake systems, rotors, power brake boosters, master cylinders, control valves and caliper rebuilding. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 153 (1)**
DRUM BRAKES (30 CONTACT HOURS)

Includes diagnosis and repair of drum brake systems, rebuilding wheel cylinders, machining brake drums, lining adjustment and emergency brake system. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 154 (1)**
WHEELS AND TIRES (30 CONTACT HOURS)

This course is the specific study of wheels and tires. Topics include tire design and tire wear patterns. Mounting, repair, inflation and static and dynamic balancing procedures are also covered. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 160 (6)**
AUTOMOTIVE ENGINES (180 CONTACT HOURS)

Prerequisite: Automotive Technology 140. This is a comprehensive course that incorporates Automotive Technology 161 and 162. Students may enroll in the comprehensive course or either of the inclusive courses. This course covers the diagnosis of engine mechanical problems. Complete overhaul procedures are also covered. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 161 (2)**
ENGINE PROGLEM DIAGNOSIS (MECHANICAL)
(60 CONTACT HOURS)

This course includes the diagnosis of engine mechanical problems. Use of shop test equipment and proper testing procedures are emphasized. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 162 (4)**
ENGINE OVERHAUL (120 CONTACT HOURS)

This course includes engine removal, disassembly, cleaning, repair and replacement of parts as required. Reassembly and installation are also covered. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 170 (6)**
AUTOMOTIVE SYSTEMS
(180 CONTACT HOURS)

Prerequisite: Automotive Technology 140. This is a comprehensive course that incorporates Automotive Technology 171, 172, 173 and 174. Students may enroll in the comprehensive course or any of the inclusive courses. Auto air conditioning, heating, electrical and exhaust systems are presented. Both diagnosis of problems and repair are included. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 171 (2)**
AUTOMOTIVE AIR CONDITIONING
SYSTEMS (60 CONTACT HOURS)

This course focuses on air conditioning systems. Topics include diagnosis, repair, evacuation and charging. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 172 (1)**
AUTOMOTIVE HEATING
SYSTEMS (30 CONTACT HOURS)

This focuses on heating systems. Topics include the diagnosis and repair of heaters and heater control systems. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 173 (2)**
ELECTRICAL SYSTEMS (60 CONTACT HOURS)

This course focuses on electrical systems. Topics include starting systems, alternators and generators, lighting and instruments. Also covered is the interpretation of wiring diagrams and schematics. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 174 (1)**
EXHAUST SYSTEMS (30 CONTACT HOURS)

This course focuses on exhaust systems. Topics include exhaust manifolds, gaskets, heat control valves, mufflers, and exhaust and tail pipes. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 260 (6)**
POWER TRAINS (180 CONTACT HOURS)

Prerequisite: Automotive Technology 140. This is a comprehensive course that incorporates Automotive Technology 261, 262, 263, and 264. Students may enroll in the comprehensive course or any of the inclusive courses. Power trains are studied. Differential assemblies, standard transmissions and overdrives, clutches, and drive trains are included. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 261 (2)**
DIFFERENTIAL ASSEMBLIES
(60 CONTACT HOURS)

This course examines differential assemblies. Topics include ring and pinion assemblies, bearings, seals, and axles. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 262 (2)**
STANDARD TRANSMISSIONS
AND OVERDRIVES (60 CONTACT HOURS)

This course examines standard transmissions and overdrives. Both diagnosis of problems and repair are included. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 263 (1)**
CLUTCHES (30 CONTACT HOURS)

This course examines clutches. Diagnosis, removal, replacement, repair, and adjustment are covered. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 264 (1)**
DRIVE TRAINS (30 CONTACT HOURS)

This course examines drive trains. Drive train and components, universal joints, carrier bearings, and constant velocity joints are covered. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 270 (6)**
AUTOMATIC TRANSMISSIONS
(180 CONTACT HOURS)

Prerequisite: Automotive Technology 140. This is a comprehensive course that incorporates Automotive Technology 271, 272, and 273. Students may enroll in the comprehensive course or in any of the inclusive courses. Automatic transmissions are presented. Emphasis is on those used by General Motors, Ford Motor Company, and Chrysler Corporation. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 271 (2)**
GENERAL MOTORS AUTOMATIC TRANSMISSIONS (60 CONTACT HOURS)

This course centers on automatic transmissions used by General Motors. Topics include problem diagnosis, removal, repair, replacement, and adjustment. Use of the automatic transmission tester is also covered. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 272 (2)**
FORD MOTOR COMPANY AUTOMATIC TRANSMISSIONS (60 CONTACT HOURS)

This course centers on automatic transmissions used by Ford Motor Company. Topics include problem diagnosis, removal, repair, replacement, and adjustment. Use of the automatic transmission tester is also covered. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 273 (2)**
CHRYSLER CORPORATION AUTOMATIC TRANSMISSIONS (60 CONTACT HOURS)

This course centers on automatic transmissions used by Chrysler Corporation. Topics include problem diagnosis, removal, repair, replacement and adjustment. Use of the automatic transmission tester is also covered. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 280 (6)**
AUTOMOTIVE TUNE-UP (180 CONTACT HOURS)

Prerequisite: Automotive Technology 140. This is a comprehensive course that incorporates Automotive Technology 281, 282, and 283. Students may enroll in the comprehensive course or any of the inclusive courses. Ignition, fuel, and emission control systems are studied. Emphasis is on diagnosis of problems, repair, replacement, and adjustment. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 281 (2)**
IGNITION SYSTEMS (60 CONTACT HOURS)

This course examines ignition systems. Both conventional and electronic ignition systems are included. Emphasis is on tune-up procedures. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 282 (2)**
FUEL SYSTEMS (60 CONTACT HOURS)

This course examines fuel systems. Carburetors, fuel pumps and other fuel system components are included. Rebuilding of the carburetor and tune-up procedures are emphasized. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 283 (2)**
EMISSION CONTROL SYSTEMS (60 CONTACT HOURS)

This course examines emission control systems. Included is infra-red emission testing. Laboratory fee.

**AUTOMOTIVE TECHNOLOGY**
**(AT) 713, 813 (3)**
(See Cooperative Work Experience)

**AUTOMOTIVE TECHNOLOGY**
**(AT) 714, 814 (4)**
(See Cooperative Work Experience)

**BLUEPRINT READING (BPR)**
**177 (2)**
BLUEPRINT READING (1 LEC., 3 LAB.)

Engineering drawings are described and explained. Topics include multi-view projection, sections, auxiliaries, bill of materials, symbols, notes, conventions, and standards. The skills of visualization, dimensioning, and sketching of machine parts are covered.

**COMPUTING SCIENCE (CS)**
**175 (3)**
INTRODUCTION TO COMPUTER SCIENCE (3 LEC.)

This course is an introduction to the computer. The history of computers and their cultural impact are explored. Topics include vocabulary, flow charting, data representation and procedure-oriented languages with general applications.

**COOPERATIVE WORK EXPERIENCE**
**701, 711, 801, 811 (1)**
**702, 712, 802, 812 (2)**
**703, 713, 803, 813 (3)**
**704, 714, 804, 814 (4)**

Prerequisite: Completion of two courses in the student's major or instructor or coordinator approval. These courses consist of seminars and on-the-job experience. Theory and instruction received in the courses of the student's major curricula are applied to the job. Students are placed in work-study positions in their technical/occupational fields. Their skills and abilities to function successfully in their respective occupations are tested. These work internship courses are guided by learning objectives composed at the beginning of each semester by the students, their instructors or coordinators, and their supervisors at work. The instructors determine if the learning objectives are valid and give approval for credit.

**ENGINE MECHANICS (EM) 100 (3)**
SHOP PRACTICES (90 CONTACT HOURS)

This course covers shop practices. Topics include tools, equipment and service department operation. (This is a comprehensive course that incorporates Engine Mechanics 101 and 102. The student may enroll in the comprehensive course or either of the inclusive courses.) Laboratory fee.

**ENGINE MECHANICS (EM) 101 (2)**
TOOLS AND EQUIPMENT
(60 CONTACT HOURS)

This course focuses on the safe and proper use of tools and equipment used in the repair of small engines. Laboratory fee.

**ENGINE MECHANICS (EM) 102 (1)**
SERVICE DEPARTMENT
OPERATION (30 CONTACT HOURS)

This course focuses on the operation of a service department. Laboratory fee.

**ENGINE MECHANICS (EM) 110 (6)**
ENGINE FUNDAMENTALS
(180 CONTACT HOURS)

Prerequisite: Engine Mechanics 100. This is a comprehensive course that incorporates Engine Mechanics 111, 112, and 113. Students may enroll in the comprehensive course or any of the inclusive courses. The fundamentals of engines are introduced. Included are two and four cycle engines, basic electrical systems, and basic fuel systems. Laboratory fee.

**ENGINE MECHANICS (EM) 111 (2)**
TWO AND FOUR CYCLE
ENGINES (60 CONTACT HOURS)

This course is the study of two and four cycle engines. Topics include principles, theory of operation, and failure analysis. Laboratory fee.

**ENGINE MECHANICS (EM) 112 (2)**
BASIC ELECTRICAL SYSTEMS
(60 CONTACT HOURS)

This course is the study of basic electrical systems. Topics include the principles of electricity as they relate to small engines. Laboratory fee.

**ENGINE MECHANICS (EM) 113 (2)**
BASIC FUEL SYSTEMS (60 CONTACT HOURS)

This course is the study of basic fuel systems. Topics include the principles and theory of operation. Laboratory fee.

**ENGINE MECHANICS**
**(EM) 703, 713, 803, 813 (3)**
(See Cooperative Work Experience)

**ENGINE MECHANICS**
**(EM) 704, 714, 804, 814 (4)**
(See Cooperative Work Experience)

**MAJOR APPLIANCE REPAIR**
**(MAR) 200 (6)**
DOMESTIC REFRIGERATORS
(180 CONTACT HOURS)

This is a comprehensive course that incorporates Major Appliance Repair 201, 202, 203, 204 and 205. Students may enroll in the comprehensive course or in any of the inclusive courses. The mechanical and electrical systems of domestic refrigerators and freezers are presented. The diagnosis, service, repair, and replacement of parts are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 201 (1)**
MOTORS AND MOTOR CIRCUITS
(30 CONTACT HOURS)

This course focuses on motors and motor circuits used in domestic refrigeration systems. Identification, repair, and replacement are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 202 (1)**
DEFROST CIRCUITS AND
COMPONENTS (30 CONTACT HOURS)

This course focuses on manual defrost, off-cycle defrost, semi-automatic defrost and frost-free defrost systems. Identification, repair, and replacement are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 203 (2)**
SEALED SYSTEM REPAIR AND COMPRESSOR
REPLACEMENT (60 CONTACT HOURS)

This course focuses on the detection and repair of leaks and on the replacement of compressors. Evacuation, charging, and performance evaluation of sealed systems are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 204 (1)**
DOMESTIC ICE MAKERS (30 CONTACT HOURS)

This course focuses on flex tray and rigid mold domestic ice makers. Diagnosis, repair, and adjustment are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 205 (1)**
TROUBLESHOOTING AND DIAGNOSIS,
DOMESTIC REFRIGERATORS AND FREEZERS
(30 CONTACT HOURS)

This course focuses on troubleshooting techniques for domestic refrigeration systems. The diagnosis of problems is included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 210 (6)**
DOMESTIC DISHWASHERS, DISPOSERS, AND
TRASH COMPACTORS (180 CONTACT HOURS)

Prerequisite: Air Conditioning 400. This is a comprehensive course that incorporates Major Appliance Repair 211, 212, 213 and 214. Students may enroll in the comprehensive course or in any of the inclusive courses. Domestic dishwashers, disposers, and trash compactors are studied. The diagnosis, service, repair, and replacement of parts are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 211 (1)**
ELECTRICAL SYSTEMS—
DISHWASHERS (30 CONTACT HOURS)

This course examines motors, water valves, heaters, timers, and dispensing electrical circuits. Diagnosis, repair, and replacement are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 212 (1)**
MECHANICAL SYSTEMS AND
WASHABILITY (30 CONTACT HOURS)

This course examines water valve assemblies, pumps, water seals, and water/detergent relationships (washability). Adjustment, repair, and replacement are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 213 (2)**
DISPOSERS AND TRASH
COMPACTORS (60 CONTACT HOURS)

This course examines the electrical and mechanical parts of domestic disposers and trash compactors. Diagnosis, service, repair, and replacement are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 214 (2)**
TROUBLESHOOTING AND DIAGNOSIS—
DISHWASHERS, DISPOSERS, AND TRASH
COMPACTORS (60 CONTACT HOURS)

This course examines troubleshooting techniques for domestic dishwashers, disposers, and trash compactors. The diagnosis of problems is included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 220 (6)**
DOMESTIC LAUNDRY
EQUIPMENT (180 CONTACT HOURS)

Prerequisite: Air Conditioning 400. This is a comprehensive course that incorporates Major Appliance Repair 221, 222, 223, 224, 225 and 226. Students may enroll in the comprehensive

course or any of the inclusive courses. Domestic washers and dryers are covered. The diagnosis, service, repair, and replacement of parts are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 221 (1)**
ELECTRICAL SYSTEMS AND MOTORS—
WASHERS (30 CONTACT HOURS)

This course is the specific study of washer motors and motor circuits, water valve circuits, timers, and dispensing circuits for bleach, softner, and detergent. Both diagnosis and repair are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 222 (1)**
WATER SYSTEMS—
WASHERS (30 CONTACT HOURS)

This course is the specific study of washer water valve, pump, and inlet and drain assemblies. Diagnosis, repair, and adjustment are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 223 (1)**
DRIVE SYSTEMS—
WASHERS (30 CONTACT HOURS)

This course is the specific study of washer clutch and belt assemblies, transmissions, drive shafts, and inner and outer tub assemblies. Diagnosis, adjustment, repair, and replacement are included.

**MAJOR APPLIANCE REPAIR**
**(MAR) 224 (1)**
ELECTRICAL SYSTEMS AND MOTORS—
DRYERS (30 CONTACT HOURS)

This course is the specific study of dryer motors and motor circuits, heating elements, gas valve circuits, and timers. Diagnosis and repair are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 225 (1)**
MECHANICAL SYSTEMS—
DRYERS (30 CONTACT HOURS)

This course is the specific study of dryer blowers, venting assemblies, belts and pulleys, bearings, and drum assemblies. Diagnosis, adjustment, repair, and replacement are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 226 (1)**
TROUBLESHOOTING AND DIAGNOSIS—
WASHERS AND DRYERS (30 CONTACT HOURS)

This course is the specific study of troubleshooting techniques for domestic washers and dryers. The diagnosis of problems is included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 230 (6)**
DOMESTIC COOKING
EQUIPMENT (180 CONTACT HOURS)

Prerequisite: Air Conditioning 400. This is a comprehensive course that incorporates Major Appliance Repair 231, 232, 233, 234 and 235. Students may enroll in the comprehensive course or in any of the inclusive courses. Domestic cooking equipment is studied. The diagnosis, service, repair, and replacement of parts are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 231 (1)**
GAS COOKING EQUIPMENT
(30 CONTACT HOURS)

This course covers manual, hydraulic, and electrical controls of gas ranges and ovens. Burner adjustment is also covered. Diagnosis, service, repair, and replacement are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 232 (2)**
ELECTRIC COOKING
EQUIPMENT (60 CONTACT HOURS)

This course covers heating elements, switches, thermostats, timers, cook tops and oven circuits of electric ranges and ovens. Diagnosis, wiring, repair, and replacement are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR**
**(MAR) 233 (1)**
SELF-CLEANING OVENS (30 CONTACT HOURS)

This course covers electronic and hydraulic controls and principles of self-cleaning ovens. Diagnosis, service, repair and replacement are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR (MAR) 234 (1)**
MICROWAVE OVENS (30 CONTACT HOURS)

This course covers the principles of microwave cooking. Diagnosis and troubleshooting of magnetrons and associated microwave circuitry are included. Laboratory fee.

**MAJOR APPLIANCE REPAIR (MAR) 235 (1)**
TROUBLESHOOTING AND DIAGNOSIS—DOMESTIC COOKING EQUIPMENT (30 CONTACT HOURS)

This course covers troubleshooting techniques for domestic cooking equipment. The diagnosis of problems is included. Laboratory fee.

**MAJOR APPLIANCE REPAIR (MAR) 240 (3)**
PROFESSIONAL SERVICE SKILLS (48 CONTACT HOURS)

Professional skills for the service industry are emphasized. Topics include invoices, service records, maintenance agreements, customer relations, inventory, salaries, working conditions, and advancement opportunities.

**MATHEMATICS (MTH) 195 (3)**
TECHNICAL MATHEMATICS (3 LEC.)

Prerequisite: One year of high school algebra or Development Mathematics 091 or the equivalent. This course is designed for technical students. It covers a general review of arithmetic, the basic concepts and fundamental facts of plane and solid geometry, computational techniques and devices, units and dimensions, the terminology and concepts of elementary algebra, functions, coordinate system, simultaneous equations, and stated problems.

**MATHEMATICS (MTH) 196 (3)**
TECHNICAL MATHEMATICS (3 LEC.)

Prerequisite: Mathematics 195. This course is designed for technical students. It includes a study of the trigonometric functions of angles, trigonometric identities, inverse trigonometric functions, trigonometric equations, comple numbers, logarithms, vectors and the solution of triangles.

**MID-MANAGEMENT (MGT) 136 (3)**
PRINCIPLES OF MANAGEMENT (3 LEC.)

The process of management is studied. The functions of planning, organizing, leading, and controlling are included. Particular emphasis is on policy formulation, decision-making processes, operating problems, communications theory, and motivation techniques.

**MID-MANAGEMENT (MGT) 137 (3)**
PRINCIPLES OF RETAILING (3 LEC.)

The operation of the retail system of distribution is examined. Topics include consumer demand, requirements, computer use, store location and layout, and credit policies. Interrelationships are emphasized.

**MID-MANAGEMENT (MGT) 150 (4)**
MANAGEMENT TRAINING (20 LAB.)

Prerequisite: Concurrent enrollment in aproved Mid-Management Program. This course provides for supervised employment in the student's chosen field. It gives practical experience to students preparing for careers in business management.

**MID-MANAGEMENT (MGT) 151 (4)**
MANAGEMENT TRAINING (20 LAB.)

Prerequisite: Concurrent enrollment in approved Mid-Management Program. This course is a continuation of Mid-Management 150. It provides for supervised employment in the student's chosen field.

**MID-MANAGEMENT (MGT) 153 (3)**
SMALL BUSINESS MANAGEMENT (3 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.

**MID-MANAGEMENT (MGT) 154 (2)**
MANAGEMENT SEMINAR: ROLE OF SUPERVISION (2 LEC.)

Prerequisite: concurrent enrollment in Mid-Management 150 and preliminary interview by Mid-Management faculty. The course is for students majoring in Mid-Management. Emphasis is on the

development of management skills, goal-setting, planning, leadership, communication, and motivation as applied to the student's work experiences.

**MID-MANAGEMENT (MGT) 155 (2)**
MANAGEMENT SEMINAR:
PERSONNEL MANAGEMENT (2 LEC.)

Prerequisite: Mid-Management 150 and 154 and concurrent enrollment in Mid-Management 151. The principles, policies, and practices of the personnel function as applied to the student's work experience are studied.

**MID-MANAGEMENT (MGT) 157 (3)**
SMALL BUSINESS BOOKKEEPING AND ACCOUNTING PRACTICES (3 LEC.)

This course focuses on basic bookkeeping and accounting techniques for the small business. The techniques are applied to the analysis and preparation of basic financial statements.

**MID-MANAGEMENT (MGT) 210 (3)**
SMALL BUSINESS CAPITALIZATION, ACQUISITION AND FINANCE (3 LEC.)

The student studies alternative strategies of financial planning, capitalization, profits, acquisition, ratio analysis, and other related financial operations required of small business owners. The preparation and presentation of a loan proposal are included.

**MID-MANAGEMENT (MGT) 211 (3)**
SMALL BUSINESS OPERATIONS (3 LEC.)

Problems of daily operations of small business are introduced. Topics include compliance with regulations, personnel administration, accounts receivable management, and business insurance.

**MID-MANAGEMENT (MGT) 212 (1)**
SPECIAL PROBLEMS
IN BUSINESS (1 LEC.)

Each student will participate in the definition and analysis of current business problems. Special emphasis will be placed upon relevant problems and pragmatic solutions that integrate total knowledge of the business process in American society. This course may be repeated for credit up to a maximum of 3 hours credit.

**MID-MANAGEMENT (MGT) 230 (3)**
SALESMANSHIP (3 LEC.)

The selling of goods and ideas is the focus of this course. Buying motives, sales psychology, customer approach, and sales techniques are studied.

**MID-MANAGEMENT (MGT) 242 (3)**
PERSONNEL ADMINISTRATION (3 LEC.)

This course presents the fundamentals, theories, principles, and practices of people management. Emphasis is on people and their employment. Topics include recruitment, selection, training, job development, interactions with others, labor management relations, and government regulations. The managerial functions of planning, organizing, staffing, directing, and controlling are also covered.

**MID-MANAGEMENT (MGT) 250 (4)**
MANAGEMENT TRAINING (20 LAB.)

Prerequisistes: Mid-Management 150 and Mid-Management 151; concurrent enrollment in Mid-Management 254. This course consists of supervised employment in the student's chosen field. It is intended to provide increased supervisory responsibility for students preparing for careers in business management.

**MID-MANAGEMENT (MGT) 251 (4)**
MANAGEMENT TRAINING (20 LAB.)

Prerequisites: Mid-Management 150 and 151; concurrent enrollment in Mid-Management 255. This course continues Mid-Management 250. It is intended to provide supervised employment in the student's chosen field.

**MID-MANAGEMENT (MGT) 254 (2)**
MANAGEMENT SEMINAR:
ORGANIZATIONAL DEVELOPMENT (2 LEC.)

Prerequisites: Mid-Management 151 and Mid-Management 155; concurrent enrollment in Mid-Management 250. Organizational objectives and management of human resources are studied. The various approaches to organizational theory are applied to the student's work experiences.

**MID-MANAGEMENT (MGT) 255 (2)**
MANAGEMENT SEMINAR:
BUSINESS STRATEGY, THE DECISION PROCESS AND PROBLEM SOLVING (2 LEC.)

Prerequisites: Mid-Management 250 and Mid-Management 254; concurrent enrollment in Mid-Management 251. Business strategy and the decision-making process are applied to the first-line supervisor and middle-management positions. Emphasis is on applying the student's course knowledge to work experiences.

**MOTORCYCLE MECHANICS**
**(MM) 120 (3)**
MOTORCYCLE CARBURETION
(90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. This is a comprehensive course that incorporates Motorcycle Mechanics 121, 122 and 123. Students may enroll in the comprehensive course or in any of the inclusive courses. Service for various carburetors is explained. Included are "Amal" carburetors, constant velocity carburetors, and fixed venturi carburetors. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 121 (1)**
"AMAL" TYPE CARBURETOR
SERVICE (30 CONTACT HOURS)

The "Amal" type carburetor is studied. Included are the theory of operation, overhaul, and tuning. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 122 (1)**
CONSTANT VELOCITY TYPE
CARBURETOR SERVICE (30 CONTACT HOURS)

The constant velocity carburetor is studied. Included are the theory of operation, overhaul, and tuning. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 123 (1)**
FIXED VENTURI TYPE
CARBURETOR SERVICE (30 CONTACT HOURS)

The fixed venturi carburetor is studied. Included are the theory of operation, overhaul, and tuning. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 130 (3)**
MOTORCYCLE IGNITION
SYSTEMS (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. This is a comprehensive course that incorporates Motorcycle Mechanics 131 and 132. Students may enroll in the comprehensive course or in either of the inclusive courses. The ignition system is presented. Both theory and diagnosis are included. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 131 (1)**
IGNITION SYSTEM THEORY
(30 CONTACT HOURS)

This course focuses on the theory of operation of motorcycle ignition systems. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 132 (2)**
IGNITION SYSTEM DIAGNOSIS
(60 CONTACT HOURS)

This course focuses on the diagnosis, repair, and adjustment of motorcycle ignition systems. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 140 (3)**
MOTORCYCLE ELECTRICAL
SYSTEMS (90 CONTACT HOURS)

Prerequsite: Engine Mechanics 100 and 110. This is a comprehensive course that incorporates Motorcycle Mechanics 141, 142 and 143. Students may enroll in the comprehensive course or in any of the inclusive courses. Electrical systems for motorcycles are explored. Theory, charging systems, and diagnosis are included. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 141 (1)**
MOTORCYCLE ELECTRICAL
SYSTEMS THEORY (30 CONTACT HOURS)

This course examines the theory of operation of all motorcycle electrical systems except the ignition systems. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 142 (1)**
MOTORCYCLE CHARGING SYSTEMS (30 CONTACT HOURS)

This course examines the diagnosis and repair of motorcycle charging systems. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 143 (1)**
MOTORCYCLE ELECTRICAL SYSTEM DIAGNOSIS (30 CONTACT HOURS)

This course includes the trouble-shooting and repair of motorcycle electrical systems other than the charging and ignition systems. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 200 (3)**
MOTORCYCLE DRIVE SYSTEMS (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. The various components of motorcycle drive systems are studied. Both theory of operation and overhaul are included. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 205 (3)**
TWO STROKE ENGINES (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. The complete overhaul and tune-up of two stroke motorcycle engines are covered. Cylinder boring and single cylinder crankshaft rebuilding are also covered. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 210 (3)**
FOUR STROKE SINGLE AND TWIN CYLINDER ENGINES (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. Single and twin cylinder motorcycle engines are presented. Both complete overhaul and tune-up are included. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 215 (3)**
FOUR STROKE MULTI-CYLINDER ENGINES (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110 and Motorcycle Mechanics 210. Four stroke multi-cylinder motorcycle engines are presented. Both complete overhaul and tune-up are included. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 220 (3)**
MOTORCYCLE CHASSIS SYSTEMS (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. This is a comprehensive course that incorporates Motorcycle Mechanics 221, 222 and 223. Students may enroll in the comprehensive course or in any of the inclusive courses. Parts of chassis systems are studied. Included are wheels, brake systems, and suspension systems. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 221 (1)**
MOTORCYCLE WHEELS (30 CONTACT HOURS)

This course is the study of wheels. Disassembly, assembly, truing, and balancing are included. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 222 (1)**
MOTORCYCLE BRAKE SYSTEMS (30 CONTACT HOURS)

This course is the study of brake systems. Both theory of operation and servicing are included. Laboratory fee.

**MOTORCYCLE MECHANICS**
**(MM) 223 (1)**
MOTORCYCLE SUSPENSION SYSTEMS (30 CONTACT HOURS)

This course is the study of suspension systems. Both theory of operation and servicing are included. Laboratory fee.

**MUSIC (MUS) 192 (3)**
MUSIC IN AMERICA (3 LEC.)

American music and musicians from early times to the present are surveyed. Various styles and periods are covered. Religious, folk, jazz, rock, musical theatre, and contemporary developments are included.

**MUSIC (MUS) 193 (3)**
IMPROVISATION (3 LEC.)

The creation of spontaneous melodic and harmonic ideas and the translation of these ideas into notation are emphasized. Using scales and modes,

the instrumentalist improvises on his/her major instrument. The vocalist uses scat singing techniques. Analysis of transcribed solos and student transcriptions are included.

**MUSIC (MUS) 194 (3)**
JAZZ WORKSHOP (3 LEC.)

This course is for the advanced instrumentalist and vocalist. Jazz is performed in recitals and scheduled functions. Discussion, analysis, writing, rehearsing, improvising, and style are emphasized. Articulating, phrasing, and conducting jazz compositions are discussed with guest artist who work and perform with the group periodically.

**MUSIC (MUS) 195 (2)**
INTRODUCTION TO SYNTHESIZER (2 LEC.)

The elements of electronically produced music are studied. Emphasis is on the musical aspects of synthesized sound. Topics include theory, basic waveforms, frequency and frequency modulation, amplitude modulation, envelope generators, filters, white noise, pink noise, and patch diagramming.

**MUSIC (MUS) 196 (3)**
BUSINESS OF MUSIC (3 LEC.)

The world of the music industry is presented. Panels, guest artists, and consultants discuss careers in the recording and performing fields and retail music business. Publishing, copyrights and other legalities, agents, managers, showmanship, and conducting techniques necessary for small and large ensemble work are included.

**MUSIC (MUS) 292 (3)**
ARRANGING/ORCHESTRATION (3 LEC.)

The knowledge of ranges and the ability to transpose for instruments, to write for voices, and to plan and execute an arrangement is developed. Standard copying techniques, chord voicing, large ensemble writing and combo writing, and use of strings (simulated by string synthesizer) are also included.

**MUSIC (MUS) 293 (3)**
INDEPENDENT STUDY (3 LEC.)

This course is for advanced work in music and is designed to meet specific needs of the student. On approval of the instructor and division chairperson, the student prepares and executes a written contract (proposal for learning). Credit is given upon completion of all aspects of the contract. This course may be repeated for credit.

**MUSIC (MUS) 295 (2)**
ADVANCED SYNTHESIZER TECHNIQUES (2 LEC.)

This course is limited to students who display promise in synthesizer composition or performance. Two major works are composed for the synthesizer and one for the synthesizer and traditional media.

**MUSIC (MUS) 803, 813 (3)**
(See Cooperative Work Experience)

**MUSIC (MUS) 804, 814 (4)**
(See Cooperative Work Experience)

**OFFICE CAREERS (OFC) 103 (4)**
SPEEDWRITING THEORY (3 LEC., 2 LAB.)

Prerequisite: Credit or concurrent enrollment in Office Careers 172 or one year of Typing. The principles of speedwriting are introduced. Included is the development of the ability to read, write and transcribe speedwriting notes. Basic spelling, grammar and punctuation rules are reviewed.

**OFFICE CAREERS (OFC) 104 (3)**
SPEEDWRITING DICTATION AND TRANSCRIPTION (3 LEC.)

Prerequisite: Office Career 103, Office Careers 172, or one year of Typing. Principles of speedwriting are applied to build dictation speed and transcription rate. Special attention is given to the review of grammar, spelling and punctuation rules.

**OFFICE CAREERS (OFC) 159 (4)**
BEGINNING SHORTHAND (3 LEC., 2 LAB.)

Prerequisite: Credit or concurrent enrollment in Office Careers 172 or one year of Typing in high school. The principles of Gregg Shorthand

(Diamond Jubilee Series) are introduced. Included is the development of the ability to read, write and transcribe shorthand outlines. Knowledge of the mechanics of English is also developed.

**OFFICE CAREERS (OFC) 160 (3)**
OFFICE MACHINES (3 LEC.)

This course focuses on the development of skills in using office machines. Adding machines, printing calculators, electronic display calculators, and electronic printing calculators are included. Emphasis is on developing the touch system for both speed and accuracy.

**OFFICE CAREERS (OFC) 162 (3)**
OFFICE PROCEDURES (3 LEC.)

Prerequisite: Office Careers 172 or one year of Typing in high school. The duties, responsibilities, and personal qualifications of the office worker are emphasized. Topics include filing, reprographics, mail, telephone, financial transactions, and job applications.

**OFFICE CAREERS (OFC) 165 (3)**
INTRODUCTION TO WORD PROCESSING (3 LEC.)

Prerequisite: Office Careers 174 or concurrent enrollment in Office Careers 174. This course introduces word processing and describes its effect on traditional office operations. Word processing terminology and concepts for organizing word processing centers are studied. Training in the transcription and distribution of business communications is provided. English skills and mechanics are reinforced.

**OFFICE CAREERS (OFC) 166 (4)**
INTERMEDIATE SHORTHAND (3 LEC., 2 LAB.)

(Formerly Business 164) Prerequisites: Office Careers 159 or one year of shorthand in high school, Office Careers 172 or one year of typing in high school. The principles of Gregg Shorthand are studied. Emphasis is on increased speed, dictation, accuracy in typing from shorthand notes and beginning techniques of transcription skills. Included will be oral reading of shorthand outlines, speed building dictation, and producing mailable copy. Special attention is given to English fundamentals, such as grammar and punctuation.

**OFFICE CAREERS (OFC) 167 (3)**
LEGAL TERMINOLOGY AND TRANSCRIPTION (3 LEC.)

Prerequisite: Completion of Office Careers 174 or typing speed of 50 words per minute; completion of Office Careers 165. Legal terms are the focus of this course. Included are the spelling and use of legal terms and Latin words and phrases. Intensive practice is provided in building speed and accuracy in the transcription of legal terms.

**OFFICE CAREERS (OFC) 172 (3)**
BEGINNING TYPING (2 LEC., 3 LAB.)

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

**OFFICE CAREERS (OFC) 174 (3)**
INTERMEDIATE TYPING (1 LEC., 2 LAB.)

Prerequisite: Office Careers 172 or one year of typing in high school. Typing techniques are developed further. Emphasis is on problem solving. Increasing speed and accuracy in typing business forms, correspondence, and manuscripts are also stressed.

**OFFICE CAREERS (OFC) 231 (3)**
BUSINESS COMMUNICATIONS (3 LEC.)

Prerequisite: Credit in Office Careers 172 or one year of typing in high school; credit in Communications 131 or English 101. This practical course includes a study of letter forms, the mechanics of writing and the composition of various types of communications. A critical analysis of the appearance and content of representative business correspondence is made.

**OFFICE CAREERS (OFC) 265 (3)**
WORD PROCESSING PRACTICES AND PROCEDURES (3 LEC.)

Prerequisite: Office Careers 165. This course concerns translating ideas into words, putting those words on paper, and turning that paper into communication. Emphasis is on training in composing and dictating business communications. Teamwork skills, priorities, scheduling, and procedures are included. Researching, storing, and retrieving documents, and managing word processing systems are also covered. Transcribing and magnetic keyboarding skills are developed. Typing skills and English mechanics are reinforced.

**OFFICE CAREERS (OFC) 266 (4)**
ADVANCED SHORTHAND (3 LEC., 2 LAB.)

Prerequisite: Office Careers 166 or two years of shorthand in high school, Office Careers 174 or two years of typing in high school. Emphasis is on building dictation speed. Producing mailable, typed transcriptions under timed conditions is also stressed. Vocabulary and extensive production work capabilities are developed.

**OFFICE CAREERS (OFC) 273 (2)**
ADVANCED TYPING (1 LEC., 2 LAB.)

Prerequisite: Office Careers 174 or two years of typing in high school. Decision-making and production of all types of business materials under time conditions are emphasized. A continuation of skill development and a review of typing techniques are also stressed. Accuracy at advanced speeds is demanded.

**OFFICE CAREERS (OFC)274 (3)**
LEGAL SECRETARIAL PROCEDURES (3 LEC.)

Prerequisite: Office Careers 174 or typing speed of 50 words per minute; Office Careers 187 or shorthand dictation speed of 80 words per minute. This course focuses on procedures of the legal secretary. Topics include reminder and filing systems, telephone usage, dictation and correspondence, the preparation of legal documents, and the court system. Client contacts, use of the law library, research techniques, timekeeping, billing, bookkeeping, and ethics are also covered. Ways to obtain a position as a Legal Secretary are described.

**OFFICE CAREERS (OFC) 275 (3)**
SECRETARIAL PROCEDURES (3 LEC.)

Prerequisite: Credit or concurrent enrollment in Office Careers 174, credit or concurrent enrollment in either Office Careers 166 or Office Careers 265. Emphasis is on initiative, creative thinking, and follow-through. Topics include in-basket exercises, decision-making problems, and use of shorthand and transcription skills. Public and personal relations, supervisory principles, business ethics, and the organizing of time and work are also covered.

**OFFICE CAREERS (OFC) 803, 813 (3)**
(See Cooperative Work Experience)

**OFFICE CAREERS (OFC) 804, 814 (1)**
(See Cooperative Work Experience)

**OUTBOARD ENGINE (OE) 150 (3)**
MARINE ENGINE FUEL SYSTEMS (90 CONTACT HOURS)

Prerequsite: Engine Mechanics 100 and 110. This is a comprehensive course that incorporates Outboard Engine 151 and 152. Students may enroll in the comprehensive course or in either of the inclusive courses. Marine engine fuel systems are presented. Both theory of operation and service are included. Laboratory fee.

**OUTBOARD ENGINE (OE) 151 (1)**
MARINE ENGINE FUEL SYSTEM THEORY (30 CONTACT HOURS)

This course focuses on the theory of operation of various marine engine fuel systems. Tuning methods are also included. Laboratory fee.

**OUTBOARD ENGINE (OE) 152 (2)**
MARINE ENGINE FUEL SYSTEM SERVICE (60 CONTACT HOURS)

This course focuses on the service of marine engine fuel systems. Overhaul, adjustment and troubleshooting are included. Laboratory fee.

**OUTBOARD ENGINE (OE) 160 (3)**
MARINE ENGINE IGNITION SYSTEMS (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. This is a comprehensive course that incorporates Outboard Engine 161 and 162. Students may enroll in the comprehensive course or in either of the inclusive courses. Marine engine ignition systems are studied. Both theory of operation and service are included. Laboratory fee.

**OUTBOARD ENGINE (OE) 161 (1)**
MARINE ENGINE IGNITION SYSTEM THEORY (30 CONTACT HOURS)

This course examines the theory of operation of ignition systems of outboard marine engines. Laboratory fee.

**OUTBOARD ENGINE (OE) 162 (2)**
MARINE ENGINE IGNITION SYSTEM SERVICE (60 CONTACT HOURS)

This course examines the service of ignition systems of outboard marine engines. Troubleshooting is included. Laboratory fee.

**OUTBOARD ENGINE (OE) 170 (3)**
MARINE ENGINE ELECTRICAL SYSTEMS (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. This is a comprehensive course that incorporates Outboard Engine 171 and 172. Students may enroll in the comprehensive course or in either of the inclusive courses. Marine engine electrical systems are discussed. Both theory of operation and service are included. Laboratory fee.

**OUTBOARD ENGINE (OE) 171 (2)**
ELECTRICAL SYSTEM THEORY AND SERVICE (60 CONTACT HOURS)

This course covers the theory of operation of marine engine electrical systems. Methods of troubleshooting are included. Laboratory fee.

**OUTBOARD ENGINE (OE) 172 (1)**
ELECTRICAL SYSTEM SERVICE (30 CONTACT HOURS)

This course covers advanced troubleshooting and service of marine engine electrical systems. Laboratory fee.

**OUTBOARD ENGINE (OE) 230 (3)**
SINGLE AND TWIN CYLINDER POWERHEADS (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. Twin cylinder outboard marine engines are studied. Overhaul and service are introduced. Laboratory fee.

**OUTBOARD ENGINE (OE) 235 (3)**
IN LINE MULTI-CYLINDER POWERHEADS (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. In line multi-cylinder out board marine engine power heads are studied. Overhaul and service are included. Laboratory fee.

**OUTBOARD ENGINE (OE) 240 (3)**
"V" MULTI-CYLINDER POWERHEADS (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. Multi-cylinder "V" configuration outboard marine engines are presented. Overhaul and service are included. Laboratory fee.

**OUTBOARD ENGINE (OE) 245 (3)**
MANUAL SHIFT LOWER UNITS (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. Manual shifting lower units for outboard marine engines are presented. Overhaul and service are covered. Laboratory fee.

**OUTBOARD ENGINE (OE) 250 (3)**
ELECTRICAL SHIFT LOWER UNITS (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. Electric shifting lower units for outboard marine engines are examined. Overhaul and service are covered. Laboratory fee.

**OUTBOARD ENGINE (OE) 255 (3)**
MARINE ENGINE AUXILIARY SYSTEM (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. The auxiliary system for marine engines is discussed. Included are boat rigging, power trim, and power tilt systems. Laboratory fee.

**RETAIL DISTRIBUTION AND MARKETING (RDM) 245 (3)**
SALES MANAGEMENT (3 LEC.)

The qualities and characteristics of the sales executive are examined. Emphasis is on pricing, distribution, promotion, and brand management. The recruiting, selecting, training, and motivating of salespersons are also covered.

**RETAIL DISTRIBUTION AND MARKETING (RDM) 246 (3)**
MARKETING AND MANAGEMENT CASES (3 LEC.)

Prerequisite: Business 136 and 206. Selected case studies in marketing and management are presented. Emphasis is on business decision-making.

**RETAIL DISTRIBUTION AND MARKETING (RDM) 247 (3)**
SIMULATED BUSINESS TRAINING I (3 LEC.)

This course introduces job procedures. Topics include application, interview, employer-employee relations, customer relations, company policies, and rules and regulations. Practical experiences are also included.

**RETAIL DISTRIBUTION AND MARKETING (RDM) 248 (3)**
SIMULATED BUSINESS TRAINING II (3 LEC.)

This course continues Business 247. Practical experience in job responsibilities are provided.

**RETAIL DISTRIBUTION AND MARKETING (RDM) 290 (3)**
FASHION BUYING (3 LEC.)

This course focuses on the principles of fashion buying. It is designed to prepare the student for employment as an assistant buyer or buyer of fashion merchandise.

**RETAIL DISTRIBUTION AND MARKETING (RDM) 291 (3)**
FASHION MERCHANDISING (3 LEC.)

This course introduces the field of fashion. Emphasis is on its historical development and trends, career opportunities, marketers, and merchandising methods.

**RETAIL DISTRIBUTION AND MARKETING (RDM) 292 (3)**
FASHION DESIGN (3 LEC.)

Fashion design is presented. History, color theory, and styling terminology are included. Emphasis is on silhouette, color, and accessories.

**RETAIL DISTRIBUTION AND MARKETING (RDM) 701, 711, 801, 811 (1)**
(See Cooperative Work Experience)

**RETAIL DISTRIBUTION AND MARKETING (RDM) 703, 713 (3)**
(See Cooperative Work Experience)

**RETAIL DISTRIBUTION AND MARKETING (RDM) 704, 714 (4)**
(See Cooperative Work Experience)

**SMALL ENGINE (SE) 180 (3)**
SMALL ENGINE CARBURETION (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. This is a comprehensive course that incorporates Small Engine 181 and 182. Students may enroll in the comprehensive course or either of the inclusive courses. The small engine carburetor is studied. Both the theory of operation and repair are included. Laboratory fee.

**SMALL ENGINE (SE) 181 (2)**
SMALL ENGINE CARBURETOR THEORY (60 CONTACT HOURS)

This course covers the theory of operation small engine carburetors. Laboratory fee.

**SMALL ENGINE (SE) 182 (1)**
SMALL ENGINE CARBURETOR REPAIR (30 CONTACT HOURS)

This course covers the disassembly, inspection, repair, and assembly of small engine carburetors. Laboratory fee.

**SMALL ENGINE (SE) 260 (3)**
SMALL ENGINE ELECTRICAL SYSTEMS (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. This is a comprehensive course that incorporates the Small Engine 261 and 262. Students may enroll in the comprehensive course or either of the inclusive courses. The

ignition and electrical systems of small engines are presented. Both the theory of organization and repair are included. Laboratory fee.

**SMALL ENGINE (SE) 261 (2)**
SMALL ENGINE IGNITION AND ELECTRICAL SYSTEM THEORY (90 CONTACT HOURS)

This course focuses on the theory of operation of ignition systems of small engines. Laboratory fee.

**SMALL ENGINE (SE) 262 (1)**
SMALL ENGINE IGNITION AND ELECTRICAL SYSTEM REPAIR (30 CONTACT HOURS)

This course focuses on trouble-shooting and repair of ignition systems of small engines. Laboratory fee.

**SMALL ENGINE (SE) 270 (6)**
ENGINE OVERHAUL AND TUNE-UP (180 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. This is a comprehensive course that incorporates Small Engine 271 and 272. Students may enroll in the comprehensive course of either of the inclusive courses. Two-stroke and four-stroke engines are examined. Both overhaul and tune-up are included. Laboratory fee.

**SMALL ENGINE (SE) 271 (3)**
TWO STROKE ENGINES (90 CONTACT HOURS)

The overhaul and tune-up of small two-stroke engines are emphasized. Laboratory fee.

**SMALL ENGINE (SE) 272 (3)**
FOUR STROKE ENGINES (90 CONTACT HOURS)

The overhaul and tune-up of small four-stroke engines are emphasized. Laboratory fee.

**SMALL ENGINE (SE) 280 (3)**
POWER TRANSFER SYSTEMS (90 CONTACT HOURS)

Prerequisite: Engine Mechanics 100 and 110. This is a comprehensive course that incorporates the Small Engine 281 and 282. Students may enroll in the comprehensive course or either of the inclusive courses. Drive and cutting systems of small engines are presented. Laboratory fee.

**SMALL ENGINE (SE) 281 (2)**
DRIVE SYSTEMS (60 CONTACT HOURS)

Belt, chain and direct drive systems of various equipment are studied. Systems of mowers, edgers, tillers, tractors, and other small equipment are included. Both theory of operation and overhaul are covered. Laboratory fee.

**SMALL ENGINE (SE) 282 (1)**
CUTTING SYSTEMS (30 CONTACT HOURS)

Cutting systems of small engines are studied. Empahsis is on chain saws. Both theory of operation and overhaul are covered. Laboratory fee.

## CEDAR VALLEY COLLEGE INDEX

Cedar Valley College
3030 North Dallas Avenue
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