Alvin Community College

3110 MUSTANG ROAD ALVIN, TEXAS 77511

30th ANNIVERSARY BULLETIN

GENERAL INFORMATION 1979-80

ALVIN COMMUNITY COLLEGE BULLETIN
VOLUME 30, AUGUST 1979 NO. 1

Alvin Community College announcement of courses for 1979-1980

Approved and Accredited by:
The Southern Association of Colleges and Schools
Coordinating Board, Texas College and University System
The Texas Education Agency
National Accreditation for Allied Health Programs

Member:
American Association of Community and Junior Colleges
Texas Public Community and Junior College Association
Texas Junior College Teachers Association
Texas Association of Music Schools

Alvin Community College is an equal opportunity institution and does not discriminate against anyone on the basis of race, creed, color, sex, handicap, age, or national origin.

Any of the regulations, services or course offerings appearing in this bulletin may be changed without prior notice. The regulation appearing here will be in force starting with the fall semester, 1979.

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ACADEMIC CALENDAR

Fall Semester 1979

26-27 July	Orientation for New Students
16-17 August	Orientation for New Students
20-21 August	Fall Semester Workshop
22-23 August	REGISTRATION
27 August	Classes Begin
3 September	Labor Day Holiday
4 September	Last Day to Add Classes
12 September	12th Class Day
19 November	Last Day to Drop Classes
20 November	Last Day to Apply for Fall Graduation
22-23 November	Thanksgiving Holidays
10 December	End of Classes
11-12-13-14 December	FINAL EXAMINATIONS

Spring Semester 1980

7-8 January	Spring Semester Workshop
9-10 January	REGISTRATION
14 January	Classes Begin
21 January	Last Day to Add Classes
29 January	12th Class Day
21-23 February	TJCTA Convention
3 March	Last Day to Apply for Spring Graduation
3 March	Last Day to Order & Measure Graduation Regalia
31 March - 4 April	Spring Break
15 April	Last Day to Drop Classes
9 May	Classes End
12-13-14-15 May	FINAL EXAMINATIONS
21 May	COMMENCEMENT

Summer Term 1980
First Session

26 May	Memorial Day Holiday
27 May	REGISTRATION
28 May	Classes Begin
2 June	Last Day to Add Classes
3 June	4th Class Day
20 June	Last Day to Drop Classes
30 June	Last Day to Apply for August Graduation
1 July	End of Classes
2-3 July	FINAL EXAMINATIONS

Summer Term 1980
Second Session

7 July	REGISTRATION
8 July	Classes Begin
10 July	Last Day to Add Classes
14 July	4th Class Day
24-25 July	Orientation for New Students
4 August	Last Day to Drop Classes
12 August	End of Classes
13-14 August	FINAL EXAMINATIONS

ALVIN COMMUNITY COLLEGE CORRESPONDENCE DIRECTORY

Mailing Address:
3110 Mustang Rd., Alvin, Tex. 77511

Telephone for Information:
(Area Code 713) 331-6111

Admissions:
Admissions Advisor ext. 247

Continuing Education, Short Courses:
Dir. of Continuing Education & Evening Programs ext. 208

Business Affairs:
Director of Fiscal Affairs ext. 225

Employment by College:
Personnel Director ext. 349

Evening School:
Dir. of Continuing Education & Evening Programs ext. 208

Student Financial Aid:
Financial Aid Officer ext. 206

Guidance & Counseling:
Dir. of Student & Instructional Services ext. 235

Graduation Advisor ext. 419

Public Relations:
Administrative Assistant ext. 241

Student Employment:
Financial Aid Officer ext. 206

Student Records:
Registrar ext. 230

Vocational/Technical Programs:
Dir. of Business & Industrial Technology ext. 258

Humanities, Mathematics & Science
Director ext. 267

Student Activities:
Coordinator of Student Activities ext. 390

Health Technologies:
Dir. of Health Technology ext. 266

Computer Services:
Dir. of Computer & Information Services ext. 251

Testing:
Counseling Center ext. 235

Veterans Coordinator:
Admissions Advisor ext. 247

Physical Fitness:
Dir. of Athletics & Physical Education ext. 410

Physical Plant Operations:
Dir. of Physical Plant ext. 207

ACC Theatre:
Box Office ext. 413

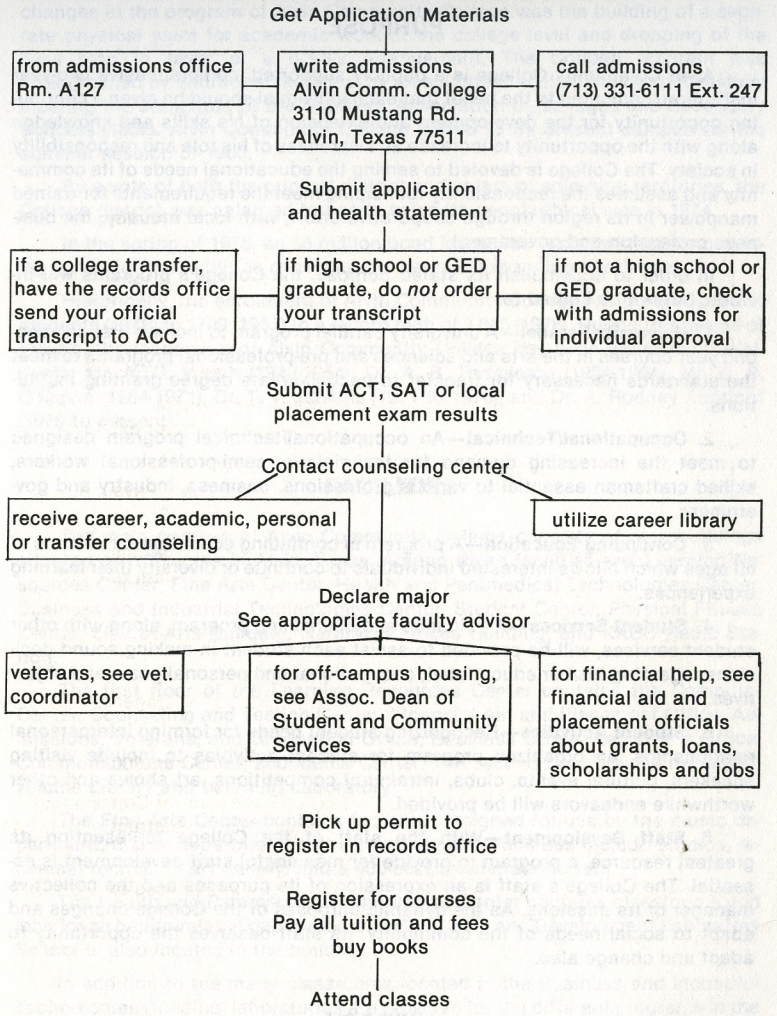
KACC Radio Station:
Radio Station Manager ext. 379

Security:
Campus Police ext. 300

Texas Department of Corrections:
Assoc. Dean of Instruction ext. 244

Cafeteria:
Dir. of Food Services ext. 418, 242

HOW TO ENROLL IN ALVIN COMMUNITY COLLEGE



GENERAL INFORMATION

PURPOSE

Alvin Community College is a publicly supported, comprehensive two-year institution, dedicated to the belief that each individual should be given a continuing opportunity for the development and extension of his skills and knowledge along with the opportunity to increase an awareness of his role and responsibility in society. The College is devoted to serving the educational needs of its community and assumes the responsibility for helping meet the requirements for trained manpower in its region through cooperative effort, with local industry, the business profession and government.

In order to accomplish its stated purpose, the College's programs will include, but not be limited to:

1. **University Parallel**—A university parallel program to include first and second year courses in the arts and sciences and pre-professional programs to meet the standards necessary for transfer to baccalaureate degree granting institutions.

2. **Occupational/Technical**—An occupational/technical program designed to meet the increasing demand for technicians, semi-professional workers, skilled craftsman essential to various professions, business, industry and government.

3. **Continuing Education**—A program in continuing education for citizens of all ages which allows interested individuals to continue or diversify their learning experiences.

4. **Student Services**—A guidance and counseling program, along with other student services, will be provided to assist each student in making sound decisions regarding his/her educational, occupational and personal goals and objectives.

5. **Student Activities**—Recognizing student needs for forming interpersonal relationships, an organized program for student activities to include visiting speakers, cultural events, clubs, intramural competitions, art shows and other worthwhile endeavors will be provided.

6. **Staff Development**—With the staff of the College representing its greatest resource, a program to provide for meaningful staff development is essential. The College's staff is an expression of its purposes and the collective manager of its missions. As the dynamic purposes of the College changes and adapt to social needs of the community, its staff deserves the opportunity to adapt and change also.

HISTORY

The Alvin Community College District was approved by the qualified voters of the Alvin Independent School District on November 2, 1948. From its inception, until the 1971-72 academic year, the college was administered by officials of the Alvin Independent School District. The 1971-72 academic year marked the beginning of a new era in the history of Alvin Community College. A separate administration, tax-district, and College Board were established to assume the management, control and operation of a newly created Alvin Community College District.

Initially, when the College and public schools were in the same system, the College was part of Alvin High School. The first classes began on September 12, 1949, in facilities which grouped grades 11 through 14 in one building and which placed Alvin under a system known as the 6-4-4 plan. One of the more important changes in the program of Alvin Community College was the building of a separate physical plant for academic work at the college level and dropping of the 6-4-4 plan in favor of a 6-3-3-2 arrangement. The College program was strengthened by additional facilities, by an enlarged faculty, and by successfully meeting the standards of the Southern Association of Colleges and Secondary Schools (1959). Alvin Community College moved to its present campus for the summer session of 1963.

By a vote of both the original district and voters of adjoining territories, the College district was enlarged to nearly twice its geographical size in 1974.

In the spring of 1975, an $8 million bond issue was approved thereby providing funds for the facilities necessary to meet an expanding enrollment.

Historically, the enrollment of Alvin Community College has grown from 134 students (1949) to 1709 (1965) to a record high of 3,015 (1978). During this period of growth, the leadership of Alvin Community College has been under four presidents: Mr. A. G. Welch (1949-1954), Dr. A. B. Templeton (1954-1964), Mr. D. P. O'Quinn (1964-1971), Dr. T. V. Jenkins (1971 to 1976), and Dr. A. Rodney Allbright (1976 to present).

FACILITIES

The main campus of Alvin Community College consists of nine buildings situated on 162 acres in Alvin, Texas. Among these facilities are: Learning Resources Center, Fine Arts Center, Health and Paramedical Technologies Center, Business and Industrial Technologies Center, Student Center, Physical Fitness Center, Liberal Arts Building, Natural Sciences Building, and KACC Radio Station.

The first floor of the Learning Resources Center contains the Computer Center, Counseling and Testing Center, Financial Aid and Placement Office, Admissions, Veterans, and Graduation Office, Business Office, Registrar's Office, Communications Center, and Media Center. The second floor houses the 35,000 volume Library and Learning Laboratory.

The Fine Arts Center contains facilities designed for use by the music department, drama department, and art department. Facilities include studios, rehearsal rooms, an art gallery, and a 400-seat theater/auditorium.

The Health and Paramedical Technologies Center contains classrooms and labs for all health-related departments. A Child Care and Development Laboratory School is also located in the building.

In addition to the many classrooms located in the Business and Industrial Technologies Building, laboratories are provided for the different programs in the area. Students have access to a simulated courtroom. An open concept secretarial lab contains learning carrels. Law enforcement students study in a crime lab. A window display case provides fashion merchandising students with actual advertising experiences. Labs for instruction in industrial programs include a drafting lab, an electronics lab with individual work stations and a microcomputer, an automobile mechanics lab, a welding lab and fabricating shop, and an air conditioning and refrigeration shop.

The Student Center consists of "The Hideout" student lounge, the "Dolphin Dugout" gameroom, Student Activities offices, a cafeteria, and the College Store.

The Physical Fitness Center includes a gymnasium, weight room, four racquetball courts, a steam bath, sauna, dressing rooms, lockers, eight tennis

courts, a baseball field, a soccer/football field, and auxiliary equipment.

The Liberal Arts Center contains classrooms and language and biofeedback laboratories.

The Natural Sciences Building houses six physical science laboratories and a greenhouse.

In 1978, the College began operation of an FM educational radio station, KACC. The station operates on 91.3 MHz with a daily schedule of local news, public affairs, educational and light entertainment programs.

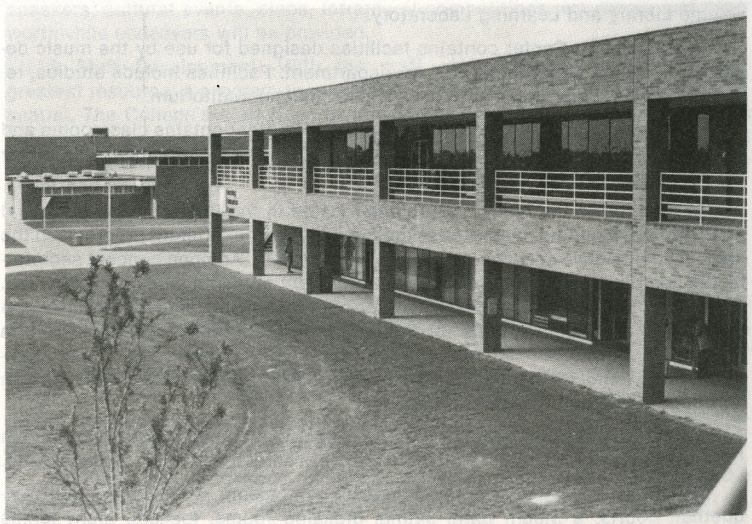
There is parking space on campus for approximately one thousand vehicles.

Classes in continuing education are also taught at various locations throughout the surrounding communities as the need arises.

RECOGNITION

Alvin Community College holds full membership in the Southern Association of Colleges and Schools. It holds full membership in the Association of Texas Colleges and Universities, and is approved by the Texas Education Agency and the Coordinating Board of the Texas College and University System.

Alvin Community College is a member of the American Association of Community Junior Colleges, the Southern Association of Junior Colleges, the Texas Junior College Association, the Texas Public Junior College Association, the Association of Texas Colleges and Universities, the National Commission on Accrediting, and the National Junior College Athletic Association.



ACADEMIC POLICIES AND REGULATIONS

ADMINISTRATIVE INTERPRETATION AND CHANGE

The administration of Alvin Community College acts as final interpreter of this Bulletin. The College may change requirements and regulations as necessitated by College or legislative action.

CLASSIFICATION OF STUDENTS

All students are classified according to the following categories:

Curriculum Student: A student is designated as a curriculum student when his/her file in the Admissions Office contains all of the information required for general admission to the College as a regular student and when he/she has been admitted to one of the curriculums of the College. A curriculum student is one of the following:

1. A full-time or part-time student working toward completion of an associate degree, diploma, certificate, or developmental program;
2. A full-time or part-time student taking credit courses for transfer to another college or university.

Special Student: A special student is one who is permitted to register under special conditions including the following:

1. A part-time student taking a course(s) as an audit for no credit;
2. A high school senior who with the permission of his/her high school principal and the Admissions Office is concurrently enrolled in a college course(s);
3. A part-time student not enrolled in an associate degree, diploma, or certificate program who may be taking a course(s) for credit is designated a general studies student by the College. Such students may later apply to the College for admission to a program as regular students.
4. A person who has not yet fulfilled all of the requirements as a regular student but who is admitted under special consideration.

Full-time Student: A student is considered a full-time student if he/she is carrying 12 or more credits of course work.

Part-time Student: A student is considered a part-time student if he/she is carrying less than 12 credits of course work.

Freshman: A student is classified as a freshman until he/she has completed 32 credits of work in his/her designated curriculum.

Sophomore: A student is considered a sophomore after he/she has completed 32 or more credits of course work in his/her designated curriculum. Transferred credits are included providing they apply toward meeting the requirements of the student's curriculum.

ATTENDANCE

Regular attendance in classes is expected. When absence from a class becomes necessary, it is the responsibility of the student to inform the instructor prior to the absence whenever possible. The student is responsible for the subsequent completion of all study missed during an absence. Any instruction missed

and not subsequently completed will necessarily affect the grade of the student regardless of the reason for the absence.

Anytime a student has accumulated the equivalent of two weeks of absences from any class within a semester the instructor may recommend to the Director of Student Services that the student be administratively dropped.

NORMAL ACADEMIC LOAD

The normal academic course load for students is 15-17 credits. The minimum full-time load is 12 credits and the normal maximum full-time load is 18 credits. A student wishing to carry an academic load of more than 18 credits must ordinarily have a 3.0 grade-point average or higher and must have the approval of the Dean of Instruction, Student and Community Services.

If the student has received academic warning or academic probation, he/she may be required to take less than the normal semester course load.

AUDIT

A student wishing to take a credit course for no credit must register for the course and pay the regular fee. A student may change from audit status to credit or from a credit status to audit only during the first two weeks of the regular session. The student may, in succeeding terms, take any course for credit which he/she has previously audited. Audit courses will be reflected on the student's permanent record as "Audit." He/she may not petition for credit for the course he/she audited.

DROPS AND WITHDRAWALS

After a student has registered and paid, he/she is considered enrolled until an official drop has been processed in the Records Office, Room A-104. Continued non-attendance does not automatically terminate enrollment in the course; therefore, a student who ceases attendance in class without first officially dropping the course will receive a failing grade in that course.

To drop a course or withdraw from the college (drop all courses), the student must obtain the appropriate drop form in the Records Office, secure the appropriate signatures and return the form to the Records Office.

Courses should be dropped in person by the student; however, written requests to the Registrar are accepted when the student is unable to appear. Drops become effective on the date the letter is received and the drop slip is processed.

DEAN'S LIST

The names of students who complete 12 or more semester hours with a grade-point average of 3.5, with no grade lower than a "C" for the term will be placed on the Dean's List in recognition of scholastic achievement.

MERIT LIST

Students who enroll for 7-11 credits during a semester and earn a G. P. A. (Grade Point Average) of 3.5 without any "F" or "U" grades will be placed on the Merit List.

ACADEMIC PROBATION

Any student who fails to maintain at least a 2.0 cumulative grade point average will be placed on academic probation until such time as his/her cumulative average is 2.0 or higher.

A student on academic probation is required to consult with a counselor prior to registration in any subsequent semester to establish conditions for continued matriculation with the college. Students on academic probation or suspension can be helped through counseling. For this reason, one of the conditions of admission or continued matriculation will be counseling. A reduced load may also be imposed if deemed necessary to improve chances for success.

A student transferring to Alvin Community College on academic probation or suspension from another college must gain approval from the Dean of Instruction, Student and Community Services or the designee for admission to the college. Such approval will be conditional. Students attempting to avoid such approval or conditions will have committed an offense and will be subject to disciplinary action.

Part-time students will be subject to academic probation after they have accumulated twelve hours credit.

The concept of academic suspension or academic dismissal based on grade point average alone is contrary to college philosophy. However, students who do not make satisfactory progress in certain curricula may be subject to removal from those curricula.

COMPLIANCE STATEMENTS

In compliance with Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and Title IX of the Education Amendments of 1972 (P.L. 92-318), Alvin Community College does not discriminate against, or exclude from participation in any of its programs or activities either in the student body or the staff, any person on the grounds of sex, race, color, religion, handicap, or national origin.

Any complaints of an alleged violation should be brought to the attention of the Director of Personnel.

Alvin Community College also complies with Section 504 of the Rehabilitation Act of 1973 (P.L. 93-112) and does not discriminate on the basis of handicap in the operation of its educational programs or in its admission and employment practices.

During 1979-80, special emphasis will continue to be placed on correcting conditions which may inadvertantly discriminate against any handicapped individual and thereby prevent compliance with the intent of the above act. Information concerning any such conditions or inquiries concerning any practices as they relate to Section 504 should be directed to the Associate Dean of Student & Community Services.

CREDIT BY EXAMINATION

Alvin Community College awards credit in some subjects to academically qualified students based on scores made on recognized nationally or locally administered examinations.

Recognized tests include:

College Level Examination Program General

College Leval Examination Program Subject

American College Testing Proficiency Examination Program

College Entrance Examination Board Advanced Placement Program

National League for Nursing Achievement

Certified Public Secretary

Locally constructed departmental tests

Credit and a letter grade of A, B, or C will be awarded to students who successfully complete locally constructed examinations. Credit and notation of credit earned will be awarded for a score of 50%ile or higher on the nationally administered tests listed above.

A fee of $4 per semester hour will be charged for locally administered tests. Fees for national tests are determined by the testing agency.

NOTE: Credit by examination will not normally be awarded for a course in which a student has been enrolled or for which a previous examination has been attempted. A student must be accepted for admission by Alvin Community College before credit will be approved. Credit will be awarded and placed on the student's academic record only after an equal number of semester hours are successfully completed on the Alvin Community College campus in each discipline involved.

Additional information on these programs can be found in the counseling center.

CREDIT FOR NONTRADITIONAL EDUCATIONAL EXPERIENCE

College credit may be awarded for schooling received from non-accredited but recognized agencies such as the armed forces schools. Guidelines established by the American Council on Education will be used to determine the validity of the schooling and the credit to be awarded. The Admissions Office has additional information.

WAIVER

A qualified student may bypass certain freshman level courses if sufficient competence is demonstrated. No credit will be awarded for the course being waived.

PHYSICAL EDUCATION REQUIREMENT

Alvin Community College supports the significance and importance of physical training/education as a collegiate concept. Physiological and psychological health is intertwined with one's physical faculties. Therefore, the College requires one year of physical activity as partial satisfaction for curriculums.

Students with justifiable extenuating circumstances should petition the Dean of Instruction for a course waiver.

GRADING SYSTEM*

A = Excellent — Four grade points per credit
B = Good — Three grade points per credit
C = Average — Two grade points per credit
D = Poor — One grade point per credit
F = Failure — Zero grade points
S = Satisfactory — No grade point credit
R = Re-enroll — The grade of "R" for re-enroll means no credit until course objectives are completed. Its use will be limited to developmental courses only to permit re-enrollment for the completion of course objectives. It will be further limited to use only one time for any given student unless there is a recommendation made by the instructor, reviewed by the appropriate Director and Department Chairman, and, if necessary, the Associate Dean of Instruction.
U = Unsatisfactory — No grade point credit
WP = Withdrawal Passing
WF = Withdrawal Failing
I = Incomplete — No credit. An incomplete grade ("I") is given when a course is nearly completed and when, in the opinion of the instructor, it may be completed with minimal additional work on the part of the student and the instructor. It is the student's responsibility to make arrangements for completion of the course work. If the course work is not completed by the end of the following semester, the earned grade (A, B, C, D, or F) will be reported.
X = Audit — No credit. Permission of the instructor and the Dean of Instruction is required to audit a class.

*As a general guide, a grade of "A" will be assigned for grades (or equivalents) of 90-100; "B" for 80-89; "C" for 70-79; and "D" for 60-69.

STUDENT RECORDS POLICY AND PROCEDURES

As a general rule the College will not release any information concerning student records without the written consent of the student or his parent (if a minor).

Release of General Information

The College will release the following items of "Directory Information" without the written consent of the student: name, address, telephone, date and place of birth, major, awards and degrees, participation in sports and activities, weight and height of athletic team members, dates of attendance and most recent educational institution attended. *The student is responsible for notifying the Records Office by the 12th Class Day of the semester if any of the information listed above, is not to be released.* No information is released by telephone.

Review of Record

Any student who desires to review his/her record may do so upon request to the Student Records Office. A student may have copies of his/her record at a charge not to exceed $1.00 for each page.

Challenge to Accuracy of Record Keeping

Any student who desires to challenge the accuracy of his/her records should follow the procedure above. Should additional clarification be necessary a request for formal review may then be made to the Dean of Instruction, Student & Community Services.

Normally, all grades published are considered final. Any question of error must be brought to the attention of the instructor within 30 days after grades are issued.

GRIEVANCE PROCEDURE

Any student wishing to present a grievance for possible action should first tender the matter before his/her instructor. Thereafter, as deemed necessary, the grievance should be presented to the program director, department chairperson, area director, associate dean, dean of instruction, and the president. If the student should feel that the matter is still unresolved, he/she may then request a hearing before the board of trustees.

DISCLAIMER STATEMENT

At the time of class schedule publication, it is the intention of the College to teach courses in accordance with time, room, and instructor as listed. However, the College reserves the right to make schedule adjustments, delete, or discontinue any class when enrollment or other circumstances do not justify continuance in accordance with the schedule.

GRADUATION REQUIREMENTS

ASSOCIATE DEGREE REQUIREMENTS (A.A., A.S., A.A.S.)

To be eligible for graduation with an Associate Degree from the College, a student must:

1. Have fulfilled all the course requirements of his/her particular curriculum as outlined in the College Bulletin.
2. Have been recommended for graduation by the appropriate Director in his/her curriculum.
3. Have completed the required hours as specified in each program, of which 24 credits must be acquired at Alvin Community College.
4. Have earned a grade point average of at least 2.0 on work attempted which is applicable toward graduation in his particular curriculum.
5. Have filed an application for graduation with the Graduation Advisor. Late applications for graduation will result in the candidates delayed graduation until the following semester.
6. Have resolved all financial obligations to the College and returned all materials including Library books.
7. Attend commencement exercises if a spring graduate.
8. Under extraordinary circumstances, any deviation in fulfilling curriculum requirements may be waived by the Dean of Instruction, Student and Community Services.

DIPLOMA REQUIREMENTS

To be awarded a diploma from the College, a student must:

1. Have completed 62 semester hours in a program planned to meet the desires and needs of the individual student (24 of the hours must be acquired at Alvin Community College).

2. Have completed at least 16 semester hours of general education courses (course work in humanities and social science courses).

3. Have earned a grade point average of at least 2.0 in all course work which is applied to the Diploma program.

4. Have been recommended for graduation by the Dean of Instruction, Student and Community Services.

5. Have filed an application for graduation in the Office of the Graduation Advisor. Late applications for graduation will result in the candidates' delayed graduation until the following semester.

6. Have resolved all financial obligations to the College and returned all materials including Library books.

7. Attend commencement exercises if a Spring graduate.

8. Under extraordinary circumstances, any deviation in fulfilling curriculum requirements may be waived by the Dean of Instruction, Student and Community Services.

CERTIFICATE REQUIREMENTS

To be awarded a certificate from the College, a student must:

1. Have fulfilled all the requirements of his/her particular program area as outlined in the College Bulletin.

2. Have been recommended for graduation by the appropriate Director in his/her program area.

3. If the certificate is one semester or longer in length, the student must complete the equivalent of at least one general education course per semester.

4. If he pursues a degree program but is unable to complete the degree requirements, he may, upon recommendation of the appropriate Director and the Dean of Instruction, Student and Community Services, be issued a certificate provided the portion of study successfully completed is equivalent to an approved program offered at the College.

5. Have filed an application for graduation with the Graduation Advisor. Late applications for graduation will result in the candidates delayed graduation until the following semester.

6. Have resolved all financial obligations to the College and returned all materials including Library books.

7. Attend commencement exercises if a spring graduate.

8. Under extraordinary circumstances any deviation in fulfilling curriculum requirements may be waived by the Dean of Instruction, Student and Community Services.

SECOND DEGREE OR CERTIFICATE

In awarding students an additional degree, diploma, or certificate, Alvin Community College will grant credit for all previously completed applicable

courses which are requirements of the additional degree, diploma, or certificate. The student must pay the regular fee for the second degree, diploma, or certificate.

COLLEGE BULLETIN
Graduation Requirements

Ordinarily a student will graduate under the requirements of the Bulletin existent when he/she enters the College. However, when he/she is continuously enrolled, he/she may choose the option of graduating under the Bulletin existent when he/she graduates. A Bulletin must be selected in its entirety.

GRADUATION HONORS

Honors recognition will be given to those degree candidates whose grade point average for all work at Alvin Community College is 3.2 or higher. In computing grade point average for graduation honors, all hours completed (grade awarded) will be used. Courses which have been repeated will be counted each time taken. The GPA for graduation (2.0) will include only the hours needed for graduation and the best grade for repeated courses. Grades of WP, I, or R do not count as hours completed.

Appropriate honors based on scholastic achievements are recorded on the student's degree as follows:

3.2 Grade Point Average — Cum Laude (with honors)
3.5 Grade Point Average — Magna Cum Laude (with high honors)
3.8 Grade Point Average — Summa Cum Laude (with highest honors)

CORE CURRICULA

The Coordinating Board, Texas College and University System, has adopted a "Core Curricula" for three major fields of study and is conducting studies in additional fields. The objective of this work is to provide "a basic core of general academic courses which, when offered at a junior college during the first two years of collegiate study, shall be freely transferable among all public institutions of higher education in Texas who are members of recognized accrediting agencies on the same basis as if the work had been done at the receiving institution."

The following statement of policy was adopted by the Coordinating Board, Texas College and University System, on October 16, 1967. It became effective on September 1, 1968, and applied to all public colleges and universities in Texas. Private colleges and universities usually implement this policy voluntarily.

GENERAL PROVISIONS

1. The mandatory provisions regarding transfer of college credits pertain only to credits earned at an accredited* Texas Public Junior College, such credits having application toward a degree in an academic field covered by the core curricula at a Texas Public Senior College or University.

2. Each Texas public senior college or university shall accept credits earned by any student transferring from an accredited Texas public junior college, provided such credits are within the core curricula of the student's declared major

field. The senior college or university shall grant the student full value toward degree requirements as these are stated in the catalog of the senior institutions and as they apply to the student's declared major.

3. Inasmuch as the core curricula necessarily depend upon the student's major, he/she shall be required to declare his/her major field no later than the end of his/her first year of attendance at the junior college and upon request for admission by transfer to a senior institution.

4. The student shall not be required to complete the entire core curricula for it to be valid and freely transferable, but any sub-item shall also be transferable, provided such item was completed prior to original registration in the senior institution.

5. Alvin Community College will accept credits from an unaccredited institution contingent upon 12 hours of satisfactory resident work at Alvin Community College.

*An accredited college in Texas is one accredited by the Southern Association of Colleges and Schools or by the Association of Texas Colleges and Universities.

DEFINITIONS OF ACADEMIC TERMS

Following are the definitions of terms with which the reader may not be familiar:

Academic Probation: The status of a student whose grade point average is below the minimum standard.

Admission: Acceptance of a student for enrollment.

Audit: A comment recorded on a transcript in place of a grade for a course which a student has elected to take without credit.

Corequisite: A course which must be taken simultaneously or prior to another course.

Course Waiver: Permission to use another course in lieu of one requested in a given curriculum.

Curriculum: A specific course of study leading to a degree or certificate.

Elective: A subject or course which a student may choose to take as distinguished from a "required course".

Expulsion: Dismissal from the College normally without recourse for reenrollment.

Faculty: The instructional staff of the College.

Grade Point Average: The ratio of grade points earned to credit hours completed.

Matriculation: Enrollment in the College.

Prerequisite: An academic requirement which must be met before a certain course may be taken.

Registration: Process of enrolling for classes, constituting selection of courses by day and hours and the payment of fees.

Suspension: A requirement that a student cease matriculation in the College for at least one semester.

Term: A subdivision of the academic year; i.e., Fall, Spring and Summer Terms.

Transcript: A certified copy of the student's academic record.

CORE CURRICULA (State Coordinating Board)

CORE CURRICULA

Subject	**Major Field I** Bachelor of Arts Degree in Arts and Sciences Bachelor of Science in Mathematics & Natural Sciences	**Major Field II** Bachelors Degree in Business Administration (incl. Accounting)	**Major Field III** Bachelor Degree in Engineering
a. English Language Proficiency (i.e., freshman English)	6 hours	6 hours	9 hours
b. Literature	6 hours	6 hours	
c. Government (to meet state statute requirement)	6 hours	6 hours	6 hours
d. History (to meet state statute requirement)	6 hours	6 hours	6 hours
e. Natural Science A	6-8 hours Biological Science	6-8 hours	8 hours Chemistry
f. Natural Science B	6-8 hours Physical Science	--------	hours Physics*
g. Mathematics (Collegiate level)	6 hours	6 hours (Finite Math and Analysis plus sequential course appropriate to a business degree)	9 hours (analytical geometry and calculus)
h. Foreign Language	for the BA degree: 12-14 hours in a single language for the BS degree: 6-8 hours in a single language		
i. Humanities Electives: excluding courses in literature beyond b. above, also no more than 12-14 hours foreign language may be used in h. and i. combined	9 hours	9 hours	3 hours (to satisfy ECPD requirements)
j. Special Courses	--------	Economics: 6 hours Accounting: 6 hours	Engineering Mathematics 3 hours* Engineering Graphics: 2 hours

Subject	Major Field IV Law Enforcement	Major Field V Art	Major Field VI Agriculture
a. English Language Proficiency	9-12 hours	6-12 hours	9 hours
b. English Literature	- - - - - - - -	- - - - - - - -	3 hours
c. Government	6 hours	6 hours	6 hours
d. History	6 hours	6 hours	6 hours
e. Science and/or Foreign Language	8 hours	6-8 hours 6-8 hours	12-16 hours 6-8 Chem. 6-8 Biol.
f. Mathematics	- - - - - - - -	6 hours	6 hours
g. Humanities and other Electives	8-15 hours	- - - - - - - -	- - - - - - - -
h. Humanities and/or Social Science	- - - - - - - -	6 hours	- - - - - - - -
i. Special Courses	Law Enforcement 21 hours Total not to exceed 66 hours	Art History I, II, or Art Apprec. 6 hours Drawing I-II 6 hours Design I-II 6 hours Drawing III Design III Painting I Sculpture I 6-12 hours	Agriculture 9 hours Additional elective hours may be taken to give a total of 66 hours

*The content of these courses and the mathematics prerequisites of these courses must be the same as these same courses in the curricula of ECPD accredited senior colleges.

STUDENT SERVICES, POLICIES and REGULATIONS

ADMISSION REQUIREMENTS

A student may be admitted to Alvin Community College on any one of the following conditions:

1. Transfer in good standing from another college or university.
2. Graduation from an accredited high school.
3. Successful completion of the General Educational Development (GED) test.
4. Individual approval.
   a. A person who is age 17 or above may apply to the Admissions Office for approval.
   b. A student who is within two units of graduating from an accredited high school may, upon recommendation of the high school principal and individual approval of the Admissions Office be permitted to enroll at ACC when enrolled concurrently in a senior high school for sufficient courses to graduate at the close of the current session.

ADMISSION PROCEDURES

All new students must submit a completed application for admission and a health and immunization statement to the Admissions Office, preferably at least three months prior to the student's planned registration date. All former students must have their records updated in the Records Office i.e. address change.

1. If the student is *working for a certificate or a degree,* find the proper mode of admission below for additional requirements.
   a. Former student — No additional requirements.
   b. Transfer student —
      (1) Official transcripts from all previous colleges.
      (2) ACT or SAT scores or a local placement exam, if English and math are not transferred.
      (3) If the student is on academic probation or suspension from another school, he/she must gain approval from the Dean of Instruction, Student and Community Services (or designated representative) for admission to the College. Such approval will be conditional.
   c. High school or GED gradaute — ACT or SAT scores or a local placement exam.
   d. Student without high school equivalency —
      (1) Receive individual approval from Admissions Office after providing sufficient evidence that he/she can benefit from college work.
      (2) ACT or SAT scores or a local placement exam.
2. If the student is *not working for a certificate or a degree,* he/she must notify the Admissions Office. Additional requirements below:
   a. Former or transfer student, high school or GED graduate — no additional requirements.
   b. Student without high school equivalency —

      (1) Receive individual approval from Admissions Office after providing sufficient evidence that he/she can benefit from college work.
      (2) Current high school students must have an approval letter about concurrent enrollment sent from his/her high school principal.
   c. College transient student — Sign a statement that he/she is in good standing at last college attended.

PLACEMENT TEST

All new students who are working for a degree or certificate and do not transfer college English and math should take the American College Test (ACT) and have the results sent to the Admissions Office. Students who have not taken the ACT should contact the Counseling Center for dates and testing information.

ACT results are used for placement in English and math courses, counseling, research, and follow-up programs. It is *not a selective device for college admission.*

The Scholastic Aptitude Test (SAT) is acceptable.

A local placement exam may be substituted. Contact the Counseling Center about times for this exam.

FULL AND PROVISIONAL ACCEPTANCE

A new student will be fully accepted by the Admissions Office after all required documents are on file. A student will be provisionally accepted until all required documents are received. All documents should be submitted as soon as possible.

TRANSFER CREDIT

Transfer credit will be given for all passing work completed at accredited colleges and universities.

Credits from foreign colleges and universities will be evaluated for credit after the student completes at least nine credits with at least C grades at Alvin Community College.

The Admissions Office is responsible for evaluation of transfer credits.

INTERNATIONAL STUDENTS

Students from other countries attending Alvin Community College shall be termed "International" students if they are a person who is a citizen of a country other than the United States who has a visa for educational purposes with an intent to return to his home upon completion of his educational program.

International students must carry a minimum of twelve (12) semester hours to meet Department of U.S. Naturalization and Immigration Service requirements. Because no scholarships or grants are available to international students, it is essential that students from outside the United States have sufficient funds to cover their expenses while in this country. The international student tuition is $14.00 per semester hour with a minimum tuition of $200 for the regular term and $100 for the summer session (subject to change without notice).

Before any action can be taken on their applications, international students who wish to become degree-seeking students at Alvin Community College must complete and file the following with the International Student Advisor 30 days prior to the beginning of the semester or summer session in which they are intending to begin their studies.

1. A completed application form.
2. Health form (physicians examination).
3. Official transcripts for at least the last four years of secondary school study and any university-level or other post-secondary school work that has been completed or attempted. All these records must list all subjects taken, grades earned or examination results in each subject, and all diplomas and certificates awarded. If these documents are not in English, they must be accompanied by authorized English transcriptions.
4. An official Test of English as a Foreign Language (TOEFL) score report. To be considered for admission, students must receive a minimum score of 500 or above.
5. Affidavit of Support.
6. Educational Background letter from foreign student advisor of the previous school attended (this applies to students already enrolled in a school in the United States).
7. A deposit of $500 in the Alvin Community College Business Office.

*Once an international student has been accepted for enrollment, he or she must agree to attend foreign student orientation each semester or summer session while attending Alvin Community College.

ADMISSION TO SPECIFIC CURRICULUMS

In addition to the general admission requirements, specific requirements are usually prescribed for each curriculum of the College. Among the items generally considered in determining the eligibility of a student for admission to a curriculum in the College are his/her educational and occupational experiences, and other reasonable standards to insure that the student possesses the potential to meet program requirements.

The specific requirements for each curriculum in the College are listed in the Curriculum Offerings section of the College Bulletin. Persons who do not meet the requirements for a specific curriculum or course may be eligible to enter the curriculum or course after they have completed preparatory course work.

It is policy not to admit a student to a curriculum unless he/she meets all of the listed requirements for the curriculum. The Admissions Office will officially admit the student upon the approval of the appropriate Director responsible for the curriculum. If the student has not completed all of the admission requirements for the curriculum, the student will be required to complete these requirements in the developmental program.

RESIDENCE STATUS

The legal residence of each application for admission to Alvin Community College will be determined in the Registrar's Office.

For tuition purposes, the students who enroll in Alvin Community College will be classified as follows:

1. In-District — Students who are residents of the Alvin Community College District. (Resident at least 12 months).
2. Out of District — Students whose homes are not in the Alvin Community College District but who are residents of Texas.
3. Out of State or Out of Country — An out-of-state or out-of-country student is a person living away from his family and whose family resides in another state or another country or who has not resided in Texas for the twelve months immediately preceding the day of registration.

   Individual determination can be affected by death or divorce of parents; custody of minor by court order; marriage of student; active military duty of student or student's parents; full-time employment of the student's spouse or parents in a senior state-supported college or university of Texas; or temporary assignments of student's parents out of Texas that do not affect actual legal residence.

   Full details of the aforementioned can be obtained from the Registrar's Office.
4. Alien — An alien who is living in this country under a visa permitting permanent residence or who has filed with the proper federal immigration authorities a declaration of intention to become a citizen has the same privilege of qualifying for residence status fee for purposes under this act as has a citizen of the United States. A resident alien residing in a junior college district located immediately adjacent to Texas boundary lines shall be charged the resident tuition by that junior college.

RESIDENT CLASSIFICATION STUDENT RESPONSIBILITY

The responsibility of registering under the proper residence classification is that of the student, and if there is any question of his/her right to classification as a resident of Texas, it is his/her obligation, prior to or at the time of his/her registration, to raise the question with the Registrar's Office.

Once a student has been found to be a non-resident, his/her status is frozen as long as he/she remains in attendance at this college or until a petition for change of status has been approved.

Every student who is classified as a resident student but who becomes a non-resident at any time by virtue of a change of a legal residence by his own action or by the person controlling his/her domicile is required to notify the Registrar's Office.

FINANCIAL INFORMATION

All tuition and fees must be paid in full at the time of registration or as posted in the case of advance registration. A student may not attend class until all payments have been made. Students who have received a scholarship are required to pay the full tuition and fees personally if the granting organization has not paid the scholarship at the time of registration. Students needing financial assistance should make application to the Student Financial Aid Office at least 30 days prior to registration.

The College reserves the right to change, without notice, tuition, other charges, and related requirements and regulations as necessitated by College or legislative action.

TUITION AND MATRICULATION FEES

Fall or Spring Terms

	In-District	Out-Of-District	Out-Of-State	Alien
Tuition (Semester Hour)	$ 4.00	$ 4.00	$17.00	$14.00
Minimum	25.00	25.00	25.00*	200.00
Matriculation Fees	$1 per sem. hour for 6 hrs. and above; ($10 max)	$3. per sem. hour for 6 hrs. and above; ($25 max.)	None	None

NOTE: Tuition for all Vocational Nursing Students is $150.00 for 12 months.

*Out-of-State Students have $200 maximum tuition

Summer Term

Tuition* (Semester Hour)	$10.00	$10.00	$17.00	$ 14.00
Minimum Matriculation Fees	$25.00 None	$25.00 None	$25.00 None	$100.00 None

A schedule of rates for students based on semester hour is listed as follows:

*per six weeks session

Schedule also applies to continuous registration.

SPECIAL FEES

Student Service Fee — per semester	$10.00
Summer term	None
Applied Music Fees	
Private Lessons — Per semester hour	$25.00
Class Piano — Per course	10.00
Class Voice — Per course	10.00
Class Change Fee (For approved class changes made for the convenience of the student) Per each add or drop	$ 3.00
maximum	$ 9.00
Credit by Examination Per semester hour:	$ 4.00
*Graduation Fee	
Cap and Gown	$ 9.00
Diploma	6.00

Lab Fees	
(Art, Biology, Business Machines, Chemistry, Computer Science, Crafts, Drafting, Electronics, Foreign Language, Medical Laboratory Technology, Nursing, Physics, Shorthand, Typing)	$ 8.00
Air Conditioning & Refrigeration and Welding	$15.00
Physical Education Fee (per semester)	
Towel & Locker Use Fee	$ 5.00
Bowling Fee	$15.00
Golf Fee	$15.00
Scuba Diving Fee	$45.00
Returned Check Fee	$ 5.00
Late Registration Fee	$10.00
TNSA Membership Fee	$11.00
State Board Examination Fee (ADN)	$30.00
Malpractice Insurance Fee	$ 8.55
Transcript fee	$ 1.00

*Note—Procedures for ordering regalia for Graduation: Graduation Fees must be paid to Business Office. Upon presentation of Business Office receipt, College Store personnel will assist with orders and measurements for cap and gown.

ALVIN COMMUNITY COLLEGE
TUITION AND FEES SCHEDULE
Fall and Spring Semesters

This schedule represents fees for the Fall and Spring Semesters based on residency status and number of hours taken. Alvin Community College reserves the right to change without notice the schedule of tuition and fees.

NOTE: Placing a stop payment on your check does not cancel your registration or withdraw you from school.

SEM HRS	TUITION & MATRICULATION RI	RO	NR	IS	STUDENT SERVICE	BUILDING USE FEE*	TOTAL CHARGES RI	RO	NR	IS
1-3	$25.00	$ 25.00	$ 51.00	$200.00	$10.00	$ 7.50	$ 35.00	$ 42.50	$ 68.50	$217.50
4	25.00	25.00	68.00	200.00	10.00	15.00	35.00	50.00	93.00	225.00
5	25.00	25.00	85.00	200.00	10.00	15.00	35.00	50.00	110.00	225.00
6	31.00	43.00	102.00	200.00	10.00	15.00	41.00	68.00	127.00	225.00
7	35.00	49.00	119.00	200.00	10.00	15.00	45.00	74.00	144.00	225.00
8	40.00	56.00	136.00	200.00	10.00	15.00	50.00	81.00	161.00	225.00
9	45.00	61.00	153.00	200.00	10.00	20.00	55.00	91.00	183.00	230.00
10	50.00	65.00	170.00	200.00	10.00	20.00	60.00	95.00	200.00	230.00
11	54.00	69.00	187.00	200.00	10.00	20.00	64.00	99.00	217.00	230.00
12	58.00	73.00	200.00	200.00	10.00	20.00	68.00	103.00	230.00	230.00
13	62.00	77.00	200.00	200.00	10.00	20.00	72.00	107.00	230.00	230.00
14	66.00	81.00	200.00	200.00	10.00	20.00	76.00	111.00	230.00	230.00
15	70.00	85.00	200.00	210.00	10.00	20.00	80.00	115.00	230.00	240.00
16	74.00	89.00	200.00	224.00	10.00	20.00	84.00	119.00	230.00	254.00
17	78.00	93.00	200.00	238.00	10.00	20.00	88.00	123.00	230.00	268.00
18	82.00	97.00	200.00	252.00	10.00	20.00	92.00	127.00	230.00	282.00
19	86.00	101.00	200.00	266.00	10.00	20.00	96.00	131.00	230.00	296.00
20	90.00	105.00	200.00	280.00	10.00	20.00	100.00	135.00	230.00	310.00

CODE: RI—Resident/In-District
RO—Resident/Out-of-District
NR—Non-residents who are US citizens
IS—International Students

*Does not apply to Resident/In-District students

REFUND POLICY

Total Withdrawal

Student tuition and fees provide only a portion of the costs to provide educational opportunities. When a student enrolls in a class, a place is reserved in that class which cannot be made available to another student until the student officially drops the class. Also, the enrollment of a student, whether it is continued or not, represents a sizable cost to the college. Therefore, refunds are made under the following conditions:

1. A student must OFFICIALLY WITHDRAW from classes in the Counseling Center in order to receive a refund.
2. If a student withdraws prior to beginning of classes, a 100% refund, less a $10.00 service charge, will be made.
3. If a student withdraws from the college during the first ten days, the refund is 70%. No service charge is assessed.
4. The late registration fee of $10.00 is not refundable under any circumstances.

A student who feels that his refund request is due to an extenuating circumstance beyond the limits of the refund policy may submit a letter of explanation to the Refund Petitions Committee in the Business Office.

Schedule Changes

1. Schedule changes are normally assessed a $3.00 charge per line on the Add/Drop form with a $9.00 limit. This fee will be waived if the change is due to administrative or instructor request.
2. If the net result of the schedule change is the ADDITION of tuition and/or fees, the student pays the net difference at the Business Office.
3. If there is no change in credit hours and/or labs, the only charge assessed is the $3.00 per line fee.
4. If there is reduction of credit hours and/or fees the refund will be determined as 70% of the difference between the students new and original total fee amounts, except that late registration fees and student service fees are not refundable.

Changes become official only after payment is received.

COUNSELING

As a service to students and to the community, Alvin Community College maintains a staff of professional counselors, in addition to a system of faculty advisors in each instructional program.

The counseling center functions to assist students in making intelligent decisions regarding their vocational, educational, and personal-social plans. As a part of this assistance, students have available appropriate tests, inventories, and occupational and educational information.

The counseling service provides individual attention and supplementation to the instructional program of the College.

Each regular student will be assigned to a counselor or a faculty advisor.

LEARNING LABORATORY

Various types of instructional media exist in the learning laboratory to meet individual or curricular needs. Audio-tutorial programs, peer group sessions, tutoring, films, programmed textbooks, filmstrips, filmloops, slides, models, microfilms, and printed materials are employed in a multitude of learning paths from which students may choose. The learning laboratory exists as an adjunct to all other departments by providing a supplement through self-directed study and the use of individualized instructional resources. All of these services are provided at no extra cost to the students.

CHILD CARE LABORATORY SCHOOL

A campus Day Care Center is available to the children of students, staff, and faculty. The Center, a laboratory school operated by the Child Care and Development Department, is open from 7:50 a.m. until 5:10 p.m. Monday through Friday and from 6:20 p.m. until 9:30 p.m. Monday through Thursday. The Center is licensed for children 18 months-6 years of age. Registration information and fee schedules may be obtained by contacting the Laboratory School Office.

ORIENTATION

An orientation program has been established to acquaint new students with the purposes and programs of the College. The orientation programs begin weeks before registration when the student is asked to meet with a counselor at the College for an interview to discuss the student's educational interests, to determine what additional tests he/she may need, and to plan the student's application for admission to a specific curriculum at the College. The student will also meet with a faculty advisor in his/her major curriculum and/or a counselor to plan his/her program and course of studies. An orientation period is scheduled for all new students prior to registration for group orientation to the College and a discussion of student services and activities.

VETERANS ADMINISTRATION BENEFITS

Alvin Community College has been approved for GI Bill Educational Training. Prospective veterans and dependents should contact the VA Regional Office in Houston or the campus Veterans Affairs Office for application forms and further information. Early application is advised. VA recipients are expected to comply with standards of satisfactory progress. Full text of *Policies Governing Satisfactory Progress* is being added to the Administrative Procedures Manual. Copies are available in the Veterans Coordinator's office.

TEXAS REHABILITATION COMMISSION

The Texas Rehabilitation Commission offers assistance for tuition to students who have certain physical disabilities, provided the vocational objective selected by the disabled person has been approved by a representative of the Texas Rehabilitation Commission. Application for this assistance should be

made to the nearest Texas Rehabilitation Commission Office before each registration period of the school year. For further information please contact the Associate Dean of Student's Office who can direct students to the local Texas Rehabilitation Commission office in Alvin.

FINANCIAL AID

The primary purpose of the student financial aid program at Alvin Community College is to provide financial assistance to students who, without such aid, would be unable to attend college. Although the college constantly seeks additional support for student loans, scholarships, and grants, funds are limited in some of these areas.

Financial aid is awarded in the form of scholarships, grants, loans, and jobs. Details about different programs can be found in the following paragraphs. All applications should be made through the **Office of Student Financial Aid and Placement, Alvin Community College, Alvin, Texas 77511.** Student consumer information is available through this office.

Most aid is assigned according to financial need, academic grades, and academic load. The amount of support which may be expected from the income, assets, and all other resources of the family and the student is considered in determining the student's financial need. All students who apply for aid in which financial need is a qualification, are required to (1) complete the necessary requirements for admission to the College; (2) complete the College's application for financial aid; and (3) file the Financial Aid Form of the College Scholarship Services and request a copy to be sent to Alvin Community College. A student must submit a new application each year in order that his/her financial need may be reevaluated. Since the amount of financial assistance awarded usually reflects the financial standing of the student's family, all information this office receives is handled confidentially. **It is important for a student to apply in person.**

The application form used at Alvin Community College can only be obtained at the Office of Student Financial Aid. Satisfactory academic progress as determined by the Student Financial Aid Office must be made by the student in order to remain eligible for financial assistance.

Student financial aid is awarded in the order of need to students who meet priority deadlines. In order to receive priority consideration a student's need analysis report (the results of the Financial Aid Form) must be received in the office before May 1st for summer assistance and June 16th for the nine month academic period. Applications and reports received after those dates will be awarded on a first come first serve basis as long as funds are available. Students should apply in February or as soon as family income information is available after the first of the calendar year.

Financial Aid Programs Available

Basic Educational Opportunity Grants

This grant makes funds available to eligible students who are undergraduates and enrolled on at least a half-time basis. The need is determined by the use of the Financial Aid Form which includes a confidential income statement of the student's family. Every student should submit an application for this program. A print-out identifying the student's eligibility is returned to the student and he/she submits it to the Student Financial Aid Office.

Short-Term Loans

Alvin Community College has limited funds to provide immediate assistance for tuition and fees. These funds are made available through gifts contributed by individuals and organizations interested in Alvin Community College and the welfare of its students. These are considered emergency loans and must be repaid during the term of enrollment so that the money may be continually circulated.

Federally Insured Student Loan

This loan program permits students to obtain low interest loans from their local lending agencies who participate in the program. The Student Financial Aid Officer can recommend such loans after consulting with the student. Applicants should find out whether their local lending agencies (banks, credit unions, or savings and loan associations) participate in the program.

Nursing Scholarships

Scholarships are available for students in the Nursing Program (enrolled in nursing classes) who qualify on the basis of financial need.

Nursing Loans

Loans are available for students in the Nursing Program (enrolled in nursing classes) who qualify on the basis of financial need. Up to 85% of the loan may be canceled if the borrower is employed as a registered nurse under specified circumstances.

Law Enforcement Education Program (LEEP)

Grants are available to pay tuition and fees, for full-time employees of public-funded law enforcement agencies and who are enrolled in the Law Enforcement or Correctional Science curriculum at Alvin Community College. It is necessary for a student to remain employed in public-funded law enforcement for two (2) years after the close of the semester in which he/she receives the grant, otherwise, the grant becomes a loan.

State Student Incentive Grant

All full time eligible students will be considered for this grant program which is based on financial need.

Supplemental Educational Opportunity Grants

Supplemental Educational Opportunity Grants are awarded to students of greatest financial need. The minimum grant is $200 per academic year. These grants can be no more than one-half the total assistance given a student. Any student filing for other student financial aid will be considered for one of these grants.

Texas Public Education Grants

A grant fund has been made available by state law to be administered by this institution for grants to needy students. Although funds are somewhat limited in this program, all applicants for other student financial aid will be considered for one of these grants.

Hazlewood Act

Veterans, who were honorably discharged from the service, were legal residents of Texas at the time of induction into the service, have no further entitlement to VA educational benefits, and have resided in Texas for at least 12 months before the date of college registration, are qualified for exemption of tuition and fee charges required at registration. A copy of a veteran's DD 214 must be presented to the Veterans' Coordinator for exemption prior to registration.

Athletic Grants-in-Aid

For information on athletic grants-in-aid contact the Athletic Director.

Music Grants-in-Aid

For information on the music grants-in-aid contact the Head of the Music Department.

College Work-Study Program

This program provides on-campus employment for students who qualify on the basis of financial need. In order to be eligible for employment under this program, the student must be enrolled or accepted as at least a half-time student and be in need of the job earnings to pay for his/her college expenses.

Additional information will be available to all interested students and prospective students as new types of student aid develop at Alvin Community College.

Placement Service

The College maintains a placement service in the Financial Aid and Placement Office for students who wish to secure part-time or full-time employment while attending college, during vacations or after graduation. Occupational information on job requirements and opportunities is provided in the Placement Center. The College maintains contact with business, industry, the professions, and the government for the latest information about jobs.

Students who seek part-time work are encouraged to do so with a view to their future career plans. The experience gained will assist them in finding permanent and satisfying positions.

ATHLETICS

The College schedules intercollegiate competition in basketball, baseball, volleyball, tennis and golf. For non-varsity students, an extensive schedule of intramural sports and the physical education program afford all students many opportunities for participation.

CAFETERIA

Hot and cold food and beverages may be obtained from the cafeteria which is located in the Student Center.

PARKING

Automobiles must be registered before they may be parked on campus. Parking permits are distributed during registration and afterward by the Security Office. Certain areas are reserved. Traffic regulations will be distributed by the Security Office.

CO-CURRICULAR ACTIVITIES

Activities outside the classroom provide some of the most valuable educational experiences a student will have while attending college. For this reason, Alvin Community College encourages its students to participate in these activities. Student activities, which are open to all students, include movies, speakers,

dances, intramurals, workshops, concerts, programs, and various club activities. The activities calendar is maintained in the office of the Student Activities Coordinator. Campus events are listed in the weekly newsletter, "This Week at ACC".

STUDENT HANDBOOK

A student handbook is available to provide additional information of interest to students. The handbook, which describes student activities, organizations, student services, and college regulations pertinent to students, is available in the Student Activities office.

COLLEGE STORE

A College Store is operated for the convenience of students and faculty. It is located in the Student Center.

Book buy back will be conducted by the College Store on the following dates:

Fall Semester — December 10-14, 1979
Spring Semester — May 12-16, 1980
Summer Session II — August 11-15, 1980

Book buy back is conducted the week of final examinations. Buy back price is one-half the original purchase price.

CURRICULUM OFFERINGS

ACADEMIC PROGRAMS

Alvin Community College offers a variety of academic programs. The following degree, diplomas, and certificates are awarded to those students who successfully complete approved programs.

ART

Degree: Associate in Arts (A.A.)

Length: Four-Semester (Two-Year) Program

Purpose: Associate in Arts Degree (A.A.) is awarded to those students who fulfill the requirements in the Art curriculum.

Program Requirements: This curriculum will include the general education courses and introductory specialty courses usually required in the first two years of equivalent baccalaureate programs. Each student is urged to acquaint himself/herself with the requirements of the major department in the college or university to which he/she expects to transfer in planning his/her program and selecting his/her electives.

ART

Associate in Arts Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ENGL 121	Comp. & Rhetoric I	3	0	3
HIST 141	U.S. to 1877	3	0	3
ARTS 111	Design I	0	6	3
ARTS 121	Drawing I	0	6	3
ARTS 120	Art Appreciation	3	0	3
PHED	Physical Education	0	3	1
		9	15	16
	Second Semester			
ENGL 122	Comp. and Rhetoric II	3	0	3
HIST 142	U.S. Since 1877	3	0	3
ARTS 112	Design II	0	6	3
ARTS 122	Drawing II	0	6	3
ARTS 240	Watercolor Painting	0	6	3
PHED	Physical Education	0	3	1
		6	21	16

	Third Semester			
ENGL 211 or ENGL 221	Survey of Literature I	3	0	3
GOVT 211	Amer. Nat. & State Govt. I	3	0	3
ARTS 211	Drawing III	0	6	3
ARTS 231 or 251	Painting I / Commercial Art I	0	6	3
	*Elective	3	0	3
		9	12	15
	Fourth Semester			
ENGL 212 or ENGL 222	Survey of Literature II	3	0	3
GOVT 212	Amer. Nat. & State Govt.	3	0	3
ARTS 232 or 252	Painting II / Commercial Art II	0	6	3
ARTS 221	Design III	0	6	3
	*Elective	3	0	3
		9	12	15

Total Minimum Credits Required for Arts Degree 62

*Elective should be chosen to coincide with senior requirements.

DRAMA

Degree: Associate in Arts (A.A.)

Length: Four Semester (Two-Year) Program

Purpose: Associate in Arts Degree (A.A.) is awarded to those students who fulfill the requirements in the Drama Curriculum.

Program Requirements: This curriculum will include the general education courses and introductory specialty courses usually required in the first two years of equivalent baccalaureate programs. Each student is urged to acquaint himself/herself with the requirements of the major department in the college or university to which he/she expects to transfer in planning his/her program and selecting his/her electives.

DRAMA

Associate in Arts Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ENGL 121	Composition and Rhetoric I	3	0	3
HIST 141	The U.S. to 1877	3	0	3
DRAM 111	Rehearsal and Performance	0	2	1
DRAM 120	The Creative Experience	3	0	3
DRAM 130	Introduction to Theatre Arts	3	0	3
PHED 125	Fundamentals of Movement	0	3	1
SPCH 110	Fundamentals of Speech or Elective	3	0	3
		15	5	17
	Second Semester			
ENGL 122	Composition and Rhetoric II	3	0	3
HIST 142	The U.S. since 1877	3	0	3
DRAM 112	Rehearsal and Performance	0	2	1
DRAM 140	Introduction to Acting	2	2	3
DRAM 150	Stage Makeup	2	2	3
PHED 126	Fundamentals of Movement	0	3	1
	*Elective	3	0	3
		13	9	17
	Third Semester			
ENGL 211 or ENGL 221	Survey of Literature I	3	0	3
GOVT 211	American National and State Governments I	3	0	3
DRAM 211	Rehearsal and Performance	0	2	1
DRAM 230	Introduction to Technical Theatre	2	2	3
DRAM 240	Advanced Acting	2	2	3
	Elective	3	0	3
		13	6	16
	Fourth Semester			
ENGL 212 or ENGL 222	Survey of Literature II	3	0	3
GOVT 212	American National and State Governments II	3	0	3
DRAM 235	Intermediate Technical Theatre	3	0	3
DRAM 250	Theatre Speech	3	0	3

DRAM 212	Rehearsal and Performance	0	2	1
	Elective	3	0	3
		15	2	16

Total Minimum Credit Requirement for Drama Major Degree 66

ASSOCIATE IN ARTS DEGREE

GENERAL LIBERAL ARTS PROGRAM

Degree: Associate in Arts (A.A.)

Length: Four-Semester (Two-Year) Program

Purpose: Associate in Arts Degree (A.A.) is awarded to those students who fulfill the requirements in General Liberal Arts curriculum. Students who complete this curriculum normally transfer to a four-year college where they may major in one of the following subject-areas:

Economics	Library Science
Education	Philosophy
English	Physical Education
Foreign Language	Pre-Law
Government	Psychology
History	Sociology
Journalism	Speech

Program Requirements: This curriculum will include the general education courses and introductory specialty courses usually required in the first two years of equivalent baccalaureate programs. Each student is urged to acquaint himself/herself with the requirements of the major department in the college or university to which he/she expects to transfer in planning his/her program and selecting his/her electives.

GENERAL LIBERAL ARTS

Associate In Arts Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ENGL 121	Composition and Rhetoric I	3	0	3
HIST 141	The U.S. to 1877	3	0	3
MATH 111	Selected Topics I	3	0	3
	*Elective	3	0	3
	**Foreign Language or Elective	3	0-2	3-4
PHED	Physical Education	0	3	1
		15	0-5	16-17

	Second Semester			
ENGL 122	Composition and Rhetoric II	3	0	3
HIST 142	The U.S. since 1877	3	0	3
MATH 112	Selected Topics II	3	0	3
	*Elective	3	0	3
	**Foreign Language or Elective	3	0-2	3-4
PHED	Physical Education	0	3	1
		15	0-5	16-17
	Third Semester			
ENGL 211 or ENGL 221	Survey of Literature I	3	0	3
	Physics 111, or Chem 111, or Biol 111, or Geol 111	3	3	4
GOVT 211	American National and State Governments I	3	0	3
	*Electives	6	0	6
		15	3	16
	Fourth Semester			
ENGL 212 or ENGL 222	Survey of Literature II	3	0	3
	Physics 112, or Chem 112, or Biol 112, or Geol 112	3	3	4
GOVT 212	American National and State Governments II	3	0	3
	*Electives	6	0	6
		15	3	16

Total Minimum Credit Requirement for a General Liberal Arts Degree 64-66

*Co-op courses may be selected as satisfaction of elective credit with advisor approval.
**Recommended elective depending on the transfer requirements of the college the student will be attending.

MUSIC

Degree: Associate in Arts (A.A.)

Length: Four-Semester (Two-Year) Program

Purpose: Associate in Arts Degree (A.A.) is awarded to those students who fulfill the requirements in the Music curriculum.

Program Requirements: This curriculum will include the general education courses and introductory specialty courses usually required in the first two years of equivalent baccalaureate programs. Each student is urged to acquaint himself/herself with the requirements of the major department in the college or university to which he/she expects to transfer in planning his/her program and selecting his/her electives.

Music Major (Instrumental Concentration) Associate in Art Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ENGL 121	Composition and Rhetoric I	3	0	3
HIST 141	The U.S. to 1877	3	0	3
MUSC 141	Music Theory	3	0	3
MUSC 121	Ear Training and Sight-Singing	1	2	2
	Applied Music: Principal Instrument	1	4	2
*MUSC 131	Class Piano	0	2	1
MUSC 185	Concert Band	0	3	1
PHED	Physical Education	0	3	1
		11	14	16
	Second Semester			
ENGL 122	Composition and Rhetoric II	3	0	3
HIST 142	The U.S. since 1877	3	0	3
MUSC 142	Music Theory	3	0	3
MUSC 122	Ear Training and Sight-Singing	1	2	2
	Applied Music: Principal Instrument	1	4	2
*MUSC 132	Class Piano	0	2	1
MUSC 186	Concert Band	0	3	1
PHED	Physical Education	0	3	1
		11	14	16
	Third Semester			
ENGL 211 or ENGL 221	Survey of Literature I	3	0	3
GOVT 211	American National and State Governments I	3	0	3
MUSC 243	Music Theory	3	0	3
MUSC 223	Ear Training & Sight Singing	1	2	2
MUSC 111	Survey of Music Literature	3	0	3
	Applied Music: Principal Instrument	1	4	2
*MUSC 131	Class Piano	0	2	1
MUSC 287	Concert Band	0	3	1
		14	11	18
	Fourth Semester			
ENGL 212 or ENGL 222	Survey of Literature II	3	0	3
GOVT 212	American National and State Governments II	3	0	3

MUSC 244	Music Theory	3	0	3
MUSC 224	Ear Training & Sight Singing	1	2	2
MUSC 112	Survey of Music Literature	3	0	3
	Applied Music: Principal Instrument	1	4	2
*MUSC 132	Class Piano	0	2	1
MUSC 288	Concert Band	0	3	1
		14	11	18

*MUSC 117X, 117Y, 217X, 217Y may be substituted.

Total Minimum Credits Required for a Music Major Degree 68

Music Major (Voice Concentration) Associate in Art Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ENGL 121	Composition and Rhetoric I	3	0	3
HIST 141	The U.S. to 1877	3	0	3
MUSC 141	Music Theory	3	0	3
MUSC 121	Ear Training and Sight-Singing	1	2	2
MUSC 125X	Applied Music-Voice	1	4	2
*MUSC 131	Class Piano	0	2	1
MUSC 151	Concert Choir	0	3	1
PHED	Physical Education	0	3	1
		11	14	16
	Second Semester			
ENGL 122	Composition and Rhetoric II	3	0	3
HIST 142	The U.S. since 1877	3	0	3
MUSC 142	Music Theory	3	0	3
MUSC 122	Ear Training and Sight-Singing	1	2	2
MUSC 125Y	Applied Music-Voice	1	4	2
*MUSC 132	Class Piano	0	2	1
MUSC 152	Concert Choir	0	3	1
PHED	Physical Education	0	3	1
		11	14	16
	Third Semester			
ENGL 211 or ENGL 221	Survey of Literature I	3	0	3
GOVT 211	American National and State Governments I	3	0	3
MUSC 243	Music Theory	3	0	3

MUSC 223	Ear Training & Sight Singing	1	2	2
MUSC 111	Survey of Music Literature	3	0	3
MUSC 225X	Applied Music-Voice	1	4	2
*MUSC 131	Class Piano	0	2	1
MUSC 253	Concert Choir	0	3	1
		14	11	18
	Fourth Semester			
ENGL 212 or ENGL 222	Survey of Literature II	3	0	3
GOVT 212	American National and State Governments II	3	0	3
MUSC 244	Music Theory	3	0	3
MUSC 224	Ear Training & Sight Singing	1	2	2
MUSC 112	Survey of Music Literature	3	0	3
MUSC 225Y	Applied Music-Voice	1	4	2
MUSC 132	Class Piano	0	2	1
MUSC 254	Concert Choir	0	3	1
		14	11	18

*Music 117X, 117Y, 217X, 217Y may be substituted.

Total Minimum Credits Required for a Music Major Degree 68

Physical Education Major Associate in Arts Degree Program

Degree: Associate in Arts (A.A.)

Length: Four-Semester (Two-Year) Program

Purpose: Associate in Arts Degree (A.A.) is awarded to those students who fulfill the requirements in the P.E. curriculum.

Program Requirements: This curriculum will include the general education courses and introductory specialty courses usually required in the first two years of equivalent baccalaureate programs. Each student is urged to acquaint himself/herself with the requirements of the major department in the college or university to which he/she expects to transfer in planning his/her program and selecting his/her electives.

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ENGL 121	Composition & Rhetoric I	3	0	3
HIST 141	The U.S. to 1877	3	0	3
MATH 111	Selected Topics I	3	0	3
PHED 110	Foundations of Phy. Ed.	3	0	3

PHED 130	Coaching Athletics	3	0	3
PHED	Physical Activity	0	3	1
		15	3	16

Second Semester

ENGL 122	Composition & Rhetoric II	3	0	3
HIST 142	The U.S. since 1877	3	0	3
MATH 112	Selected Topics II	3	0	3
PHED 120	Personal Health	3	0	3
PSYC 120	General Psychology	3	0	3
PHED	Physical Activity	0	3	1
		15	3	16

Third Semester

ENGL 211	Survey of Literature I	3	0	3
BIOL 121	Human Anatomy & Physiology	3	2	4
GOVT 211	American Government I	3	0	3
PHED 210	First Aid	3	0	3
PHED 230	Athletic Injuries	3	0	3
PHED	Physical Activity	0	3	1
		15	3	17

Fourth Semester

ENGL 212	Survey of Literature II	3	0	3
BIOL 122	Human Anatomy & Physiology	3	2	4
GOVT 212	American Government II	3	0	3
PHED 220	Officiating	3	0	3
PHED	Physical Activity	0	3	1
SPCH 110	Intro. to Speech	3	0	3
		15	5	17

ASSOCIATE IN SCIENCE DEGREES

Degree: Associate in Science

Length: Four-semesters (Two-Year Program)

Purpose: Associate in Science Degree (AS) is awarded to those students who fulfill the requirements of the Agriculture, Biological Science, Business Administration, Mathematics or Physical Science curriculum. Students who complete these curriculums normally transfer to a four-year college where they may major in one of the following subject areas:

- Agriculture
- Biology
- Business Administration
- Chemistry
- Conservation
- Engineering
- Pre-Dentistry
- Physics
- Geology
- Forestry
- Mathematics
- Pre-Medicine
- Pharmacy
- Pre-Veterinary

Program Requirements: Although the major emphasis in this curriculum is in mathematics, the biological sciences, and the physical sciences, the curriculum also includes courses in the humanities and social sciences. Numerous electives are provided so that the student can select the appropriate courses for his/her pre-professional or scientific program as required in the first two years of the four-year college or university. Each student is urged to acquaint himself/herself with the requirements of the major department of the college or university to which transfer is contemplated and also to consult with the Counseling Center of Alvin Community College in planning his/her program and selecting his/her electives. In order to prepare for upper division (junior class) standing at the four-year college or university, the student usually must complete a program that is comparable in length and rigor to the first two years of the program at the four-year college or university.

AGRICULTURE

Associate in Science Degree Program

First Year

First Semester		Lecture Hours	Lab Hours	Course Credits
ENGL 121	Composition and Rhetoric I	3	0	3
BIOL 110	Environmental Conservation	3	0	3
BIOL 111	General Biology I	3	3	4
HIST 141	The United States to 1877	3	0	3
AGRI 110	Animal Husbandry	3	0	3
PHED 111	Physical Education	0	3	1
		15	6	17

Second Semester

ENGL 122	Composition and Rhetoric II	3	0	3
BIOL 112	General Biology II	3	3	4
HIST 142	The United States since 1877	3	0	3
AGRI 120	Fundamentals of Crop Production	3	0	3
AGRI 130	Agriculture Equipment Technology	2	2	3
PHED 112	Physical Education	0	3	1
		14	8	17

Second Year

Third Semester

ENGL 211 or ENGL 221	Survey of Literature I	3	0	3
BUAD 130	Business Mathematics	3	0	3
AGRI 210	Farm Management	3	0	3
CHEM 111	Introductory Chemistry I	3	2	4
GOVT 211	American National and State Governments I	3	0	3
		15	2	16

PHED 130	Coaching Athletics	3	0	3
PHED	Physical Activity	0	3	1
		15	3	16

Second Semester

ENGL 122	Composition & Rhetoric II	3	0	3
HIST 142	The U.S. since 1877	3	0	3
MATH 112	Selected Topics II	3	0	3
PHED 120	Personal Health	3	0	3
PSYC 120	General Psychology	3	0	3
PHED	Physical Activity	0	3	1
		15	3	16

Third Semester

ENGL 211	Survey of Literature I	3	0	3
BIOL 121	Human Anatomy & Physiology	3	2	4
GOVT 211	American Government I	3	0	3
PHED 210	First Aid	3	0	3
PHED 230	Athletic Injuries	3	0	3
PHED	Physical Activity	0	3	1
		15	3	17

Fourth Semester

ENGL 212	Survey of Literature II	3	0	3
BIOL 122	Human Anatomy & Physiology	3	2	4
GOVT 212	American Government II	3	0	3
PHED 220	Officiating	3	0	3
PHED	Physical Activity	0	3	1
SPCH 110	Intro. to Speech	3	0	3
		15	5	17

ASSOCIATE IN SCIENCE DEGREES

Degree: Associate in Science

Length: Four-semesters (Two-Year Program)

Purpose: Associate in Science Degree (AS) is awarded to those students who fulfill the requirements of the Agriculture, Biological Science, Business Administration, Mathematics or Physical Science curriculum. Students who complete these curriculums normally transfer to a four-year college where they may major in one of the following subject areas:

- Agriculture
- Biology
- Business Administration
- Chemistry
- Conservation
- Engineering
- Pre-Dentistry
- Physics
- Geology
- Forestry
- Mathematics
- Pre-Medicine
- Pharmacy
- Pre-Veterinary

Program Requirements: Although the major emphasis in this curriculum is in mathematics, the biological sciences, and the physical sciences, the curriculum also includes courses in the humanities and social sciences. Numerous electives are provided so that the student can select the appropriate courses for his/her pre-professional or scientific program as required in the first two years of the four-year college or university. Each student is urged to acquaint himself/herself with the requirements of the major department of the college or university to which transfer is contemplated and also to consult with the Counseling Center of Alvin Community College in planning his/her program and selecting his/her electives. In order to prepare for upper division (junior class) standing at the four-year college or university, the student usually must complete a program that is comparable in length and rigor to the first two years of the program at the four-year college or university.

AGRICULTURE

Associate in Science Degree Program

First Year

First Semester		Lecture Hours	Lab Hours	Course Credits
ENGL 121	Composition and Rhetoric I	3	0	3
BIOL 110	Environmental Conservation	3	0	3
BIOL 111	General Biology I	3	3	4
HIST 141	The United States to 1877	3	0	3
AGRI 110	Animal Husbandry	3	0	3
PHED 111	Physical Education	0	3	1
		15	6	17

Second Semester

ENGL 122	Composition and Rhetoric II	3	0	3
BIOL 112	General Biology II	3	3	4
HIST 142	The United States since 1877	3	0	3
AGRI 120	Fundamentals of Crop Production	3	0	3
AGRI 130	Agriculture Equipment Technology	2	2	3
PHED 112	Physical Education	0	3	1
		14	8	17

Second Year

Third Semester

ENGL 211 or ENGL 221	Survey of Literature I	3	0	3
BUAD 130	Business Mathematics	3	0	3
AGRI 210	Farm Management	3	0	3
CHEM 111	Introductory Chemistry I	3	2	4
GOVT 211	American National and State Governments I	3	0	3
		15	2	16

Fourth Semester

ENGL 212	Survey of Literature II			
or				
ENGL 222		3	0	3
AGRI 220	Soils and Fertilizers	2	2	3
CHEM 112	Introductory Chemistry II	3	2	4
GOVT 212	American National and State Governments II	3	0	3
CO-OP 211	Cooperative Education	0	15	3
or				
BIOL 210	Entomology	3	3	4
		11-14	7-19	16-17

Total Minimum Credits Required for An Agriculture Major Degree 66-67

BIOLOGICAL SCIENCE

Associate In Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
BIOL 111	Biology I (Zoology)	3	3	4
CHEM 121	General Chemistry & Analysis	3	4	4
ENGL 121	Composition & Rhetoric I	3	0	3
MATH 121 or 132	College Algebra — Plane Trigonometry	3	0	3
HIST 141	The U.S. to 1877	3	0	3
PHED	Physical Education	0	3	1
		15	10	18
	Second Semester			
BIOL 112	Biology II (Botany)	3	3	4
CHEM 122	General Chemistry & Analysis	3	4	4
ENGL 122	Composition & Rhetoric II	3	0	3
MATH 132 or 150	Plane Trigonometry — Analytic Geometry	3	0	3
HIST 142	The U.S. since 1877	3	0	3
PHED	Physical Education	0	3	1
		15	10	18
	Third Semester			
BIOL 110	Environmental Conservation	3	0	3
or				
BIOL 121	Human Anatomy & Physiology	3	2	4
CHEM 211	Organic Chemistry	3	4	4
ENGL 211	Survey of Literature I			
or				
ENGL 221		3	0	3
GOVT 211	American National and State Government I	3	0	3
		15	6	13-14
	Fourth Semester			
BIOL 230	Entomology	3	3	4
or				
BIOL 122	Human Anatomy & Physiology	3	2	4
CHEM 212	Organic Chemistry	3	4	4
ENGL 211	Survey of Literature II			
or				
ENGL 222		3	0	3
GOVT 212	American National and State Government II	3	0	3
		12	9	14

Total Minimum Credits Required for Biological Science Degree 63-64

BUSINESS ADMINISTRATION

Associate in Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ENGL 121	Composition and Rhetoric I	3	0	3
MATH 180	Finite Mathematics	3	0	3
HIST 141	The United States to 1877	3	0	3
	Phys 111, Chem 111, or Biol 111	3	2	4
	*Elective	3	0	3
PHED	Physical Education	0	3	1
		15	5	17
	Second Semester			
ENGL 122	Composition and Rhetoric II	3	0	3
MATH 190	Analysis	3	0	3
HIST 142	The United States since 1877	3	0	3
	Phys 112, Chem 112, or Biol 112	3	2	4
CSCI 110	Introduction to Computer Science	3	2	4
PHED	Physical Education	0	3	1
		15	7	18

	Third Semester			
ENGL 211 or ENGL 221	Survey of Literature I	3	0	3
ACCT 221	Principles of Accounting I	3	1	3
GOVT 211	American National and State Governments I	3	0	3
ECON 111	Principles of Economics I	3	0	3
BUAD 120	Business Law	3	0	3
		15	1	15
	Fourth Semester			
ENGL 212 or ENGL 222	Survey of Literature II	3	0	3
ACCT 222	Principles of Accounting II	3	1	3
GOVT 212	American National and State Governments II	3	0	3
ECON 112	Principles of Economics II	3	0	3
	*Elective	3	0	3
		15	1	15

*Recommended to be taken from the following: SOCI 111, PSYC 120, SPCH 110, or Co-op courses.

Total Minimum Credits Required for a Business Administration Degree 65

MATHEMATICS

Associate In Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ENGL 121	Composition and Rhetoric I	3	0	3
MATH 121	College Algebra —	3	0	3
MATH 132	Plane Trigonometry	3	0	3
HIST 141	The U.S. to 1877	3	0	3
PHED	Physical Education	0	3	1
	Natural Science with Laboratory	3	2-4	4
		15	5-7	17
	Second Semester			
ENGL 122	Composition and Rhetoric II	3	0	3
MATH 150	Analytic Geometry	3	0	3
HIST 142	The U.S. since 1877	3	0	3
PHED	Physical Education	0	3	1

	Natural Science with Laboratory	3	2-4	4
	*Elective	3	0	3
		15	5-7	17

Third Semester

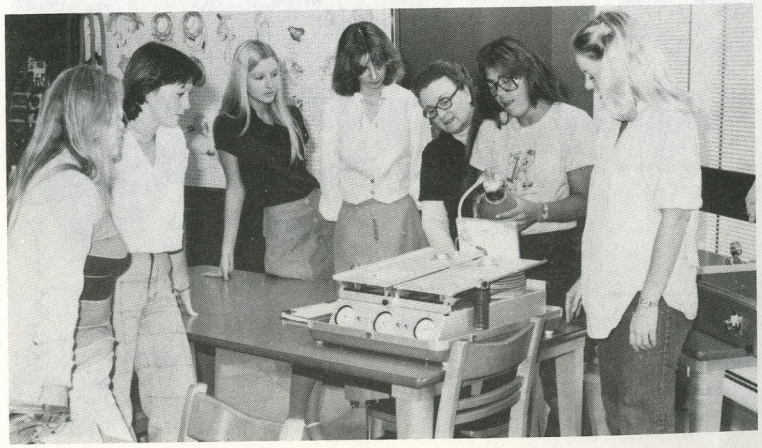
ENGL 211 or ENGL 221	Survey of Literature I	3	0	3
GOVT 211	American National and State Governments I	3	0	3
MATH 213	Differential and Integral Calculus	4	0	4
	Natural Science with Laboratory	3	2-4	4
	*Elective	3	0	3
		16	2-4	17

Fourth Semester

ENGL 212 or ENGL 222	Survey of Literature II	3	0	3
	Natural Science with Laboratory	3	2-4	4
GOVT 212	American National and State Governments II	3	0	3
	Electives	3	0	3
MATH 214	Differential and Integral Calculus	4	0	4
		16	2-4	17

*Co-op courses may be selected as satisfaction of elective credit.

Total Minimum Credits Required for a Mathematics Degree 68



PHYSICAL SCIENCE

Associate In Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
CHEM 121	General Chemistry and Analysis	3	4	4
ENGL 121	Composition and Rhetoric I	3	0	3
HIST 141	The U.S. To 1877	3	0	3
MATH 121 or 132	College Algebra Plane Trigonometry	3	0	3
PHED	Physical Education	0	3	1
		12	7	14
	Second Semester			
CHEM 122	General Chemistry and Analysis	3	4	4
ENGL 122	Composition and Rhetoric II	3	0	3
HIST 142	The U.S. Since 1877	3	0	3
MATH 132 or 150	Plane Trigonometry Analytic Geometry	3	0	3
	*Elective	3	0	3
PHED	Physical Education	0	3	1
		15	7	17
	Third Semester			
CHEM 211 or PHYS 141, 146	Organic Chemistry I / Mechanics and Heat / Mec. and Heat Lab	3	4	4
		3	0	3
		0	3	1
ENGL 211	Survey of Lit. I	3	0	3
GOVT 211	American Nat'l. and State Gov'ts. I	3	0	3
BIOL 111	General Biology I	3	3	4
**MATH 213	Differential Calculus	3	0	3
		15	6-7	17
	Fourth Semester			
CHEM 212 or PHYS 242, 247	Organic Chemistry II / Electricity and Magnetism and Lab	3	4	4
		3	3	3
		0	3	1
ENGL 212	Survey of Lit. II	3	0	3
GOVT 212	American Nat'l and State Gov'ts. II	3	0	3
BIOL 112	General Biology II	3	3	4

**MATH 214	Integral Calculus	3	0	3
	*Elective	3	0	3
		18	6-7	20

*It is recommended that electives be selected from either Chemistry, Physics, Mathematics, or Biology. Physics majors should take MATH 211 or MATH 213 the second semester.
**MATH 211 and 212 may be substituted for MATH 213 and 214.

Total Minimum Credits Required for a Physical Science Degree 68

ASSOCIATE IN APPLIED SCIENCE DEGREES

Degree: Associate in Applied Science (A.A.S.)

Length: Four-Semester (Two-year) Program.

Purpose: Associate in Applied Science Degree (A.A.S.) is awarded to those students who fulfill the requirements in one of the following programs:

- Accounting
- Air Conditioning and Refrigeration
- Child Care
- Computer Science
- Correctional Science
- Court Reporting
- Drafting Technology
- Electronics Instrumentation
- Electronic Technology
- Law Enforcement and Police Administration
- Legal Assistant
- Medical Laboratory Technology
- Mid-Management
- Nursing Home Administration
- Nursing Technology
- Ornamental Horticulture
- Secretarial Science
- Welding

These programs are two-years in length and are designed to prepare the student for immediate occupational employment.

ACCOUNTING

Degree: Associate in Applied Science.

Length: Four-Semester (two years) curriculum.

Purpose: The Associate in Applied Science Degree curriculum in Accounting is designed for persons who seek full-time employment in the accounting field immediately upon completion of the community college curriculum. Both persons who are seeking their first employment in an accounting position and those presently employed in the field but who are seeking promotions, may benefit from this curriculum.

Program Requirements: The first two semesters of the Accounting Program are similar to other curriculums in business. In the second year the student will pursue a specialty in accounting. The curriculum will include technical courses in accounting and related areas. Instruction will include both theoretical and practical applications needed for future success in accounting. Students are urged to consult with the counseling office and their faculty advisor in planning their program and in selecting electives. Upon satisfactory completion of the two-year program the student will be awarded an Associate of Applied Science Degree in Accounting.

Internship Option: The Accounting student may choose to serve an internship during the third and fourth semesters of the program for pay and for college credit.

ACCOUNTING

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ACCT 221	Principles of Accounting I	3	1	3
BUAD 130	General Business Mathematics	3	0	3
SECT 121	Typewriting I	2	3	3
*ENGL 111	Communication Skills	3	0	3
SOCI 111	Principles of Sociology	3	0	3
PHED	Physical Education	0	3	1
		14	8	16
	Second Semester			
ACCT 222	Principles of Accounting II	3	1	3
CSCI 110	Intro. to Computer Science	3	3	4
MMGT 121	Principles of Management	3	0	3
*ENGL 112	Communication Skills	3	0	3
GOVT 211	American National & State Government	3	0	3
PHED	Physical Education	0	3	1
		15	7	17

Third Semester

ACCT 231	Intermediate Accounting I	3	0	3
ACCT 230	Tax and Payroll Accounting	3	0	3
ECON 111	Principles of Economics I	3	0	3
PSYC 120	General Psychology	3	0	3
**ACCT 211	Accounting Internship	0	20	3
or				
Elective		—	—	—
		12	20	15

Fourth Semester

ACCT 232	Intermediate Accounting II	3	0	3
ACCT 240	Cost Accounting or			
ACCT 250	Auditing	3	0	3
ECON 112	Principles of Economics II	3	0	3
BUAD 120	Business Law	3	0	3
**ACCT 212	Accounting Internship	0	20	3
or				
***Elective		—	—	—
		12	20	15

*ENGL 121 and 122 may be substituted if a 4-year degree is planned.
**Two electives such as Introduction to Business, Office Machines, Principles of Real Estate, Personnel Management, Coop courses, etc., may be substituted.
***Co-op courses may be selected as satisfaction of elective credit.

Total Minimum Credits Required for Accounting Major Degree 63

AIR CONDITIONING AND REFRIGERATION

Degree: Associate in Applied Science.

Length: Four-Semester (two-year) Program.

Purpose: The Associate in Applied Science Degree Curriculum in Air Conditioning and Refrigeration is designed to prepare the student for full-time employment immediately upon graduation from the Program. The Air Conditioning and Refrigeration technician is prepared for employment as an engineering assistant in installation, maintenance, research and development in the Air Conditioning and Refrigeration field.

Program Requirements: In addition to the general requirements for admission to the College, entry into the Air Conditioning and Refrigeration Program requires a personal interview with the Department Head of the Air Conditioning and Refrigeration Program.

AIR CONDITIONING AND REFRIGERATION

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ACRH 131	Air Conditioning Fundamentals I	3	0	3
ACRH 133	Air Conditioning & Electrical Circuits I	3	0	3
ACRH 140	Introduction to Refrigeration	3	3	4
MATH 151	Technical Math I	3	0	3
PHYS 133	Technical Physics I	3	3	4
PHED	Physical Education	0	3	1
		15	9	18
	Second Semester			
ACRH 132	Air Conditioning Fundamentals II	3	3	4
ACRH 134	Industrial Electricity or Elective	3	2	4
ACRH 141	Refrigeration Systems Servicing I	3	3	4
ACRH 170	Domestic Refrigeration	3	1	3
*ENGL 111	Communication Skills I	3	0	3
PHED	Physical Education	0	3	1
		16	12	18
	First Summer Session			
ACRH 135	Air Conditioning and Refrigeration Troubleshooting	1	3	2
	Third Semester			
ACRH 242	Refrigeration Systems Servicing II	2	6	4
ACRH 250	Heating and Ventilation	2	6	4
*ENGL 112	Communication Skills II	3	0	3
SOCI III	Principles of Sociology	3	0	3
GOVT 211	American National and State Governments I	3	0	3
		13	12	17

Fourth Semester

ACRH 234	Air Conditioning & Electrical Circuits II	2	6	4
ACRH 260	Heat Load Calculations	3	0	3
ACRH 280	Automotive Air Conditioning	3	3	4
PROD 230	Industrial Management	3	0	3
		11	9	14

*ENGL 121 and 122 should be substituted if a 4-year degree is planned.

Total Credits required for the Air Conditioning & Refrigeration Degree 69

BANKING

Please see Mid-Management, Banking Specialization; Banking Certificate.

CHILD CARE and DEVELOPMENT

Degree: Associate in Applied Science.

Length: Two year program.

Purpose: The curriculum in Child Care and Development has been designed to prepare individuals for career services in day care centers, pre-school programs and related occupations. Supported by a broad general education, training is given to develop professional competence in the area of child care.

Admission Requirements: In addition to the general requirements for admission to the college, entry into the Child Care and Development program requires the following:

A personal interview with the Child Care and Development Department.

Program Requirements: Approximately one-half of the curriculum will include courses in child care with the remaining courses in related areas, general education, and electives. Instruction will include both the theoretical concepts and practical applications needed for future success in child care work or related activities. Students are urged to consult with their faculty advisor and the counseling office in planning their program and selecting electives. Upon satisfactory completion of the program the graduate will be awarded the Associate in Applied Science Degree.

CHILD CARE AND DEVELOPMENT

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
CHCD 110	Pre-School and Day Care Programs	3	0	3
PSYC 130	Child Growth and Development	3	0	3
SOCI 111	Principles of Sociology	3	0	3
*ENGL 111	Communication Skills	3	0	3
BIOL 121	Anatomy and Physiology	3	2	4
PHED	Physical Education	0	2	1
		15	4	17
	Second Semester			
CHCD 140	Child Care Recreation	1	2	2
CHCD 150	Introductory Creative Activities	1	2	2
CHCD 160	Literature for Young Children	1	2	2
CHCD 170	Music for Young Children	1	2	2
*ENGL 112	Communication Skills	3	0	3

BIOL 122	Anatomy and Physiology	3	2	4
PHED	Physical Education	0	2	1
		10	12	16

Third Semester

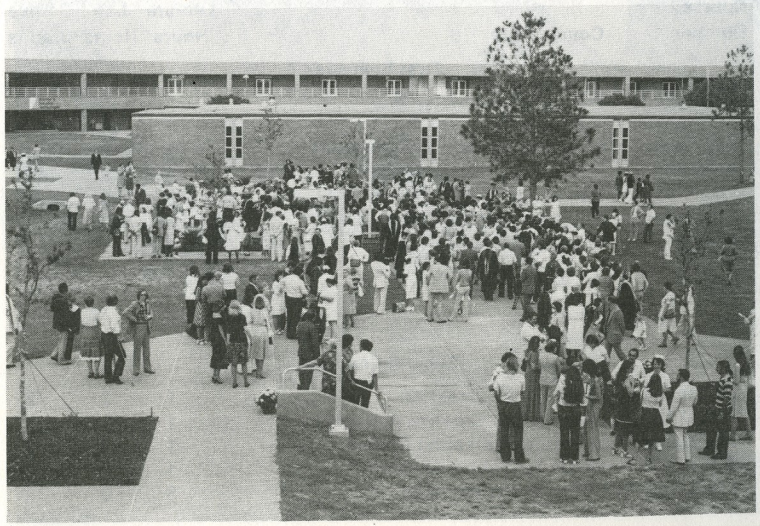
CHCD 200	Exceptional Children or			
CHCD 130	Child Care Services	3	0	3
CHCD 210	Creative Activities II	1	2	2
CHCD 220	Child Nutrition and Health Care	3	0	3
CHCD 240	Child Care and Development I	3	2	4
SOCI 122	Social Problems	3	0	3
		13	4	15

Fourth Semester

CHCD 230	Advanced Child Growth and Development	3	0	3
CHCD 250	Child Care and Development II	3	4	4
**CHCD 260	Seminar and Field Work or			
CHCD 270	Special Project	3	8	4
SOCI 110	Marriage and the Family	3	0	3
	**Elective	3	0	3
		15	12	17

*ENGL 121 and 122 should be substituted if a 4-year degree is planned.
**See advisor prior to registration.

Total Credits required for a
Child Care & Development Major Degree 65



COMPUTER SCIENCE TECHNOLOGY
COMPUTER PROGRAMMING

Degree: Associate in Applied Science Degree.

Length: Four-Semesters or two years.

Purpose: The Computer Science Technology curriculum is designed to provide the types of educational and skill experiences which both industry and the computer manufacturers agree are needed, specifically to develop in students the skills, knowledges, attitudes, and abilities which will enable them to function in positions of responsibility in the current employment market. Special emphasis will be on computer programming.

Program Requirements: The curriculum in Computer Science is a two-year program encompassing instruction in the many areas required for competence as a technician in the Computer Science industry. Approximately one-half of the curriculum will include courses in Computer Technology with the remaining courses in technically related areas: mathematics, business, and general education. This curriculum will provide the student with a broad background qualifying him to perform effectively in several different occupational areas of the Computer Science Technology field. Upon completion of the two-year curriculum, with an overall grade point average of 2.0 for all Computer Science courses attempted, the student will be awarded the Associate in Applied Science Degree with a major in Computer Science Technology, specializing in business computer programming.

COMPUTER SCIENCE (COMPUTER PROGRAMMING)

Associate In Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
CSCI 110	Introduction to Computer Science	3	3	4
CSCI 114	Computer Programming (BASIC) or			
CSCI 115	Computer Operations	3	2	3
ACCT 221	Principles of Accounting I	3	1	3
*MATH 180	Finite Mathematics or			
MATH 121	College Algebra	3	0	3
PHED		0	3	1
Elective		3	0	3
		15	9	17
	Second Semester			
CSCI 130	Computer Programming (Intro. COBOL)	3	2	3
CSCI 170	Structured Programming	3	2	3
ACCT 222	Principles of Accounting II	3	1	3
*MATH 190	Analysis or			

MATH 132	Plane Trigonometry	3	0	3
Elective		3	0	3
		15	5	15

Third Semester

CSCI 120	RPG Programming or			
CSCI 220	Seminar & Project or			
CSCI 260	Mini/Micro Computers	3	2	3
CSCI 230	Computer Programming (Advanced COBOL)	3	2	3
CSCI 240	Systems Analysis	3	2	3
*ENGL 111	Communication Skills I	3	0	3
Elective		3	0	3
		15	6	15

Fourth Semester

CSCI 210	Computer Programming (Advanced FORTRAN)	3	2	3
CSCI 215	Digital Computer Fundamentals or			
CSCI 225	Special Topics	3	2	3
CSCI 250	Computer Programming (Assembly)	3	2	3
ENGL 122	Composition and Rhetoric II or			
**ENGL 112	Communication Skills II	3	0	3
PHED		0	3	1
Elective		3	0	3
		15	9	16

*See advisor prior to registration. Business Programming needs MATH 180-190, Scientific Programming needs MATH 121-132.
**ENGL 121 and 122 should be substituted if a 4-year degree is planned.

Total Credits Required for a Computer Science Major Degree 63

CORRECTIONAL SCIENCE

Degree: Associate in Applied Science.

Length: Two-Year Program

Purpose: The curriculum in Correctional Science has been designed to prepare individuals for career services with the Texas Department of Corrections, with juveniles in institutions and related correctional occupations. Supported by a broad general education, training is given to develop professional competence in the field of contemporary corrections. This curriculum is applicable to both the preparatory student and the experienced correctional worker.

Admission Requirements: In addition to the general requirements for admission to the College, entry into the Correctional Science Program requires the following:

1. A personal interview with the Correctional Science Department.
2. Satisfactory results on required tests.
3. Special Requirements: for employment with correctional agencies, the following qualifications are often prerequisites: (a) excellent physical condition free from any physical or mental condition which might adversely affect acceptance or performance as a correctional officer; (b) normal hearing, color vision, and eye functions; (c) weight in proportion to height; (d) excellent moral character.

Program Requirements: Approximately one-half of the curriculum will include courses in Correctional Science with the remaining courses in related areas, general education, and electives. Instruction will include both the theoretical concepts and practical applications needed for future success in correctional work. Students are urged to consult with their faculty advisor and the counseling office in planning their program and selecting electives. Upon satisfactory completion of the program, the graduate will be awarded the Associate in Applied Science Degree.

CORRECTIONAL SCIENCE

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
CRSC 110	Introduction to Corrections	3	0	3
CRSC 120	Penology	3	0	3
*ENGL 111	Communication Skills	3	0	3
SOCI 111	Principles of Sociology	3	0	3
HIST 141	The United States to 1877	3	0	3
PHED	Physical Education	0	3	1
		15	3	16
	Second Semester			
*ENGL 112	Communication Skills	3	0	3
HIST 142	The United States since 1877	3	0	3

CRSC 130	American Legal System	3	0	3
CRSC 140	Crime and Delinquency	3	0	3
PSYC 120	General Psychology or			
		3	0	3
PHED	Physical Education	0	3	1
		15	3	16

Third Semester

CRSC 150	Introduction to the Criminal Justice System	3	0	3
CRSC 210	Probation, Pardons, and Parole	3	0	3
CRSC 220	Institutional Procedures, Jails and Detention	3	0	3
SOCI 122	Social Problems	3	0	3
GOVT 211	American National and State Government	3	0	3
		15	0	15

Fourth Semester

CRSC 230	Contemporary Practices in Corrections	3	0	3
CRSC 240	Corrections I. Organization and Operations	3	0	3
CRSC 250	Corrections II. Theory and Practice	3	0	3
PSYC 250	Fundamentals of Behavior Pathology	3	0	3
GOVT 212	American National and State Government	3	0	3
		15	0	15

*ENGL 121 and 122 should be substituted if a 4-year degree is planned.

Total Minimum Credits for the Correctional Science Degree 62

COURT REPORTING

Degree: Associate in Applied Science.

Length: Four-Semester (Two-Year) Curriculum, plus one summer term.

Purpose: The Associate in Applied Science Degree curriculum in Court Reporting is designed to prepare students for job entry positions in court reporting; to prepare students for positions related to court reporting, i.e., transcribers, note-readers, and typists; and to assist in preparing students for job entry positions as legal secretaries. The purpose of this curriculum is to meet a need which exists due to the greatly expanding Gulf Coast area, the increasing demand for qualified court reporters throughout the nation, and the lack of institutions to provide the necessary training.

Program Requirements: The curriculum is designed to run for two years. However, the machine shorthand courses will be offered in such a way as to allow students to progress at their own individual rates. Maximum use of live dictation exists in the program, as practice tapes are encouraged for use off-campus. Accommodations will be made for students to secure credit for work previously accomplished through the credit-by-examination procedure.

Program Objectives: The objective of the two-year curriculum is for the student to attain the machine shorthand speed of 225 words/minute, with material equivalent to standards of the National Shorthand Reporters Association (NSRA). An accompanying objective will be the attainment of the Legal Stenography Certificate at the end of the Second Semester of the Program for those students who so desire.

COURT REPORTING

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
SECT 122	Typing II	2	3	3
CTRP 111	Machine Shorthand Theory	6	4	6
CTRP 121	Law and Legal Terminology	4	1	3
ENGL 111	Communication Skills I	3	0	3
CTRP 141	Grammar and Punctuation I	2	0	2
PHED	Physical Education	0	2	1
		17	10	18
	Second Semester			
SECT 220	Typing III	2	3	3
CTRP 112	Machine Shorthand I (60-80-100)	6	4	6
CTRP 130	Transcription I	0	5	2
CTRP 122	Medical Terminology	4	1	3
ENGL 112	Communication Skills II	3	0	3

CTRP 142	Grammar and Punctuation II	2	0	2
PHED	Physical Education	0	2	1
		17	15	20

Summer Semester

CTRP 120	Machine Shorthand II (120-140)	6	4	6
CTRP 140	Transcription II	0	5	2
GOVT 211	American National & State Government	3	0	3
		9	9	11

Third Semester

SOCI 111	Principles of Sociology	3	0	3
CTRP 211	Machine Shorthand III (160-180)	6	4	6
CTRP 210	Transcription III	0	5	2
CTRP 221	Courtroom Procedures I	3	2	3
CTRP 225	Technical Dictation	3	2	3
		15	13	17

Fourth Semester

CTRP 212	Machine Shorthand IV (200-225)	6	4	6
CTRP 240	General Office Practices	3	2	3
CTRP 220	Transcription IV	0	5	2
CTRP 222	Courtroom Procedures II	3	2	3
		12	13	14

· Total Credits Required for Associate of Arts Degree in Court Reporting 80

A typing speed of 60 wpm is required for graduation, and an internship of 40 hours will be required of each student for graduation.

When typing requirements have been fulfilled, the student is encouraged to utilize the tape library for home practice.

DRAFTING TECHNOLOGY

Degree: Associate in Applied Science.

Length: Four-Semester (Two-Year) program.

Purpose: Drafting technicians work on a team with engineers, scientists, supervisors, and skilled craftsmen, converting theories and ideas into products and processes. Drafting technicians participate in designing and developing machines, processes, materials, and services for our increasingly complex world of work. They consider why things work as well as how things work. Technician jobs frequently require the ability to apply scientific principles and to solve design, process, or service problems. The drafting technician may be required to have extensive knowledge in such fields as welding, home building, machine shops, instrumentation, process equipment, and fabrication.

Program Requirements: The drafting technician is an essential member of the technician-engineering team. He/she should be proficient in both technical knowledge and skills involving drawing instruments as schematics, working drawings, and blueprints are developed. This program provides an opportunity for students to specialize in several phases of drafting, with proper qualifications for employment as Junior Draftsmen.

DRAFTING TECHNOLOGY

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
First Semester				
DRFT 111	Technical Drafting	2	6	4
DRFT 105 or	Blueprint Reading I			
DRFT 106	Blueprint Reading II	2	1	2
DRFT 241	Architectural Drafting I	2	6	4
*ENGL 111	Communication Skills I	3	0	3
MATH 151	Technical Math I	3	0	3
		12	13	16
Second Semester				
DRFT 130	General Drafting	2	6	4
DRFT 120	Descriptive Geometry	2	4	3
DRFT 251	Machine Drafting I	2	6	4
*ENGL 112	Communication Skills II	3	0	3
MATH 152	Technical Math II	3	0	3
		12	16	17

Third Semester

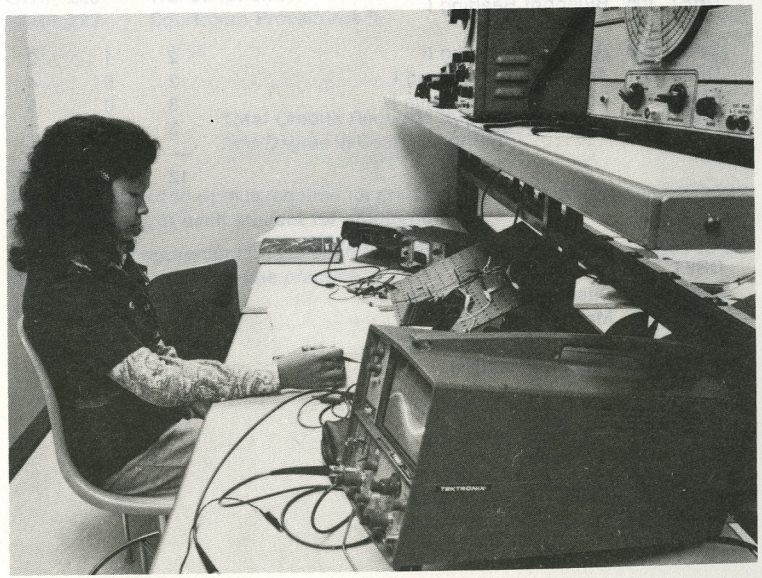
DRFT 221	Structural Drafting I	2	6	4
DRFT 211	Pipe Drafting I	2	6	4
**DRFT	Elective	2	6	4
GOVT 211	American National and State Govt. I	3	0	3
***	Related Elective			3
PHED	Physical Education	0	3	1
		—	—	—
				19

Fourth Semester

DRFT 260	Surveying	2	3	3
SOCI 111	Principles of Sociology	3	0	3
***DRFT	Elective	2	6	4
	Free Elective			3
DRFT 270	Construction Drafting	2	6	4
PHED	Physical Education	0	3	1
		—	—	—
				18

*ENGL 121 and 122 should be substituted if a 4-year degree is planned.
**Approval of Department Head.
***May be in areas of Drafting, Math, Physics, Computer Science, Electronic Technology, Air Conditioning, Welding and Department approval.

Total Credits Required for a Drafting Technology Major Degree 70



Selection for Drafting electives:

DRFT 110 — Fundamentals of Drafting
DRFT 170 — Industrial Design
DRFT 281 — Special Problems I
DRFT 282 — Special Problems II
DRFT 212 — Pipe Drafting II
DRFT 222 — Structural Drafting II
DRFT 231 — Electrical Drafting I
DRFT 232 — Electrical Drafting II
DRFT 242 — Architectural Drafting II
DRFT 252 — Machine Drafting II
DRFT 265 — Map Drafting
DRFT 275 — Industrial Model Construction

ELECTRONIC TECHNOLOGY

Degree: Associate in Applied Science

Length: Four-Semesters (Two-Year) Program

Purpose: The Associate of Applied Science Degree curriculum including Electronics Technology is designed to prepare the student for full-time employment immediately upon graduation from the Program. The electronics technician is prepared for employment as an engineering assistant in production, maintenance, and research and development in the electronics field. Options in the curriculum allow for designing a program for those desiring transfer to baccalaureate degree granting institutions.

Program Requirements: In addition to the general admission requirements established for Alvin Community College, entry into the Associate in Applied Science curriculum in Electronic Technology requires a proficiency in algebra. Students who require increased proficiency in algebra will be required to complete the development mathematics I course prior to enrolling in the ELEC 130 and ELEC 135.

ELECTRONIC TECHNOLOGY

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ELEC 110	Introduction to Electronic Technology	3	0	3
ELEC 115	Introduction to Electronic Technology Laboratory	0	3	1
ELEC 120	DC Theory and Circuit Analysis	3	0	3
ELEC 125	DC Theory and Circuit Analysis Lab	0	3	1
ELEC 150	Electronic Problems	3	0	3
PHYS 133	Technical Physics I	3	3	4
*ENGL 111	Communication Skills	3	0	3
PHED	Physical Education	0	3	1
		—	—	—
		15	12	19

Second Semester

ELEC 130	AC Theory and Circuit Analysis	3	0	3
ELEC 135	AC Theory and Circuit Analysis Lab	0	3	1
ELEC 140	Electronics I	3	0	3
ELEC 145	Electronics I Laboratory	0	3	1
ELEC 160	Elec Drafting & Design	3	0	3
ELEC 165	Elec Drafting & Design Lab	0	3	1
PHYS 134	Technical Physics II	3	3	4
*ENGL 112	Communication Skills	3	0	3
		15	12	19

Third Semester

ELEC 210	Electronics II	3	0	3
ELEC 215	Electronics II Laboratory	0	3	1
ELEC 230	Electronics Instrumentation and Measurement Techniques	3	0	3
ELEC 235	Electronics Instrumentation and Measurement Techniques Lab	0	3	1
CSCI 110	Introduction to Computer Science	3	2	4
HIST 141	US History to 1877 or			
GOVT 211	American Nat'l & State Governments I	3	0	3
MATH 121	College Algebra	3	0	3
		15	8	18

Fourth Semester

ELEC 220	Electronics III	3	0	3
ELEC 225	Electronics III Laboratory	0	3	1
ELEC	Electronic Elective	0	0	3
MATH 132	Plane Trig	3	0	3
HIST 142	US History Since 1877 or			
GOVT 212	American Nat'l & State Governments II	3	0	3
**SOCI 111	Principles of Sociology or approved elective	3	0	3
PHED	Physical Education	0	3	1
		12	6	16

*ENGL 121 or 122 should be substituted if a 4-year degree is planned.
**See advisor prior to registration.

Total Credit Requirements for Electronic Technology Major Degree 72

LAW ENFORCEMENT AND POLICE ADMINISTRATION

Degree: Associate in Applied Science

Length: Four-Semesters (Two-Year) Program.

Purpose: The curriculum in Law Enforcement and Police Administration has been designed to prepare individuals for career services in law enforcement and related occupations. Supported by a broad general education, training is given to develop professional competence in the fields of law enforcement administration, police science, the prevention and control of delinquency and crime, correctional administration and industrial security administration. This curriculum is applicable to both the preparatory student and the experienced officer.

Admission Requirements: In addition to the general requirements for admission to the college, entry into the Police Science Program requires the following:

1. A personal interview with the Law Enforcement Department.
2. Satisfactory results on required tests.
3. Special Requirements: for employment with law enforcement agencies, the following qualifications are prerequisites: (a) Excellent physical condition free from any physical or mental condition which might adversely affect acceptance or performance as a law enforcement officer; (b) Normal hearing, color vision, and eye functions with visual acuity not less than 20/40 in either eye without correction; (c) Weight in proportion to height (Very few law enforcement agencies will accept male applicants who are less than 5'8" in height); and (d) Excellent moral character—no convictions in any crime involving moral turpitude or any felony and no excessive number of traffic citations. (Background investigation will be conducted by the employing agency to confirm the foregoing).

Program Requirements: Approximately one-half of the curriculum will include courses in law enforcement with the remaining courses in related areas, general education, and electives. Instruction will include both the theoretical concepts and practical applications needed for future success in law enforcement or related activities. Students are urged to consult with their faculty advisor and the

counseling office in planning their program and selecting electives. Upon satisfactory completion of the program, the graduate will be awarded the Associate in Applied Science Degree.

Law Enforcement and Police Administration

Associate In Applied Science Degree Program

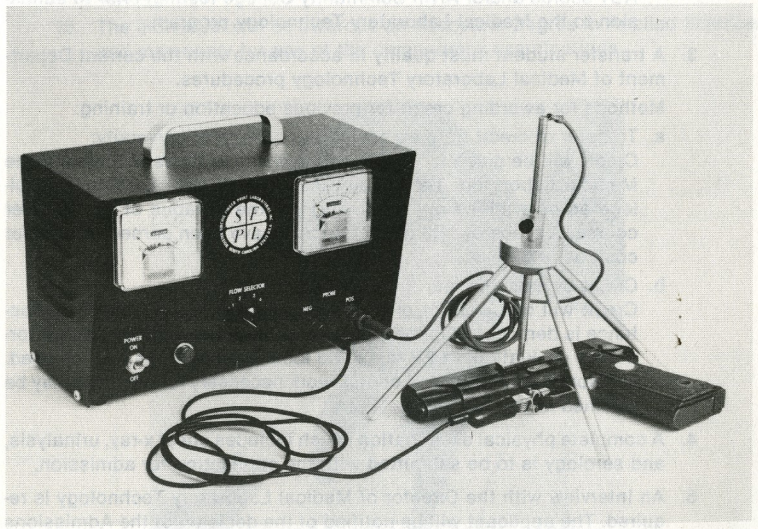
Law Enforcement

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
LWNF 110	Introduction to Law Enforcement	3	0	3
LWNF 120	Criminal Investigation	3	0	3
LWNF 130	Legal Aspects of Law Enforcement	3	0	3
*ENGL 111	Communication Skills I	3	0	3
HIST 141	The United States to 1877	3	0	3
PHED	Physical Education	0	3	1
		15	3	16
	Second Semester			
*ENGL 112	Communication Skills	3	0	3
HIST 142	The United States since 1877	3	0	3
LWNF 140	Criminal Procedure and Evidence	3	0	3
LWNF 150	Police Role in Crime and Delinquency	3	0	3
**SOCI 111	Principles of Sociology or			
PSYC 120	General Psychology	3	0	3
PHED	Physical Education	0	3	1
		15	3	16
	Third Semester			
BIOL 111	General Biology I or (Foreign Language or General Elective)	3	3	4
LWNF 220	Police Organization and Administration	3	0	3
LWNF 230	Patrol Administration	3	0	3
ENGL 211	Survey of Literature I (or Approved Elective)	3	0	3
GOVT 211	American National and State Governments I	3	0	3
		15	3	16

	Fourth Semester			
LWNF 240	Police — Community Relations	3	0	3
LWNF 250	Traffic Law and Investigation	3	0	3
LWNF 270	Juvenile Delinquency	3	0	3
GOVT 212	American National and State Governments II	3	0	3
BIOL 112	General Biology II or (Foreign Language or General Elective)	3	3	4
		15	3	16

*ENGL 121 and 122 should be substituted if a 4-year degree is planned.
**See advisor prior to registration. Co-op courses may be selected as satisfaction of elective courses.

Total Credit Requirements for Law Enforcement & Police Adm. Major Degree..... 64



MEDICAL LABORATORY TECHNICIAN

Degree: Associate in Applied Science in Medical Laboratory Technology.

Length: Five Semesters (Two Year Program)

Purpose: The curriculum in Medical Laboratory Technology is designed to prepare individuals for careers associated with allied health fields by providing an approved, formalized educational program directed toward an Associate Degree in Applied Science. Upon completion of the two year program in Medical Laboratory Technology, the individual will be awarded an Associate Degree in Applied Science and may apply to the American Society of Clinical Pathologists for the Board of Registry examination for Medical Laboratory Technician (MLT).

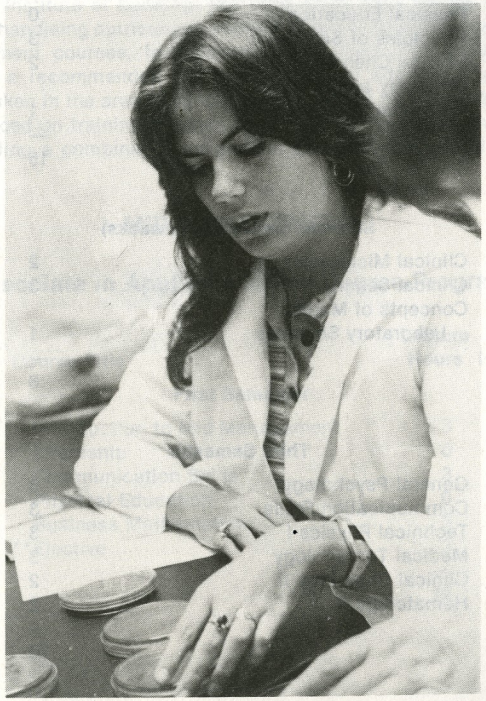
Admission Requirements: In addition to the general requirements for admission to Alvin Community College, entry into the Medical Laboratory Technology program requires the following:

1. All students will be required to write the American College Test.
2. a. A composite score of 16 must be achieved on the ACT, or 713 on the SAT, or a grade point average of 2.5 in nine or more semester hours of credit in courses approved for the Medical Laboratory Technology curriculum.
   b. A student must be eligible to enter MATH 130 or 110 (as indicated by ACT scores and/or Alvin Community College testing) prior to admission to the Medical Laboratory Technology program.
3. A transfer student must qualify in accordance with the current Department of Medical Laboratory Technology procedures.

   Methods for awarding credit for previous education or training:

   a. Transfer of credit from an accredited college or university:
      Credit will be given for courses equivalent to those included in the Medical Laboratory Technology Program at Alvin Community College as determined by examination of the syllabus of the transfer course. A grade of "C" or better must have been earned in transfer courses.
   b. Credit by examination:
      Credit will be given for previous education or experience if competence is demonstrated through an approved examination and performance evaluation. CLEP tests and local examinations may be used. No more than 50% of the course work necessary for a degree may be attained in this manner.
4. A complete physical examination which includes chest x-ray, urinalysis, and serology is to be submitted with the application for admission.
5. An interview with the Director of Medical Laboratory Technology is required. The applicant will be notified of the decision of the Admissions Committee.
6. A MLT student will abide by the curriculum requirements of the MLT department at the time they are accepted into the MLT program. Curriculum requirements of the MLT program take precedence over the Bulletin under which the student entered Alvin Community College.
7. After a student has enrolled, the required MLT courses must be completed in proper sequence.
8. Prior to entering the MLT program, a student may take several or all of the general liberal arts courses required in the MLT program.

9. Any required course completed more than five years previous to the time the student is accepted may not satisfy degree requirements.
10. A MLT student is required to satisfactorily complete both theory and clinical experience of the MLT course. In the event either theory or clinical is evaluated unsatisfactorily, the student will be required to repeat the course in its entirety the next time offered.
11. No grade below a "C" will be acceptable in MLT or biology courses.
12. A MLT student must maintain a grade point average of at least 2.00 in order to progress in the MLT program.
13. A student may be terminated from the program if clinical performance is unsatisfactory.
14. A student not successfully completing a MLT course for the second time will be subject to redirection.
15. If a student is not enrolled in a MLT course for a semester, application for readmission to the MLT program is required.
16. A student is required to earn at least 24 resident semester hours at Alvin Community College.
17. Hospitalization insurance, malpractice insurance, laboratory uniforms, and transportation to and from the various health facilities are the responsibilities of the student.
18. The individual will be awarded an Associate Degree in Applied Science and may apply for any of the competency examinations.



MEDICAL LABORATORY TECHNOLOGY

Associate in Applied Science Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
BIOL 121	Anatomy and Physiology I	3	2	4
*CHEM 110	Chemistry for Allied Health Sciences	3	2	4
*MATH 130	Mathematics for Allied Health Sciences	3	0	3
PHED	Physical Education	0	3	1
HMLT 115	Phlebotomy-Serology-Immunology	1	4	2
HMLT 113	Hematology I	2	12	5
		12	23	19
	Second Semester			
BIOL 122	Anatomy and Physiology II	3	2	4
*ENGL 111	Communication Skills	3	0	3
*MATH 110 or *MATH 121	Developmental Mathematics or College Algebra	3	0	3
PHED	Physical Education	0	3	1
SOCI 111	Principles of Sociology	3	0	3
HMLT 111	Clinical Chemistry I	2	4	3
HMLT 116	Urinology and Clinical Microscopy	1	4	2
		15	13	19
	Summer Semester (12 weeks)			
HMLT 117	Clinical Microbiology I	2	4	3
HMLT 119	Clinical Seminar	3	4	3
HMLT 120	Concepts of Medical Laboratory Sciences	1	0	1
		6	8	7
	Third Semester			
PSYC 120	General Psychology	3	0	3
*ENGL 112	Communication Skills	3	0	3
*PHYS 133	Technical Physics I	3	2	4
NURS 210	Medical Terminology	3	0	3
HMLT 112	Clinical Chemistry II	2	4	3
HMLT 114	Hematology II	2	4	3
		16	10	19

	Fourth Semester			
HMLT 211	Clinical Instrumentation	2	10	4
HMLT 212	Immuno-hematology	1	4	2
HMLT 118	Clinical Microbiology II	2	10	4
		5	24	10

Total Credit Requirements for Medical Laboratory Technician Major Degree 74

*ENGL 121, 122, MATH 121, 132, CHEM 121, 122, and PHYS 121, 122 may be substituted if a 4-year degree is planned.

MID-MANAGEMENT

Degree: Associate in Applied Science

Length: Four Semester (Two-year) Program

Purpose: The Mid-Management Program has been designed to prepare individuals for career occupations in the fields of Banking Production, Real Estate, and Retailing. The program is applicable to both the preparatory student and the individual currently working.

Program Requirements: The Banking curriculum follows the requirements of the American Institute of Banking in providing the Basic and Standard certificates of the American Institute of Banking. The Production, Real Estate, Retailing, and Fashion Merchandising curriculums contain a core of required courses including four management courses, four semesters of internship, general education courses, and a recommended list of electives. In addition, four specialized courses are taken in the area of specialization chosen by the student. Emphasis is thereby placed on training the individual for a particular specialized occupation by providing a combination of general courses, specialized courses, and internships.

MID-MANAGEMENT

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
MMGT 111	Introduction to Mid-Management	3	0	3
MMGT 112	Internship	0	20	3
*ENGL 111	Communication Skills	3	0	3
PHED	Physical Education	0	3	1
BUAD 130	Business Mathematics	3	0	3
**Elective		3	0	3
		12	23	16

Second Semester

MMGT 121	Principles of Management	3	0	3
MMGT 122	Internship	0	20	3
*ENGL 112	Communications Skills	3	0	3
PHED	Physical Education	0	3	1
PSYC 120	General Psychology	3	0	3
	**Elective	3	0	3
		12	23	16

Third Semester

MMGT 211	Personnel Management	3	0	3
MMGT 212	Internship	0	20	3
SOCI 111	Principles of Sociology			
or				
ECON 111	Principles of Economics I	3	0	3
	**Elective	6	0	6
		12	20	15

Fourth Semester

MMGT 221	Problems in Management	3	0	3
MMGT 222	Internship	0	20	3
GOVT 211	American National and State Government I			
or				
ECON 112	Principles of Economics II	3	0	3
	**Elective	6	0	6
		12	20	15

*ENGL 121 or 122 should be substituted if a 4-year degree is planned.
**Suggested electives are ACCT, 221, 222, BUAD 110, 120, CSCI 110, MATH 180, 190, REAL 230, SECT 121, 150.

Total for 2-year curriculum 62

MID MANAGEMENT BANK SPECIALIZATION

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
BANK 130	Principles of Bank Operations	3	0	3
ECON 111	Principles of Economics I	3	0	3
*ENGL 111	Communication Skills I	3	0	3
ACCT 221	Principles of Accounting I	3	1	3
BUAD 130	General Business Mathematics	3	0	3
PHED	Physical Education	0	3	1
	Total	15	4	16

ADDITIONAL REQUIREMENTS FOR AIB BASIC CERTIFICATE

Second Semester

BANK 140	Money and Banking	3	0	3
*ENGL 112	Communication Skills II	3	0	3
ACCT 222	Principles of Accounting II	3	1	3
BANK 280	Teller Training Seminar	3	0	3
ECON 112	Principles of Economics II	3	0	3
PHED	PHYSICAL Education	0	3	1
	Total	15	4	16

Third Semester

MMGT 111	Introduction to Mid Management	3	0	3
**MMGT 112	Internship	0	20	3
CSCI 110	Introduction to Computer Science	3	3	4
PSYC 120	General Psychology	3	0	3
SOCI 111	Principles of Sociology	3	0	3
	Total	12	23	16

ADDITIONAL REQUIREMENTS FOR AIB STANDARD CERTIFICATE

Bank Specialization

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	Fourth Semester			
MMGT 121	Principles of Management	3	0	3
**MMGT 122	Internship	0	20	3
BANK 230	Marketing for Bankers	3	0	3
GOVT 211	American National & State Government I	3	0	3
	Elective	3	0	3
	Total	12	20	15

*These courses correspond to AIB courses: Bank Letters and Reports and Effective English. ENGL 121 and 122 may be substituted if a 4-year degree is planned.
**In lieu of internship, the student may elect to substitute electives approved by the department of any banking functions courses. Suggestions include:

BANK 150 Analyzing Bank Financial Statements
BANK 240 Bank Investments
BANK 250 Credit Administration
BANK 260 Supervision and Personnel Administration
BANK 270 Installment Credit

Total Credit Requirements for Bank Specialization Major Degree..... 63

FASHION MERCHANDISING

DEGREE: Associate in Applied Science

LENGTH: Four-Semester (two-year) Curriculum

PURPOSE: The Fashion Merchandising Curriculum is designed to develop an overview of the fashion industry, its principles, and procedures. The graduate of this program could expect to continue a trend of upward mobility in the field of Fashion Merchandising. Either the person currently working in a fashion-related area or the immediate post high school student interested in fashion merchandising will find this curriculum applicable.

PROGRAM REQUIREMENTS: The Fashion Merchandising Curriculum combines a careful blending of fashion merchandising principles, fashion merchandising courses, and management courses such as Introduction to Management, Principles of Management, Personnel Management and Problems in Management with general education courses such as two semesters of communications skills and two semesters of social science to provide the student a balanced education and a strong marketable skill. In addition, the students will serve four semesters of internship to combine practical experience with his class instruction. The internship will require the intern to work a minimum of twenty hours per week at an approved work station. Upon satisfactory completion of the program, the graduate will be awarded the Associate in Applied Science Degree.

MID-MANAGEMENT
FASHION MERCHANDISING SPECIALIZATION

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
MMGT 111	Introduction to Mid Management	3	0	3
*FASH 112	Internship	0	20	3
**ENGL 111	Communication Skills I	3	0	3
FASH 130	Introduction to Fashion Merchandising	3	0	3
SOCI 111	Principles of Sociology	3	0	3
PHED	Physical Education	0	2	1
	Total	12	22	16
	Second Semester			
MMGT 121	Principles of Management	3	0	3
*FASH 122	Internship	0	20	3
**ENGL 112	Communication Skills II	3	0	3
BUAD 130	General Business Mathematics	3	0	3
FASH 140	Fashion Buying and Merchandising	3	0	3
PHED	Physical Education	0	2	1
	Total	12	22	16

	Third Semester			
MMGT 211	Personnel Management	3	0	3
FASH 212	Internship	0	20	3
FASH 210	Fashion Sales Promotion	3	0	3
GOVT 211	American National and State Government			
or				
ECON 111	Principles of Economics I	3	0	3
PSYC 120	General Psychology	3	0	3
	Total	12	20	15
	Fourth Semester			
MMGT 221	Problems in Management	3	0	3
FASH 222	Internship	0	20	3
FASH 220	Textiles	3	0	3
FASH 230	Fashion Fundamentals	3	0	3
	***Elective	3	0	3
	Total	12	20	15

*These courses replace MMGT internship classes.
**ENGL 121 and 122 should be substituted if a 4-year degree is planned.
***Suggested electives include RETL 130, SECT 130, BUAD 120.

Total Credit Requirements for Fashion Merchandising Degree 62

MID-MANAGEMENT
PRODUCTION SPECIALIZATION

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
MMGT 111	Introduction to Mid-Management	3	0	3
MMGT 112	Internship	0	20	3
	*Elective	3	0	3
**ENGL 111	Communication Skills I	3	0	3
SOCI 111	Principles of Sociology	3	0	3
PHED	Physical Education	0	3	1
		12	23	16
	Second Semester			
MMGT 121	Principles of Management	3	0	3
MMGT 122	Internship	0	20	3
**ENGL 112	Communication Skills II	3	0	3
*BUAD 130	Business Math	3	0	3

GOVT 211	American National and State Government I	3	0	3
PHED	Physical Education	0	3	1
		12	23	16

Third Semester

MMGT 211	Personnel Management	3	0	3
MMGT 212	Internship	0	20	3
PROD 230	Industrial Management	3	0	3
ECON 111	Principles of Economics I	3	0	3
PSYC 120	General Psychology	3	0	3
		12	20	15

Fourth Semester

MMGT 221	Problems in Management	3	0	3
MMGT 222	Internship	0	20	3
PROD 240	Production Planning and Control	3	0	3
ECON 112	Principles of Economics II	3	0	3
	Elective	3	0	3
		12	20	15

*MATH 180 and MATH 190 may be substituted if a 4-year degree is planned.
**ENGL 121 and 122 may be substituted if a 4-year degree is planned.

Total for two-year curriculum 62

MID-MANAGEMENT
REAL ESTATE SPECIALIZATION

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
MMGT 111	Introduction to Mid-Management	3	0	3
MMGT 112	Internship	0	20	3
REAL 130	Principles of Real Estate	3	0	3
*ENGL 111	Communication Skills I	3	0	3
REAL 140	Real Estate Mathematics	3	0	3
PHED	Physical Education	0	3	1
		12	23	16

Second Semester

MMGT 121	Principles of Management	3	0	3
MMGT 122	Internship	0	20	3
BUAD 130	Business Mathematics	3	0	3
*ENGL 112	Communication Skills II	3	0	3
REAL 220	Real Estate Practice	3	0	3
PHED	Physical Education	0	3	1
		12	23	16

Third Semester

MMGT 211	Personnel Management	3	0	3
MMGT 212	Internship	0	20	3
REAL 240	Real Estate Finance	3	0	3
PSYC 120	General Psychology	3	0	3
SOCI 111	Principles of Sociology			
or				
ECON 111	Principles of Economics I	3	0	3
		12	20	15

Fourth Semester

MMGT 221	Problems in Management	3	0	3
MMGT 222	Internship	0	20	3
REAL 250	Real Estate Brokerage	3	0	3
REAL 260	Real Estate Appraisal	3	0	3
GOVT 211	American National and State Government			
or				
ECON 112	Principles of Economics II	3	0	3
		12	20	15

*ENGL 121 and 122 may be substituted if a 4-year degree is planned.

Total for 2-year curriculum 62

MID-MANAGEMENT
RETAIL SPECIALIZATION

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
MMGT 111	Introduction to Mid-Management	3	0	3
MMGT 112	Internship	0	20	3
RETL 130	Principles of Retailing	3	0	3
*ENGL 111	Communication Skills I	3	0	3

SOCI 111	Principles of Sociology			
or				
ECON 111	Principles of Economics I	3	0	3
PHED	Physical Education	0	3	1
		12	23	16

Second Semester

MMGT 121	Principles of Management	3	0	3
MMGT 122	Internship	0	20	3
BUAD 130	Business Mathematics	3	0	3
*ENGL 112	Communication Skills II	3	0	3
GOVT 211	American National and State Government			
or				
ECON 112	Principles of Economics II	3	0	3
PHED	Physical Education	0	3	1
		12	23	16

Third Semester

MMGT 211	Personnel Management	3	0	3
MMGT 212	Internship	0	20	3
RETL 230	Principles of Marketing	3	0	3
RETL 240	Advertising	3	0	3
PSYC 120	General Psychology	3	0	3
		12	22	15

Fourth Semester

MMGT 221	Problems in Management	3	0	3
MMGT 222	Internship	0	20	3
RETL 250	Selling and Salesmanship	3	0	3
RETL 260	Retail Mdse. Management	3	0	3
	*Elective	3	0	3
		12	20	15

*ENGL 121 and 122 may be substituted if a 4-year degree is planned.

Total for 2-year curriculum..... 62

NURSING

Degree: Associate in Applied Science

Length: Two Year Program

Purpose: The aim of the Associate Degree Nursing Program (ADN) is to prepare the graduate to give direct patient care as a member of the health team, in hospitals and other health-care facilities. The program includes a background in general education and skills related to patient care. The graduate is competent to function in nursing situations utilizing the nursing process which involves problem-solving associated with patient care.

At the completion of a minimum of two (2) academic years and all program requirements, the graduate is qualified to make application to write the State Board Test Pool Examination to become a Registered Nurse (RN) in Texas.

Admission Requirements for the Associate Degree Nursing Program:

To be considered for admission to the Associate Degree Nursing Program, the applicant must:

1. Make applications to the college and fulfill the admission requirements for enrolling in Alvin Community College.
2. After all academic deficiencies have been removed, the applicant will make application to the ADN program.
3. An applicant must have a personal interview with a member, or members, of the admission committee and receive a recommendation for admission.
4. Possess the attributes necessary to become a professional nurse as ascertained by a battery of tests, a physical examination and a personal interview. Tests will include the four (4) tests on the National League for Nursing's Pre-Nursing and Guidance Examination (PNG).
5. Score 16 or higher on ACT composite *OR*
6. Attain an overall grade point average (GPA)* of 2.5 on all courses taken at Alvin Community College (excluding developmental courses) and including at least one (1) natural science course required in the nursing curriculum.
7. Any science or nursing course completed more than five (5) years previous to the time the student is accepted, will not satisfy requirements for a degree in nursing.
8. Former students will not be allowed a third attempt in the nursing program.
9. Transfer students and applicants attempting to re-enter nursing school must meet the above admission criteria. Transfer students will be admitted on a probationary status on a one-time only basis.

*The overall GPA will be computed on all hours attempted at ACC in which a grade of A, B, C, D, F, or WF was recorded. If a course is repeated, both attempts will be computed.

Progression Policies:

1. Nursing students will abide by the admission and curriculum requirements of the nursing department at the time they are admitted or readmitted to the Associate Degree Nursing Program. Requirements of the nursing (ADN) program take precedence over the catalogue requirements under which the student entered Alvin Community College.

2. Once a student has enrolled in the ADN program, all nursing courses and related courses must be completed in proper sequence as shown in the catalogue and degree plan.
3. An ADN student is required to satisfactorily complete theory, laboratory and clinical experience of all nursing courses in order to earn a passing grade. A student will be terminated from the program if clinical or laboratory performance is unsatisfactory as determined by the instructors in these areas. This action may be taken at any time during the semester or at the end of the semester.
4. A student will be permitted only two (2) attempts in a science or nursing course. An attempt is defined as any course that is recorded on the transcript.
5. No grade below a "C" will be acceptable for progression in nursing or science courses.
6. A minimum grade of 75% must be attained in each required nursing course to achieve a grade of "C".
7. A student must achieve an overall GPA of 2.5 on all courses (excluding developmental courses) taken at A.C.C. in order to progress to the next nursing course.
8. A student requiring hospitalization or sustaining an injury will be required to obtain a written statement from his/her physician verifying that the health status of the student is adequate for safe performance in the clinical agency. A student may not be allowed to return to the clinical area if he/she must be on medications.
9. A student who is pregnant may be barred from clinical agencies due to the hospital's policies. If allowed in the hospitals during the early months of pregnancy, she must present a physician's statement giving evidence of her ability to perform the work required.
10. A student who has accumulated five (5) days of absences in nursing classes, either in theory or lab or a combination of both, within a semester, will be dropped.

NURSING

Associate in Applied Science Degree Program

FIRST YEAR

Summer Semester I

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
BIOL 121	Anatomy and Physiology I	3	2	4
PHED	Physical Education	0	3	1
		3	5	5

Summer Semester II

BIOL 122	Anatomy and Physiology II	3	2	4
PHED	Physical Education	0	3	1
		3	5	5

The Summer session is optional, but strongly recommended; however, students electing not to enroll during the summer will be required to complete these courses offered at times designated by the nursing department.

A new class starts each September and each January. Applicants for the January class should consult the Counseling Center concerning the academic courses.

Fall Semester

*ENGL 111	Communication Skills	3	0	3
NURS 110	Introduction to Nursing	4	12	8
CHEM 110	Chemistry for Allied Health Sciences	3	2	4
or				
CHEM 121	General Chemistry & Analysis	3	4	4
		10	14	15

Spring Semester

*ENGL 112	Communication Skills	3	0	3
BIOL 225	Basic Microbiology	3	3	4
NURS 211	Medical/Surgical Nursing I	4	12	8
		10	15	15

SECOND YEAR

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	Summer Semester I			
NURS 130	Psychiatric Nursing (12 weeks)	4	8	5
PSYC 130	Child Growth & Development	3	0	3
		7	8	8
	Summer Semester II			
PSYC 120	General Psychology	3	0	3
		3	0	3
	Fall Semester			
SOCI 111	Principles of Sociology	3	0	3
NURS 212	Medical/Surgical Nursing II	4	12	8
	Nursing Elective	3	0	3
		10	12	14

Students may elect any one of the following 3 hour courses:

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
NURS 121	Principles & Practice of Pharmacology	3	0	3
NURS 122	Principles & Practice of Nutrition	3	0	3
NURS 210	Medical Terminology	3	0	3
NURS 221	Professional Development	3	0	3
	Spring Semester			
†NURS 213	Maternal Nursing (8 weeks)	4	12	4
†NURS 214	Child Health Nursing (8 weeks)	4	12	4
		4	12	8

*ENGL 121 and 122 should be substituted if a 4-year degree is planned.
†Pending approval of Texas Education Agency, Maternal Child Health Nursing (NURS 120) 8 credits will be divided into two 4 credit courses, NURS 213 and NURS 214.

Total Credit Requirements for Associate Degree Nursing..... 73

NURSING HOME ADMINISTRATION

Degree: Associate in Applied Science, Degree in Nursing Home Administration

Length: Four semesters (two year program)

Purpose:

Statement of purpose. The purpose of the Alvin Community College Department of Nursing Home Administration is to provide an approved, formalized educational program that will prepare competent men and women for careers associated with the management of nursing homes and extended health care facilities. A graduate of the program is expected to be prepared to pursue a career as:

(1) Licensed nursing home administrator
(2) Extended-care facility administrator
(3) Retirement center administrator
(4) Custodial care facility administrator
(5) Administrator of special programs for the aging

At the completion of this program the student will be able to transfer to a four-year college or university and pursue studies toward a baccalaureate degree. The curriculum also provides a liberal arts background for general education and personal enrichment.

Admission

Standards. A student may be admitted to Alvin Community College on any one of the following conditions:

(1) Graduation from an accredited high school or successful completion of the General Educational Development (GED) Test, as certified by the State of Texas.
(2) Transfer in good standing from another college or university.
(3) Interview with, and approval of the Nursing Home Administration Department.

NURSING HOME ADMINISTRATION

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
*ENGL 111	Communication Skills	3	0	3
SOCI 111	Principles of Sociology	3	0	3
HNHA 111	Introduction to Nursing Home Administration	3	0	3
PHED	Physical Education	0	3	1
BUAD 130	General Business Mathematics	3	0	3
PSYC 120	General Psychology	3	0	3
		15	3	16
	Second Semester			
*ENGL 112	Communication Skills	3	0	3
BUAD 120	Business Law	3	0	3
**PSYC 230	Psychology of Personal Adjustments	3	0	3
HNHA 112	Psychology of Patient Care	3	0	3
HNHA 113	Principles of Patient Care	3	0	3
PHED	Physical Education	0	3	1
		15	3	16
	Third Semester			
HNHA 211	Nursing Home Administration Internship I	3	20	6
ACCT 221	Principles of Accounting I	3	2	3
MMGT 121 or MMGT 211	Principles of Management Personnel Management	3	0	3
	Elective	3	0	3
		12	22	15
	Fourth Semester			
HNHA 212	Nursing Home Administration Internship II	3	20	6
HNHA 213	Nursing Home Administration Law	3	0	3
HNHA 214	Financial Management of the Nursing Home	3	0	3
HNHA 215	Dietetic Food Supervision	3	0	3
	Elective			3
		12	20	18

*ENGL 121 and 122 may be substituted if a 4-year degree is planned.
**Prerequisite may be waived for Nursing Home Administration applicant with approval of Psychology Department.

Total Credit Requirements for Associate Degree in Nursing Home Administration 65

ORNAMENTAL HORTICULTURE

Degree: Associate in Applied Science.

Length: Four-Semester (two-year) Program.

Purpose: The curriculum is designed to benefit students seeking full-time employment, those presently employed, and those preparing for a four year degree in one of the many related Horticulture fields.

Program Requirements: The major emphasis of this curriculum is to acquaint the student with the many areas associated with Horticulture. The student is also required to take selected courses in non-related fields preparing himself for a well rounded education. The curriculum is designed to coordinate with the Horticulture programs of the four year colleges and universities in this state.

ORNAMENTAL HORTICULTURE

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
HORT 101	Principles of Horticulture	3	2	4
HORT 111	Plant Materials for Landscape Use	3	2	4
DRFT 110	Fundamentals of Drafting	2	4	3
HIST 141	The United States to 1877	3	0	3
*ENGL 111	Communication Skills I	3	0	3
PHED	Physical Education	0	3	1
	Total	14	11	18
	Second Semester			
HORT 121	Plant Propagation	3	2	4
HORT 240	Indoor Plants	3	2	4
*ENGL 112	Communication Skills II	3	0	3
HIST 142	The United States since 1877	3	0	3
BIOL 112	Biology II (Botany)	3	3	4
	Total	15	7	18
	Third Semester			
HORT 221	Chemical Control of Weeds, Plant Diseases and Pests	3	2	4
HORT 250	Vegetable Crops	3	2	4
GOVT 211	American National & State Governments I	3	0	3
PSYC 120	General Psychology	3	0	3
CHEM 110	Introductory Chemistry for the Allied Health Sciences	3	2	4
	Total	15	6	18
	Fourth Semester			
HORT 201	Soils and Fertilizer	3	2	4
HORT 231	Turf Management	3	2	4
GOVT 212	American National & State Governments II	3	0	3
PHED	Physical Education	0	3	1
SOCI 111	Principles of Sociology	3	0	3
	**Related Elective	3	0	3
	Total	15	7	18

*ENGL 121 and 122 may be substituted if a 4-year degree is planned.
**CHEM 121, MATH 152, RETL 260, BIOL 111, HORT 131 and HORT 211 is recommended.

Total Credit Requirements for Associate Degree in Ornamental Horticulture 72

PRODUCTION

Please see Mid-Management, Production Specialization.

REAL ESTATE

Please see Mid-Management, Real Estate Specialization; Certificate Program.

RETAIL

Please see Mid-Management, Retail Specialization; Certificate Program.

SECRETARIAL SCIENCE

Executive Secretary

Degree: Associate in Applied Science

Length: Four-Semesters (Two-Year) Program.

Purpose: The Associate in Applied Science degree curriculum in Secretarial Science is designed to offer a background in business courses which will prepare the student for employment in the secretarial field. It is designed for those seeking first employment, and for those seeking promotion in the secretarial field. The program has been developed in response to the needs of businesses in the fast growing Gulf Coast area for efficient executive secretaries.

Program Requirements: The two-year curriculum in secretarial science provides instruction in areas required for competence as an executive secretary in a business office. The curriculum includes courses in secretarial science and related courses, plus general electives. Upon satisfactory completion of the two-year curriculum, the student will be awarded the Associate in Applied Science Degree in Secretarial Science.

Internship Option: The Executive Secretarial student may choose to serve an internship during the third and fourth semesters of the program, for pay and for college credit. The student desiring to serve an internship will omit two 3-hour courses — the two to be decided on an individual basis in conference with departmental personnel.

SECRETARIAL SCIENCE

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ACCT 110	Office Accounting	2	1	3
BUAD 130	General Business Math	3	0	3
*ENGL 111	Communication Skills	3	0	3
**SECT 111	Shorthand I or II	3	2	3
**SECT 121	Typewriting I or II	2	3	3
PHED	Physical Education	0	3	1
		13	9	16

	Second Semester			
*ENGL 112	Communication Skills	3	0	3
BUAD 110	Introduction to Business	3	0	3
SECT 150	Office Machines	2	3	3
**SECT 112	Shorthand II or III	3	2	3
**SECT 122	Typewriting II or III	2	3	3
PHED	Physical Education	0	2	1
		13	10	16
	Third Semester			
SECT 230	Records Management	2	2	3
SECT 130	Business Communication	3	0	3
SECT 210	Shorthand III or Business Elective	3	2	3
SOCI 111	Principles of Sociology	3	0	3
GOVT 211	American National and State Governments I	3	0	3
SECT 220	Typewriting III or Business Elective	2	3	3
		16	7	18
	Fourth Semester			
SECT 140	Secretarial Practice	3	2	3
SECT 240	Office Procedures	3	0	3
CSCI 115	Computer Operations	3	2	3
SECT 215	Dictation and Transcription	3	2	3
GOVT 212	American National and State Governments II	3	0	3
BUAD 120	Business Law or Elective	3	0	3
		18	6	18

*ENGL 121 and 122 should be substituted if a 4-year degree is planned.
**Placement tests will determine which course needs to be taken.

Total Credit Requirements for Secretarial Science Degree 68

WELDING

Degree: Associate in Applied Science.

Length: Four-Semester (two-year) Program.

Purpose: The Associate in Applied Science Degree Curriculum in Welding is designed to prepare the student for full-time employment upon graduation in the career of welding. The basic objective of the program is to develop the skills in ferrous and nonferrous metals for employment in construction trades and area industrial needs.

Program Requirements: In addition to the general requirements for admission to the College, entry into the Welding Program requires a personal interview with the Director of the Welding Program.

WELDING

Associate in Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
WELD 110	Welding Processes	2	6	4
WELD 121	Arc Welding (Plate I)	2	6	4
WELD 160	Shop Equipment and Safety	1	2	2
DRFT 110	Fundamentals of Drafting (including Blueprint reading)	2	4	3
PHED	Physical Education	0	3	1
		7	21	14
	Second Semester			
WELD 131	Basic MIG and TIG	2	6	4
WELD 122	Arc Welding (Plate II)	2	6	4
MATH 151	Technical Math I	3	0	3
*ENGL 111	Communication Skills I	3	0	3
PHED	Physical Education	0	3	1
		10	15	15
	Third Semester			
WELD 241	Basic Layout Design and Fabrication	1	4	3
WELD 251	Pipe Welding I	2	6	4
WELD 231	Advanced MIG and TIG	2	6	4
DRFT 211	Pipe Drafting I	2	6	4
*ENGL 112	Communication Skills II	3	0	3
		10	22	18
	Fourth Semester			
WELD 242	Adv. Layout Design and Fabrication	1	4	3
WELD 252	Pipe Welding II	2	6	4
WELD 270	Welding Specifications and Testing	2	3	3
SOCI 111	Principles of Sociology	3	0	3
	**Elective	3	0	3
		11	13	16

*ENGL 121 and 122 may be substituted if a 4-year degree is planned.
**Co-op courses may be selected as satisfaction of elective.

Total Credits Required for the Welding Degree 63

CERTIFICATE PROGRAMS

The Certificate of completion in technical education is awarded to those students who fulfill the requirements in one of the following programs:

- Agriculture
- Air Conditioning & Refrigeration
- Certified Laboratory Assistant
- Child Care & Development
- Correctional Science
- Drafting
- Electronics
- Law Enforcement
- Mid-Management
  - Banking
  - Fashion Merchandising
  - Production
  - Real Estate
  - Retail
- Computer Science
- Stenography
- Clerical
- Vocational Nurse
- Nursing Assistant
- Respiratory Therapy Technician
- Welding

These programs vary in length from one to two semesters and are designed to prepare the student for immediate occupational employment.

AGRICULTURE

Degree: Certificate

Length: Two-semester (one-year) program

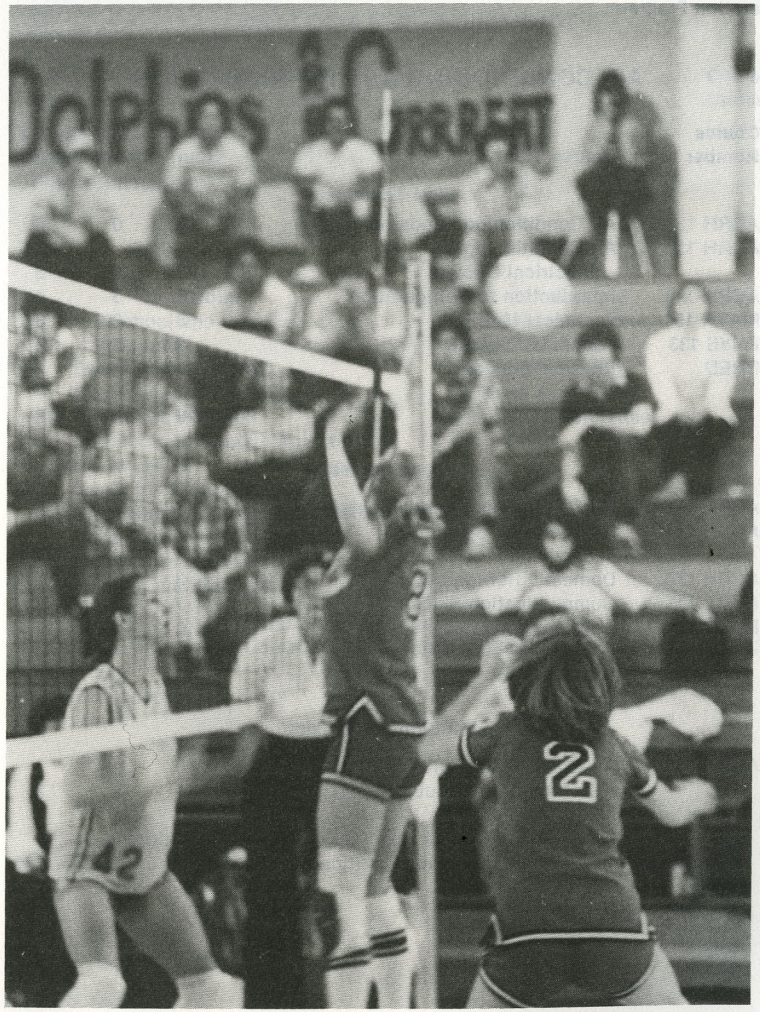
Purpose: The program is designed to prepare the student for entry into an agriculture or related occupation. Completion of this program will also enhance the effectiveness of those presently employed in an agriculture related occupation.

Program Requirements: The one-year program in Agriculture combines formal instruction with on-the-job work experience. The certificate in Agriculture will be awarded upon satisfactory completion of the two semester program.

AGRICULTURE

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credit
	First Semester			
ENGL 111	Communication Skills I	3	0	3
BIOL 110	Environmental Conservation	3	0	3
AGRI 110	Animal Husbandry	3	0	3
CO-OP 111	Cooperative Education	0	15	3
		9	15	12
	Second Semester			
ENGL 112	Communication Skills II	3	0	3
AGRI 120	Fundamentals of Crop Production	3	0	3
AGRI 130	Agriculture Equipment Technology	2	2	3
CO-OP 112	Cooperative Education	0	15	3
		8	17	12

Total requirements for Agriculture Certificate..... 24



AIR CONDITIONING AND REFRIGERATION

Degree: Certificate.

Length: Two-Semester (one-year) Program.

Purpose: The one-year certificate in Air Conditioning and Refrigeration is designed to prepare the student for full-time employment immediately upon certification from the Program. The basic objective of the program is to incorporate adequate shop and lab experience of a sufficient duration to develop competencies for employment in the air conditioning and refrigeration field.

Program Requirements: In addition to the general requirements for admission to the College, entry in the Air Conditioning and Refrigeration Program requires a personal interview with the Department Head of the Air Conditioning and Refrigeration Program.

AIR CONDITIONING AND REFRIGERATION

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ACRH 131	Air Conditioning Fundamentals I	3	0	3
ACRH 133	Air Conditioning & Electrical Circuits I	3	0	3
ACRH 140	Introduction to Refrigeration	3	3	4
MATH 151	Technical Math I	3	0	3
PHYS 133	Technical Physics I	3	3	4
PHED	Physical Education	0	3	1
		15	9	18
	Second Semester			
ACRH 132	Air Conditioning Fundamentals II	3	3	4
ACRH 141	Refrigeration Systems Servicing I	3	3	4
ACRH 170	Domestic Refrigeration	3	1	3
ENGL 111	Communication Skills I	3	0	3
PHED	Physical Education	0	3	1
		12	10	15
	First Summer Session			
ACRH 135	Air Conditioning and Refrigeration Troubleshooting	1	3	2

Total Credits Required for the Air Conditioning & Refrigeration Certificate 35

CHILD CARE AND DEVELOPMENT

Degree: Certificate

Length: Thirty-two semester hours.

Purpose: The certificate program is designed for mature persons working in the child care field. A certificate represents the completion of 32 hours of approved course work.

Program Requirements: A certificate student will take seven courses from Group I, three courses from Group II and two semesters of physical education. Course selection will be determined by consultation with the Department Chairman, after he is familiar with the student's background, abilities and goals.

Child Care and Development

Course	Lecture Hours	Lab Hours	Course Credits
Group I	21	0	21
Group II	9	0	9
Physical Education	0	6	2
	30	6	32

Group I	Group II
Pre-School and Day Care Programs	Principles of Sociology
Exceptional Children	Social Problems
Child Care Recreation	General Psychology
Child Care Services	Marriage and Family
Introductory Creative Activities	Communication Skills
Literature for Young Children	
Music for Young Children	
Child Nutrition and Health Care	
Child Care and Development I	
Child Care and Development II	
Seminar and Field Work	

Total Credit Requirements for Child Care & Development Certificate..... 32

COMPUTER SCIENCE TECHNOLOGY

General Computer Data Processing

Degree: Certificate

Length: Two semesters or one year

Purpose: The General Computer Data Processing Curriculum is designed to provide students with an introduction to data processing and to allow persons already engaged in business and industry to increase their computer knowledge.

Program Requirements: The curriculum includes technical courses in computer science, courses in related subjects, and general education courses. Each student is urged to consult with the Counseling Center and his/her faculty advisor in planning his/her program. Upon satisfactory completion of the two semesters curriculum, with an overall 2.0 grade point average for all computer science courses attempted, the student will be awarded the Certificate in Computer Science (General Computer Data Processing).

Computer Science Technology — General Computer Data Processing

Course	Lecture Hours	Lab Hours	Course Credits
Group I	15	11	16
Group II	15	0	15
		Total	31

Group I	Group II
CSCI 105 Keypunch Operations	BUAD 110 Intro to Business
CSCI 110 Intro to Computer Science	BUAD 130 General Business Mathematics
CSCI 114 Basic Programming	ACCT 110 Office Accounting
CSCI 115 Computer Operations	ACCT 221 Principles of Accounting I
CSCI 120 RPG Programming	ACCT 222 Principles of Accounting II
CSCI 130 COBOL Programming	SOCI 111 Principles of Sociology
CSCI 170 Structured Programming	MATH 121 College Algebra
CSCI 210 FORTRAN Programming	MATH 132 Plane Trigonometry
CSCI 215 Digital Computer Fundamentals	MATH 180 Finite Mathematics
CSCI 225 Special Topics	MATH 190 Analysis
CSCI 230 Advanced COBOL	ENGL 111 Communication Skills
CSCI 240 System Analysis	ENGL 112 Communication Skills
CSCI 250 Assembly Programming	ENGL 121 Composition & Rhetoric I
CSCI 260 Mini/Micro Computers	ENGL 122 Composition & Rhetoric II
	HIST 111 Western Civilization to 1660
	HIST 112 Western Civilization since 1660
	GOVT 211 American National & State Gov't.
	GOVT 212 American National & State Gov't.
	PHYSICAL EDUCATION

CORRECTIONAL SCIENCE

Certificate Program: Certificate in Correctional Science

Length: Thirty-two semester hours

Purpose: The Certificate Program is designed for mature persons working in the correctional field. A certificate represents the completion of hours of approved course work including an appropriate internship.

Program Requirements: Approximately one-half of the certificate program will include courses in Correctional Science with the remaining courses in related areas. In the event that any student who has first enrolled in a "Certificate Only" program desires to thereafter enter a degree program, he/she must meet all prerequisites and requirements met by the degree student.

A certificate student will take seven courses from Group I and Physical Education. The student will take three courses from Group II. Course selection will be determined by consultation with the Division Chairman, after he/she is familiar with the student's background, abilities and goals.

Correctional Science

Course	Lecture Hours	Lab Hours	Course Credits
Group I	21	4	23
Group II	9	0	9
		Total	32

Group I

Introduction to Corrections
Penology
American Legal System
Crime and Delinquency
Probation, Pardons, & Parole
Institutional Procedures, Jails & Detention
Contemporary Practices in Correction
Corrections I. Organization and Operations
Corrections II. Theory and Practice
Physical Education

Group II

Composition and Rhetoric
General Psychology
Principles of Sociology
Communication Skills
American, National, & State Government
U.S. History

Total Credit Requirements for Correctional Science Certificate 32

DRAFTING TECHNOLOGY

Degree: Certificate

Length: Two-semester (one year) program

Purpose: The one-year program is designed to prepare the student for entry into the drafting occupation.

Program Requirements: The drafting technician is an essential member of the technician-engineering team. He/she should be proficient in both technical knowledge and skills involving drawing instruments as well as schematics, working drawings, and blueprints.

DRAFTING TECHNOLOGY

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
DRFT 111	Technical Drafting	2	6	4
DRFT 105 or	Blueprint Reading I			
DRFT 106	Blueprint Reading II	2	1	2
DRFT 241	Architectural Drafting I	2	6	4
MATH 151	Technical Math I	3	0	3
ENGL 111	Communication Skills I	3	0	3
		12	13	16
	Second Semester			
DRFT 130	General Drafting	2	6	4
*DRFT	Elective	2	6	4
MATH 152	Technical Math II	3	0	3
ENGL 112	Communication Skills II	3	0	3
PHED	Physical Education or	0	3	1
	**Related Elective			3 or 4
		10	15	18 or 19

Total Credit Requirements for Drafting Technology Certificate ..... 34 or 35

*Approval of Department Head.
**Related Electives may be in areas of Drafting, Math, Physics, Computer Science, Electronic Technology, Air Conditioning, Welding with approval of Department.

ELECTRONIC TECHNOLOGY

Degree: Certificate

Length: Two-semester (one-year) program.

Purpose: the one year program is provided to allow the student to become familiar with basic electronics. The required electronics background for general field maintenance is stressed.

Program Requirements: The certificate in Electronics will be awarded upon satisfactorily completing the two semester program.

ELECTRONIC TECHNOLOGY

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
MATH 151	Technical Mathematics I	3	0	3
ELEC 120	DC Theory and Circuit Analysis	3	0	3
ELEC 125	DC Theory and Circuit Analysis Lab	0	3	1
ELEC 110	Introduction to Electronic Technology	3	0	3
ELEC 115	Introduction to Electronic Technology Lab	0	3	1
ENGL 111	Communication Skills I	3	0	3
*SOCI 111	Principles of Sociology			
	approved elective	3	0	3
PHED	Physical Education	0	3	1
		15	9	18
	Second Semester			
MATH 152	Technical Mathematics II	3	0	3
ELEC 130	AC Theory and Circuit Analysis	3	0	3
ELEC 135	AC Theory and Circuit Analysis Lab	0	3	1
ELEC 230	Electronic Tests and Measurements	3	0	3
ELEC 235	Electronic Tests and Measurements Lab	0	3	1
ELEC 140	Electronics I	3	0	3
ELEC 145	Electronics I Laboratory	0	3	1
PHED	Physical Education	0	3	1
		12	12	16

Total Credit Requirements for Electronic Technology Certificate 34

*See advisor prior to registration.

LAW ENFORCEMENT AND POLICE ADMINISTRATION

LAW ENFORCEMENT

Degree: Certificate

Length: Thirty semester hours

Purpose: The Certificate program is designed for mature persons working in the law enforcement field. A certificate represents the completion of 30 hours of approved course work.

Program Requirements: A certificate student will take seven courses from Group I and three courses from Group II and two semesters of physical education. Course selection will be determined by consultation with the Department Chairman, after he/she is familiar with the student's background, abilities and goals.

LAW ENFORCEMENT

Course	Lecture Hours	Lab Hours	Course Credits
Group I	21	0	21
Group II	9	0	9
Physical Education	0	6	2
Total	30	6	32

Group I
Introduction to Law Enforcement
Criminal Investigation
Legal Aspects of Law Enforcement
Criminal Procedure and Evidence
Element of Police Supervision
Principles of Sociology
Social Problems
Criminology
Juvenile Delinquency
Police Organization and Administration
Patrol Administration

Group II
Composition and Rhetoric
General Psychology
Human Relations
Communication Skills
American National and State Governments
U. S. History

Total Credit Requirements for Certificate in Law Enforcement 32

LEGAL STENOGRAPHY

Degree: Certificate

Length: Two-semester (one-year) program

Purpose: The one-year certificate in Legal Stenography program is designed to prepare the student for full-time employment immediately in a specialized business occupation. This course will provide a job outlet for those students who desire to work in the legal field, but do not care for pressures of Court Reporting or find they must secure employment within a shorter time.

Program Requirements: Students entering upon this program must be high school graduates or possess a GED equivalency certificate. Each student is urged to consult with the Counseling Center and Court Reporting department chairman in planning his/her program. The Legal Stenography Certificate will be awarded upon satisfactory completion of the two-semester program.

COURT REPORTING

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
SECT 122	Typing II	2	3	3
CTRP 111	Machine Shorthand Theory	6	4	6
CTRP 121	Law and Legal Terminology	4	1	3
ENGL 111	Communication Skills I	3	0	3
CTRP 141	Grammar and Punctuation I	2	0	2
PHED	Physical Education	0	2	1
		17	10	18
	Second Semester			
SECT 220	Typing III	2	3	3
CTRP 112	Machine Shorthand I (60-80-100)	6	4	6
CTRP 130	Transcription I	0	5	2
CTRP 122	Medical Terminology	4	1	3
ENGL 112	Communication Skills II	3	0	3
CTRP 142	Grammar and Punctuation II	2	0	2
PHED	Physical Education	0	2	1
		17	15	20

Total Credit Requirements for Legal Stenography Certificate 38

MID-MANAGEMENT

Degree: Certificate

Length: Two-semester (one-year) program

Purpose: The one-year certificate in Mid-Management is designed to prepare the student for full-time employment in the field of management. The basic objective of the program is to develop management skills and allow the student a chance to utilize these skills at an approved work station.

Program Requirements: A certificate student will take six courses from Group 1, three courses from Group 2, two courses from their area of specialization (Retail, Production, Fashion Merchandising, Banking and Real Estate) and two semesters of Physical Education or one three hour elective.

MID-MANAGEMENT

Course	Lecture Hours	Lab Hours	Course Credits
Group 1	12	40	18
Group 2	9	0	9
Specialization	6	0	6
Physical Education or Elective	0 3	6 0	2 3
Total	27	40 or 46	35 or 36

Group 1

Introduction to Mid-Management
Internship
Personnel Management
Principles of Management
Internship
Problems in Management

Group 2

Communication Skills
Business Mathematics
General Psychology
Principles of Economics
Principles of Sociology

Specialization Area

Retail

Principles of Retailing
Principles of Marketing
Advertising
Selling and Salesmanship
Retail Merchandise Management

Fashion Merchandising

Introduction to Fashion Merchandising
Fashion Buying and Merchandising
Textiles
Fashion Sales Promotion
Fashion Fundamentals

Banking

Principles of Bank Operations
Money and Banking
Analyzing Bank Financial Statements
Marketing for Bankers
Bank Investments
Credit Administration
Supervision and Personnel Administration
Installment Credit
Teller Training Seminars

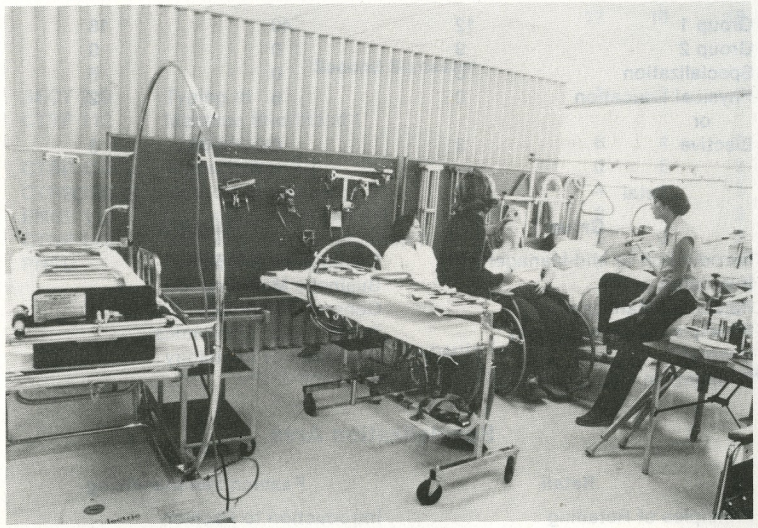
Real Estate

Principles of Real Estate
Real Estate Mathematics
Real Estate Practice
Real Estate Law
Real Estate Finance
Real Estate Brokerage
Real Estate Appraisal

Production

Industrial Management
Production Planning and Control
Materials Management
Methods Analysis and Work Measurement

Total Credit Requirements for
Mid-Management Certificate..... 35 or 36



NURSING ASSISTANT PROGRAM

Degree: Certificate

Length: One semester

Purpose: The program is designed to provide the individual with the necessary skills and knowledge for performance as an essential member of the nursing team. Theory is integrated with supervised clinical practice.

Admission Requirements:

1. An interview with the nursing department.
2. Satisfactory physical and mental health.

Program Requirements:

1. Satisfactory clinical and classroom performance.
2. Regular attendance.

Program Content:

COURSE UNITS

Pre-clinical:

Orientation
Introduction to the Patient
The Working Environment
Communication Skills

Clinical:

The Patient's Unit
Personal Care of the Patient
Observing and Recording Vital Signs
Special Treatments
Food Service

The above course content is taught over a 10 week period and has the following lecture-lab ratio:

Total nursing lecture	44
Total nursing lab hours	240
Total Liberal Arts hours	36
Total Contact Hours	320

ORNAMENTAL HORTICULTURE

Degree: Certificate

Length: Two-semester (one year) program

Purpose: The program is designed to prepare the student for entry into a horticulture or related occupation. Completion of this program will also enhance the effectiveness of those presently employed in all horticulture related occupation.

Program Requirements: The one-year program in horticulture combines formal instruction with on-the-job work experience. The certificate in horticulture will be awarded upon satisfactory completion of the two semester program.

ORNAMENTAL HORTICULTURE

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
HORT 101	Principles of Horticulture	3	2	4
HORT 111	Plant Materials for Landscape Use	3	2	4
CHEM 110	Introduction Chemistry	3	2	4
DRFT 110	Fundamentals of Drafting	2	4	3
ENGL 111	Communication Skills I	3	0	3
	Total	14	10	18
	Second Semester			
HORT 121	Plant Propagation	3	2	4
HORT 131	Greenhouse Crop Production	3	2	4
MATH 151	Technical Math I	3	0	3
BIOL 112	Biology II (Botany)	3	3	4
PHED	Physical Education or	0	3	1
	Approved Elective	3	0	3
	Total	15	10	19
	Summer Session I			
HORT 211	Nursery and Garden Center Management	3	2	4

COMPLETION OF CERTIFICATE LEVEL

RESPIRATORY THERAPY TECHNICIAN PROGRAM

Degree: Certificate

Length: 13½ months

Purpose: The purpose of the Alvin Community College Department of Respiratory Therapy Technology is to provide an approved, formalized educational program that will prepare competent men and women for careers in Respiratory Therapy. The certificate recipient of the program will be eligible to become a Certified Respiratory Therapy Technician (C.R.T.T.) by making application and successfully completing the examination administered by the National Board for Respiratory Therapy.

This certificate program is designed to meet the Upward Mobility/Lateral Exit concept. The curriculum involves all phases of Respiratory Care including Intermittent Positive Pressure Breathing, continuous mechanical ventilation, blood gas analysis, and pulmonary function studies. The students spend a minimum of 750 hours in the clinical setting with rotation through Respiratory Therapy Department at clinical affiliates. The program is fully accredited and meets the standards of the American Medical Association.

Admission Requirements:

Citizenship: U.S. citizen or legal declaration of intention of becoming a U.S. citizen.

Health: Satisfactory physical and mental health.

Education: High school graduate or its equivalent.

Admission Procedure:

1. Pre-Entrance testing, ACT Exam.
2. All students entering the program are required to complete the regular Alvin Community College admission procedures. The proper forms are available from the Program Chairman or the Admission's office.
3. Respiratory Therapy students must meet health requirements of affiliating clinical institutions. A health examination by the student's personal physician is required using the Alvin Community College health form. The physical examination should include chest x-ray, urinalysis, Complete Blood Count (CBC) and VDRL.
4. A personal interview with the Program Chairman is required.
5. Applicants will be notified concerning acceptance to the Respiratory Therapy Program. Admission is limited.
6. Students not admitted to the Program may take courses to enhance their potential for entering the program at a later date.
7. Any student who fails to achieve a passing grade in one or more Respiratory Therapy classes for two semesters will not be permitted to remain enrolled in the program.
8. A transfer student must qualify in accordance with the current RTT Program procedure.
9. The RTT student will abide by the curriculum requirements of the RTT department at the time he is accepted into the program. Curriculum requirements take precedence over the Bulletin under which the student entered Alvin Community College.
10. After the enrollment, the required RTT courses must be completed in proper sequence. No variances unless approved by program chairman.

11. The RTT student is required to satisfactorily complete theory and clinical experience of each RTT course. In the event either theory or clinical is evaluated unsatisfactorily the student will be required to repeat the course in its entirety the next time offered.
12. No grade below "C" will be acceptable in the RTT course.
13. A student may be terminated from the program if clinical performance is unsatisfactory.
14. A student is required to earn at least 24 resident hours at Alvin Community College.

RESPIRATORY THERAPY TECHNICIAN

Course Number	Course Title	Lecture Hours	Lab Hours	Clock Hours	Course Credits
	Summer Session I (6 Weeks)				
HRTT 111	Introduction to Respiratory Therapy	8	8	16	4
BIOL 121	Anatomy and Physiology I	8	8	16	4
HRTT 110	Introduction to Health Sciences (12 wk. course)		2		1
		16	18	32	9
	Summer Session II (6 Weeks)				
HRTT 112	Clinical Practical I	6	22	28	4
BIOL 122	Anatomy and Physiology II	8	8	16	4
		14	30	44	8
	Fall Semester				
HRTT 116	Clinical Science and Pulmonary Disorders	3	0	3	3
HRTT 120	Pharmacology	3	0	3	3
HRTT 114	Respiratory Therapy Procedures I	3	6	9	4
NURS 210	Medical Terminology	3	0	3	3
CHEM 110	Chemistry for Allied Health	3	2	5	4
		15	8	23	17
	Spring Semester				
HRTT 118	Clinical Theory	3	0	3	3
HRTT 113	Clinical Practical II	0	25	25	3
HRTT 117	Clinical Applications I	3	0	3	3
HMLT 117	Clinical Microbiology	2	4	6	3
MATH 130	Math for Allied Health I	3	0	3	3
		11	29	40	15

	Summer Session I (6 Weeks)				
HRTT 119	Clinical Practical III	0	20	20	3
ENGL 121	Composition and Rhetoric I	8	0	8	3
		8	20	28	6

Total Credit Requirements 55

SECRETARIAL SCIENCE

Options: Stenographer
General Office Worker

Degree: Certificate

Length: Two-semester (one-year) program

Purpose: The one-year program is designed to prepare the student to adequately discharge the responsibilities of stenographic work, office occupations, and general business employment.

Program Requirements: The one-year program in "Stenographer" and "General Office Worker" combines instruction in the areas required for competence as a stenographer or office worker. Students are advised to consult with a faculty member in the business department in planning their program and selecting electives. Upon satisfactory completion of the one-year program, the student will be awarded a one-year certificate.

Stenographer One-Year

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
SECT 230	Records Management	3	2	3
*BUAD 130	General Business Mathematics or equivalent	3	0	3
ENGL 111	Communication Skills	3	0	3
**SECT 111	Shorthand I or II	3	2	3
**SECT 121	Typewriting I or II	2	3	3
PHED	Physical Education	0	3	1
		14	10	16
	Second Semester			
SECT 130	Business Communications	3	0	3
SECT 150	Office Machines	2	3	3
**SECT 112	Shorthand II or III	3	2	3
**SECT 122	Typewriting II or III	2	3	3
SECT 240	Office Procedures	3	0	3
PHED	Physical Education	0	3	1
		13	11	16

Total Requirements for Stenographer/ General Office Worker Certificate 32

*May be waived by demonstrated competency in High School Math.
**Placement tests will determine which course needs to be taken.

General Clerical One-Year

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
ACCT 110	Office Accounting	2	1	3
BUAD 110	Introduction to Business	3	0	3
*BUAD 130	General Business Mathematics or equivalent	3	0	3
SECT 121	Typewriting I or II	2	3	3
ENGL 111	Communication Skills	3	0	3
PHED	Physical Education	0	3	1
		13	7	16
	Second Semester			
SOCI 111	Principles of Sociology	3	0	3
SECT 150	Office Machines	2	3	3
SECT 140	Secretarial Practice	3	2	3
**SECT 122	Typewriting II or III	2	3	3
SECT 230	Records Management	3	2	3
PHED	Physical Education	0	3	1
		13	13	16

Total Credit Requirements for a General Clerical Certificate 32

*May be waived by demonstrated competency in high school mathematics.
**Placement tests will be taken to determine which course needs to be taken.

VOCATIONAL NURSING PROGRAM

Degree: Certificate

Length: Twelve Months.

Purpose: The purpose of the Alvin Community College Program of Vocational Nursing is to provide an approved educational program designed to prepare the vocational nurse to function as a vital member of the health care team. The vocational nurse gives nursing care to patients in varied situations with the supervision of the registered nurse and/or physician.

Graduates of the twelve-month program are eligible to write the Texas State Board Examination for Vocational Nurses. Those passing the state examination will be issued a license by the State Board of Vocational Nurse Examiners and will qualify to practice as a Licensed Vocational Nurse (L.V.N.) in the state of Texas.

Admission Requirements:

1. Be the age of 17-59* years old. (Those older than 59 will be considered on an individual basis.)
2. Be in good physical and emotional health.
3. Be of good moral character.
4. Be a high school graduate or hold a certificate of equivalency (G.E.D.).
5. Satisfactorily score on the Pre-entrance exam for practical nurses.
6. Have a personal interview with the Chairman of Vocational Nursing.
7. Complete the applicaton for admission into the Vocational Nursing Program, which shall also include submission of three character references, copies of transcripts or G.E.D., and physical examination including blood counts, urinalysis, serology, chest x-ray or tine skin test, and immunizations for diphtheria/tetanus within the last ten years.

Program Requirements:

1. Tuition for the twelve-month program is $150.00 and is due in full at registration. Other fees throughout the year will include books, supplies, uniforms, bandage scissors, name pins, nursing shoes and cap, watch with second hand, testing fees, and photo.
2. Students are responsible for their own hospitalization and malpractice insurance.
3. Students are responsible for their transportation to health agencies and are expected to attend regularly to both class and clinical assignment.
4. All absences must be made up during the allotted vacation or holiday time and/or following graduation.
5. A passing grade of 70 must be attained in each subject. Scores below 70 will constitute grounds for request of student withdrawal from program.
6. Observed holidays and vacation days will include:
   - 1 Day — July 4th
   - 1 Day — Labor Day
   - 2 Days — Thanksgiving
   - 1 Day — Christmas
   - 8 Days — Vacation
   - 1 Day — New Year
   - 5 Days — Spring Vacation
   - 1 Day — Memorial Day
7. The Vocational Nursing Program may request at anytime the withdrawal or dismissal of a student whose health, conduct, personal qualities or abilities, and/or scholastic records indicate that it would be inadvisable for the student to continue in the program.
8. Transfer students must spend a minimum of six months in the Alvin Community College Vocational Nursing Program in order to be considered a graduate of this program.
9. A student who withdraws and wishes to be reinstated and receive credit for successfully completed courses must re-enter within one year from the date of withdrawal.

V.N. PROGRAM

Course Number	Course Title	Minimum* Clinical Experience	Minimum* Class Hours
NURS. 001	Personal and Vocational Relationships		10 hours
NURS. 002	Introduction to Vocational Nursing Skills, including Nutrition and Pharmacology	40 hours medication administration	225 hours
NURS. 007	Body Structure and Function		50 hours
NURS. 008	Disease Control and Prevention		10 hours
NURS. 005	Mental Health and Mental Illness	2 weeks (if available)	20 hours
NURS. 003	Maternal and Child Health Nursing	3 weeks, obstetrics 2 weeks, newborn	50 hours
NURS. 009	Child Growth and Development		10 hours
NURS. 004	Pediatric Nursing	3 weeks	50 hours
NURS. 006	Medical-Surgical Nursing	6 weeks, medical 6 weeks, surgical	125 hours

*A minimum of 550 lecture and 1250 pre-clinical and clinical experience hours is required in the Vocational Nursing Program.

WELDING

Degree: Certificate

Length: Two-Semester (one-year) Program

Purpose: The one-year certificate in Welding is designed to prepare the student for full-time employment upon certification in the career of welding. The basic objective of the program is to develop the skills in ferrous and non-ferrous metals for employment in construction trades and area industrial needs.

Program Requirements: In addition to the general requirements for admission to the College, entry into the Welding Program requires a personal interview with the Director of the Welding Program.

WELDING

Course Number	Course Title	Lecture Hours	Lab Hours	Course Credits
	First Semester			
WELD 110	Welding Processes	2	6	4
WELD 121	Arc Welding (Plate I)	2	6	4
WELD 160	Shop Equipment and Safety	1	2	2
DRFT 110	Fundamentals of Drafting (including Blueprint Reading)	2	6	4
PHED	Physical Education	0	3	1
		7	23	15
	Second Semester			
WELD 131	Basic MIG and TIG	2	6	4
WELD 122	Arc Welding (Plate II)	2	6	4
MATH 151	Technical Math I	3	0	3
ENGL 111	Communication Skills	3	0	3
PHED	Physical Education	0	3	1
		10	15	15

Total Credits Required for the Welding Certificate 30

DIPLOMA

The two-year Education Diploma is primarily for the student who wishes to complete his/her academic work at the junior college level and who desires to have maximum flexibility in course selection. He/she completes at least 62 semester hours in a program planned to meet his/her desires and needs. Essentially, the Diploma is designed for the student who does not desire to pursue a specific degree or certificate program.

CONTINUING EDUCATION PROGRAM

Purpose

Alvin Community College is a comprehensive community college offering a wide variety of non-credit courses to area citizens. These courses are designed to provide general education opportunities for personal development, civic responsibility, social-cultural values, and to assist the individual in achieving his personal goals through adult non-credit courses. The college exists to serve the post-high school educational needs of the community.

The college hopes to achieve this purpose by offering adults in the community a program of diversified non-credit courses. This program of continuing education provides the opportunity for adults to improve their knowledge and basic skills while employed or for pleasure and recreational purposes.

General Information

Non-credit continuing education courses are generally open to persons of all ages, including school age children. However, certain courses are directed to the adult (18 years or older) while others are specifically directed to the younger student. Courses are scheduled for given dates and hours and some continue for longer periods of time to fulfill more specific requirements.

Most courses are offered in the evening and range from three to 320 hours in length. Costs vary from $2.50 to $95.00 per course. Any course will be offered when there is sufficient demand, suitable meeting space, and a qualified instructor. The college is interested in receiving requests for special courses, or for special time-frames for offering them, and will attempt to schedule any short course not already identified when there seems to be sufficient interest.

Contact the Director, Continuing Education and Evening School Programs, regarding scheduling any program, particularly programs of an occupational nature that will provide training, skills, and knowledge for individuals already employed and individuals seeking employment.

Continuing Education and Adult Non-Credit Courses

Non-credit courses in the following areas are generally scheduled each year. Any course will be offered when there are sufficient demand, suitable meeting space and a qualified instructor.

OCCUPATIONAL

Advance Key Punch
Data Preparation Clerk
Filing Clerk
Office Machines Refresher
Shorthand Review
Typing Refresher
Alterations & Tailoring
Introduction to Air-Conditioning and Refrigeration
Air Conditioning Lab
Commercial Refrigeration Lab
Basic Rigging
Basic Law Enforcement (Qualifying Certificate)
Floral Arranging
Floral Design
Gift Wrapping
Conversational Spanish I (TDC)
Conversational Spanish II (TDC)
Conversational Spanish III (TDC)
Dietary Food Supervisor
Child Care Nutrition Workshop
Medication Administration
Nursing Assistant
Pediatric Nursing
Pharmacology for Nurses
Team Nursing
Trends in Nursing
Vocational Nursing
Cardiopulmonary Resusitation
Emergency Care Attendant
Emergency Medical Technician

(The)Role of the Nurse in the Community
Federal Income Tax for Consultants
Fundamentals of Apartment Managing
Income Tax Preparation Skills
Property & Casualty Insurance
Fundamentals of Casualty Rating
Record Keeping for Small Businesses
Radio Station Operating Practices
Heating & Ventilation Lab
Thermostat Control Workshop
Troubleshooting Heat Pumps
Blueprint Reading
Basic Welding
Introduction to Arc Welding of Plate
Introduction to Arc Welding of Pipe
Boilermaking-Pipefitting-Welding
Orientation to Industrial Welding, Pipefitting & Boilermaking
Mechanical Maintenance I
Mechanical Maintenance II
Test Equipment Repair
Test Equipment Utilization
Electrical Maintenance
Use of the Slide Rule
Communications in Industry
Human Relations in Industry (Seminar)
Human Relations & Instruction Training
Effective Supervisory Practices
Retail Management Security Seminar

GENERAL EDUCATION

Action Course in Practical Politics
Aerobic Dancing (Women)
Aviation Ground School
Basic Auto Mechanics
Biblical Archaeology
Bio-Feedback Training
CGA Safe Boat Handling
Conversational Czech I
Conversational Czech II
Conversational French
Conversational German
Conversational Spanish I
Conversational Spanish II
Creative Writing Workshop
Defensive Driving (DDC)
Estate Planning
Family Financial Planning and Investments
Firearm Knowledge for Women
Furniture Upholstery
GED Preparation
Handicrafts and Media as Teaching Devices
How to Buy, Build, or Add to a Home
Instrument Ground School
Interior Decorating
Investments
Karate (Beginner)
Karate (Advanced)
Kodaly Music Methods I
Kodaly Music Methods II
Kodaly Music Methods III
Law for the Layman
Man and His Changing World
Mid-Eastern Dancercize (Beginner I)
Mid-Eastern Dancercise (Beginner II)
Mid-Eastern Dancercize (Intermediate)
New Testament History
Old Testament History
Personal Income Tax
Personal & Professional Woman
Personal Typing
Physical Fitness (Men)
Physical Fitness (Women)
Pocketbook Protection
Reading Improvement
Self Defense for Women
Sewing (Basic)
Sewing (Intermediate)
Sewing (Patterns & Alterations)
Sewing T-Shirts
Sewing (Finishing Touches)
Sewing (Ladies Coats)
Sewing (Men's Pants)
Slimnastics (Women)
Small Engine Tune-Up and Minor Maintenance
Speed Reading
Stocks and Investments
Texas Voluntary Hunter Safety
Tumbling: Physical Fitness for Women
Verbal & Non-Verbal Communications
Yoga
Psychodrama

AVOCATIONAL-RECREATIONAL

Amateur Novice Radio
Antiques Worth Dusting
Archery Fundamentals
Art Appreciation
Art (Beginning Oil Painting)
Art (Ceramics)
Art (Beginner Drawing)
Art (Beginning Watercolor)
Art (Blockprinting)
Art (Portrait Painting)
Ballroom Dancing
Banjo
Basic Canoeing
Bridge (Advanced)
Bridge (Beginners)
Canine Obedience Training (Beginner)
Canine Obedience Training (Advanced)
Care and Grooming of Horses
CB Radio
Disco Dancing
Football Fundamentals for Females
Gardening (Landscaping and Horticulture)
Golf
Gourmet Cooking
Guitar (Beginners)
Guitar (Intermediate)
Macrame
Open Gym for Adults

COOPERATIVE EDUCATION

Cooperative Education, a plan whereby students blend theory and practice by working on training assignments in exploratory or career-related areas of professional interest, has had a tremendous growth in recent years. The structure of a cooperative experience may vary, but the underlying philosophy always remains the same: the student's job is an essential and integral part of his/her education.

Opportunities are provided for the student to apply the knowledge and skills learned in the classroom to actual job situations. Cooperative Education contributes greatly to the career development of the students.

Students seeking new careers or job enrichment can benefit from planned work experiences. Through these experiences, the student may move upward into jobs that require increasing skills, knowledges, and responsibilities.

Many students are unsure of their vocational goals. These students could specifically use cooperative education to explore and realistically test different career possibilities.

The Cooperative Education program is also designed to meet the needs of those students who already have jobs but are returning to Alvin Community College to take courses that would enable them to either advance on their present jobs or to make career changes.

The student who has decided to pursue a career and desires to enter the cooperative education, may choose from one of the following study and work calendars:

Study and Work Calendar (Plan A — Alternating)

Year in College	Semester of the Year	Study and Work Assignments by Semesters
First Year	Fall	Study
	Spring	Study
	Summer	Work
Second Year	Fall	Study
	Spring	Work
	Summer	Study

Study and Work Calendar (Plan B — Alternating)

Year in College	Semester of the Year	Study or Work Assignments by Semesters
First Year	Fall	Study
	Spring	Study
	Summer	Study
Second Year	Fall	Work
	Spring	Study
	Summer	Work

(Plan C — Parallel)

Year in College	Semester of the Year	Study or Work Assignments by Semesters
First Year	Fall	Study
	Spring	Study
	Summer	Study/Work
Second Year	Fall	Study/Work
	Spring	Study/Work

Utilizing Advisory Committees of Citizens, students, and educators in the Alvin Community College community, cooperative education closely coordinates work experience with the campus educational program; thus,

helping the student to greater meaning in his/her studies,
increasing his/her motivation,
contributing to his/her sense of responsibility,
developing a greater understanding of human relations,
giving them a chance to find out more about specific jobs in relation to their own capabilities,
providing him/her with earned income, and
better preparing him/her to enter the working world or advance on his/her present job.

The cooperative education program helps to maintain a flow of trained personnel for public and private enterprises. The program attracts capable students and serves as an actual testing ground, permitting employers to identify and select well-trained personnel. By employing the co-op student, the employer may more effectively use the talents of high-salaried professionals.

Public and private enterprises may participate in and influence the educational process through cooperative education. Closer ties between Alvin Community College and the community often result.

DESCRIPTION OF COURSES

ACCOUNTING

ACCT 110. Office Accounting (3 credits). Procedures and techniques used in recording business transactions and preparing financial statements. Course adapted to the needs of those training for secretarial positions. Two lecture hours and one laboratory hour per week.

ACCT 211. Accounting Internship (3 credits). The student works in a qualifying firm 20 hours per week in an occupational situation where he/she receives practical training and experience compatible with his/her management career objective. Students may receive credit from an approved full-time job.

ACCT 212. Accounting Internship (3 credits). The student works in a qualifying firm 20 hours per week in an occupational situation where he/she receives practical training and experience compatible with his/her management career objective. Students may receive credit from an approved full-time job.

ACCT 221. Principles of Accounting I (3 credits). Accounting for merchandise operations, proprietorships, partnerships, negotiable instruments, specialized books of original entry, and the voucher system, including emphasis on the financial aspects of accounting. Prerequisite: None. Recommendation: CSCI 110, MATH 180, 190, particularly for transfer students. Three lecture hours and one laboratory hour per week.

ACCT 222. Principles of Accounting II (3 credits). Partnership, corporations, cost accounting, assets, theory, and interpretation of financial statements, with special emphasis on the managerial aspects of accounting. Prerequisite: None. Recommendation: Same as for ACCT 221. Three lecture hours and one laboratory hour per week.

ACCT 230. Tax and Payroll Accounting (3 credits). Principles of Federal Income Tax, Social Security taxes, unemployment taxes, sales taxes. Payroll systems and accounting methods used in computing wages. Prerequisite: ACCT 221. Three lecture hours per week.

ACCT 231. Intermediate Accounting I (3 credits). Review of accounting principles, current assets and investments, plant assets, and intangibles. Prerequisite: ACCT 222. Three lecture hours per week.

ACCT 232. Intermediate Accounting II (3 credits). Study of liabilities, paid in capital, interpretation and analysis of financial statements, cash flow, reorganizations and price level impact on financial statements. Prerequisite: ACCT 231. Three lecture hours per week.

ACCT 240. Cost Accounting (3 credits). Basic concepts of cost accounting and how they function within a manufacturing firm. Material cost, labor cost, manufacturing overhead, and marketing costs of the cost accounting system. Prerequisite: ACCT 221. Three lecture hours per week.

ACCT 250. Auditing (3 credits). A study of system-based independent audits, including auditing objectives, procedures, interval control, working papers, and reporting on the fairness of financial statements. Prerequisite: ACCT 221. Three lecture hours per week.

ACCT 260. Oil and Gas Accounting (3 credits). Accounting oriented toward the production, refining, and distribution of petroleum products. Prerequisite: ACCT 221. Three lecture hours per week..

AGRICULTURE

AGRI 110. Animal Husbandry (3 credits). This is a basic course of study to acquaint the student with various types and breeds of livestock: production systems, basic facility requirements, and markets. Basic phases of feeding, breeding, disease control and production of livestock are presented. Three lecture hours per week.

AGRI 120. Fundamentals of Crop Production (3 credits). Scientific approach to commonly grown field crops; their importance, value, use, characteristics, classification, distribution, climatic and soil requirements, production, storage, improvement and seed technology. Three lecture hours per week.

AGRI 130. Agriculture Equipment Technology (3 credits). Operation, storage, repair, maintenance and economic utilization of farm machinery and tractors. Principles of internal combustion engines, servicing farm engines and tractors, hydraulic systems, and adjustment of tillage and harvesting machines. Two lecture and two lab hours per week.

AGRI 210. Farm Management (3 credits). Farm planning for the most efficient use of land, labor and capital in the production of crops and livestock. Attention is given to the problem of becoming established in farming. Class work is based on surveys and analysis of farm or ranch organization for the purpose of more profitable operation. Three lecture hours per week.

AGRI 220. Soils and Fertilizers (3 credits). Physical and chemical properties of soils and their relation to soil development. Relationship between crops and soils. Practical use of and conservation of soils. Use of fertilizers and soil fertility. Two lecture and two lab hours per week.

AIR CONDITIONING AND REFRIGERATION

ACRH 131. Air Conditioning Fundamentals I (3 credits) Knowledge and skills necessary to install and service air conditioning (cooling) systems. Introduction to air conditioning systems, properties of air, humidity, psychrometric charts, comfort coolers, residential central systems, chilled water systems, evaporators, refrigerant controls, condensers, electrical circuits and controls, air cleaning dehumidifiers, heat pump systems. Three lecture hours per week.

ACRH 132. Air Conditioning Fundamentals II (4 credits). Knowledge and skills necessary to service and maintain heat pumps, vortex tube comfort cooling, heat loads, air distribution, electronic filters, blue print reading, etc. Three lecture hours and three laboratory hours per week. Prerequisite: ACRH 131.

ACRH 133. Air Conditioning and Electrical Circuits I (3 credits). Basic principles of electricity, electron theory, sources of E.M.F., electrical circuits, magnetism, ohms law, conductors and insulators, power transformation, electric motor theory, use of electric meters and test equipment. Three lecture hours per week.

ACRH 134. Industrial Electricity (4 credits). Fundamentals of direct current and alternating current electron theory resistance, current, voltage, electomagnetism, inductance and capacitance and sinusoidal variations in passive networks of resistors and capacitors, and includes a survey of the field of electrical power distribution. Three lecture and two lab hours.

ACRH 135. Air Conditioning and Refrigeration Troubleshooting (2 credits). Additional study in any of three areas of specialization: domestic refrigeration,

commercial refrigeration or air conditioning. Problems assigned individually or in groups. One lecture hour and three laboratory hours per week.

ACRH 140. Introduction to Refrigeration (4 credits). This course covers fundamentals of refrigeration, cycle theory, basic refrigeration systems, compressor construction, refrigerant controls, safety practices. Three lecture hours and three laboratory hours per week.

ACRH 141. Refrigeration Systems Servicing I (4 credits). Knowledge and skills necessary to install and service commercial refrigeration systems. Introduction to commercial refrigeration systems, commercial compressors, condensers, and receivers, water valves, evaporators, suction-liquid lines and manifolds, constant pressure valves, solenoid valves, defrost systems, motors and fans, electrical systems, electrical circuits, heat loads and system capacitors. Three lecture hours and three laboratory hours per week.

ACRH 170. Domestic Refrigeration (3 credits). This course covers knowledge and skills necessary to install and service domestic refrigeration systems. Types and construction of cabinets, compressors, controls, evaporators, refrigerant controls, defrosting systems, safety practices. Three lecture hours and one laboratory hour per week.

ACRH 234. Air Conditioning and Electrical Circuits II (4 credits). Studies will include generation of three-phase power, its distribution and application. Theory of operation, application and servicing of three-phase motors, relays, solenoids, line starters, time-delay controls, capacitors, pressure switches, thermal relays, sequencing controls, pneumatic controls, motorized operators, low voltage controls, humidity controls and electronic controls and blue print drawing and reading. Two lecture hours and six laboratory hours per week. Prerequisite: ACRH 133.

ACRH 242. Refrigeration Systems Servicing II (4 credits). Knowledge and skills necessary to service and maintain vending machines, beverage dispensers, soda fountains, ice machines, cascade systems, etc. Two lecture hours and six laboratory hours per week. Prerequisite: ACRH 141.

ACRH 250. Heating and Ventilation (4 credits). Knowledge and skills necessary to install and service air conditioning (heating) systems. Introduction to heating systems, fuels, types of burners, warm air systems, hydronic systems, stream systems, electric heat systems, thermostats, controls, electrical circuits, heat loads, infiltration, air volumes, duct design and humidifiers. Two lecture hours and six laboratory hours per week.

ACRH 260. Heat Load Calculations (3 credits). The study of heat loads as prescribed by Air Conditioning Refrigeration Institute (ARI) and American Society of Heating and Refrigeration Engineers (ASHRE). Three lecture hours per week.

ACRH 280. Automotive Air Conditioning (4 credits). Training in refrigeration and air conditioning theory and in the installation, servicing and maintaining of all types of automobile air conditioning equipment. Three lecture hours and three laboratory hours per week.

ARTS

ARTS 110. Art Crafts for Elementary Majors (3 credits). A survey of art experiences for the elementary child. Laboratory experiences with media and technique and their use at different levels stressed. Philosophy, methodology, and organization included. Course meets requirements for certification. One hour of lecture and five lab hours a week.

ARTS 111. Design I (3 credits). This course is intended to familiarize the student with the basic elements and fundamentals of two-dimensional design and their application to works of art. Six lab hours per week.

ARTS 112. Design II (3 credits). Prerequisite: Design I or instructor approval. This course is intended to provide the student with a knowledge of the application of design principles to three-dimensional work. Six lab hours per week.

ARTS 120. Art Appreciation (3 credits). No Prerequisite. A general course in Art Appreciation open to all college students. Principles of design from the laymans standpoint. Critical evaluation of selected works of painting, sculpture, architecture, and industrial design. Art in relation to every day life. Three lecture hours.

ARTS 121. Drawing I (3 credits). A beginning course investigating a variety of media, techniques and subjects, exploring descriptive and perceptual possibilities of drawing. Six lab hours per week.

ARTS 122. Drawing II (3 credits). Prerequisite: Drawing I or instructor approval. Expansion of Drawing I stressing the expressive and conceptual aspects of drawing, including the human figure in an environmental setting. Six lab hours per week.

ARTS 130. Ceramics (3 credits). An introduction to hand building processes and glaze application. Potters wheel with emphasis on individual self expression.

ARTS 211. Drawing III (3 credits). Prerequisite: Freshman Studio Core. A course in life drawing with emphasis on structure and action of the human figure. Six lab hours per week.

ARTS 221. Design III (3 credits). Prerequisite: Freshman Studio Core or instructor approval. An advanced course in two-dimensional design with an emphasis on individual expression. Six lab hours per week.

ARTS 231. Painting I (3 credits) Prerequisite: Freshman Studio Core. Exploring the potentials of various painting media with stress on color and composition. Six lab hours per week.

ARTS 232. Painting II (3 credits). A study of the techniques and media used in painting, expression is unrestricted as well as subject matter. These courses are open to all students who wish to paint. Art majors will be expected to attend painting laboratory. Six lab hours per week.

ARTS 240. Watercolor Painting (3 credits). The watercolor medium as a means of artistic expression in interpretation of still life, landscape, and figure subjects. Arts 111 or Arts 121 are equivalent. Six lab hours per week.

ARTS 251. Commercial Art I (3 credits). Prerequisite: Freshman Studio Core. Introduction to processes and techniques of advertising art. Six lab hours per week.

ARTS 252. Commercial Art II (3 credits). Prerequisite: Freshman Studio Core. Advanced study of advertising art and production. Six lab hours per week.

ARTS 260. Graphic Media (3 credits). Critical evaluation of graphic media as well as creating works in serigraphy and other print media. Six lab hours per week.

BANK MID-MANAGEMENT

BANK 130. Principles of Bank Operations (3 credits). This course presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may view his/her chosen profession in a broad (and operational) perspective. The descriptive orientation is intentional. Banking is increas-

ingly dependent upon personnel who have the broad perspective so necessary for career advancement. Three lecture hours per week.

BANK 140. Money and Banking (3 credits). This course stresses the practical aspects of money and banking and emphasizes the basic monetary theory needed by the banking student to apply his/her knowledge to his/her particular job. Historical treatment has been kept to a minimum. Emphasis is also placed on such problems as economic stabilization, types of spending, the role of gold, limitations of central bank control, government fiscal policy, balance of payments, and foreign exchange, showing their repercussions on the banking industry in affecting yield curves and the structuring of portfolios. Three lecture hours per week.

BANK 150. Analyzing Bank Financial Statements (3 credits). A fourth edition of the textbook is used for this course and is organized into two main sections: Characteristics of Financial Statements and Financial Statement Analysis. The first section serves as a useful review of basic accounting principles for those students who have studied accounting. For those who have not, this section provides the minimum accounting background necessary for profitable study of financial statement analysis. Three lecture hours per week.

BANK 230. Marketing for Bankers (3 credits). This course discusses the basis of public relations, both internal and external, and seeks simply to explain the why, the what, and some of the how of public relations and marketing. It is intended as an overview for all bankers in terms of what everyone in banking should know about the essentials of bank public relations and marketing. Three lecture hours per week.

BANK 240. Bank Investments (3 credits). Because the bank's needs for primary reserves and loanable funds limit the funds available for investment, this course describes the nature of such funds and how their uses are determined. It also analyzes the primary and secondary reserve needs of commercial bank, the sources of reserves, and their random and cyclical fluctuations, showing the influence of these factors on investment policy. This analysis is followed by a study of yield changes as they affect a bank's long-term holdings. Three lecture hours per week.

BANK 250. Credit Administration. (3 credits). This course, directed toward the executive level, concerns itself partly with a statement and a discussion of factors influencing and determining loan policy. Methods of credit investigation and analysis, credit techniques, specific credit problems, and regular as well as unusual types of loans are discussed. Three lecture hours per week.

BANK 260. Supervision and Personnel Administration (3 credits). This course is designed to aid first-line supervisors in making a smooth transition from expert in a particular to aid first-line supervisors in making a smooth transition from expert in a particular task to the role of a supervisor who must produce results through the efforts of other people. In this role, the first-line supervisor must reflect management attitudes and carry out management policies while at the same time inspiring his/her group to achieve friendly cooperation and maximum production. It should be recognized that the same principles are involved at every level of supervision within the organization. Three lecture hours per week.

BANK 270. Installment Credit (3 credits). In this course, the techniques of installment lending are presented concisely. Emphasis is placed on establishing the credit, obtaining and checking information, servicing the loan, and collecting the amounts due. Each phase of a bank's installment credit operation should be carefully scrutinized to be certain that the most efficient methods are employed, for only through an efficient operation can a bank maximize its

profits on this particular kind of credit. Other topics discussed are inventory financing, special loan programs, business development and advertising, and the public relations aspect of installment lending. Three lecture hours per week.

BANK 280. Teller Training Seminars (3 credits): (a) Loan and Discount. This seminar teaches bank employees the essential facts about promissory notes, including calculating interest and discounting commercial paper; guaranties; general collateral agreements; examining and processing documents accompanying notes secured by stocks, bonds, and savings account passbooks, and the concept of attachment, perfection, priority, default, and foreclosure; (b) Loss Prevention. This seminar focuses on check cashing, check swindles, bank holdups, and security procedures; (c) Selling Bank Services. Teaches tellers and new-accounts personnel how to recognize and meet bank customer needs: checking accounts, savings services, loans to individuals, safe deposit boxes, travelers checks and cross selling. Three lecture hours per week.

Additional courses will be offered if demand is indicated and there is mutual agreement between Alvin Community College and the banking community.

BIOLOGY

BIOL 101-102. Contemporary Biology I, II (3 credits) (3 credits). These courses stress fundamental characteristics of living matter from the molecular level to the ecological community. Basic biological principles relevant to animals are stressed. Contemporary Biology I and those relevant to plants are covered in Contemporary Biology II. Three lecture hours per week.

BIOL 110. Environmental Conservation (3 credits). The management of natural resources, considers the problems caused by population and pollution, balance of nature and man's importance in the environment. Three lecture hours per week.

BIOL 111-112. General Biology I, II (4 credits) (4 credits). Principle of biology including considerable study of the structure of animals and plants. Biol. 111 includes the study of the animal kingdom, human organ systems, and an introduction to cell physiology and chemistry. Biol. 112 includes a study of flowering plant anatomy and physiology, a survey of plant groups, genetics, ecology and evolution. Three lecture and three laboratory hours per week.

BIOL 121-122. Anatomy and Physiology I, II (4 credits) (4 credits). These courses are to be taken in sequence. A study of the structure and function of the organ-systems of the human body. Three lecture and two laboratory hours per week.

BIOL 230. Entomology (4 credits). A survey of the insect orders emphasizing the morphology, physiology, taxonomy, ecology, and life cycles of representative insects. Various control methods for harmful insects will be discussed. Three hours of lecture and three hours of laboratory.

BIOL 225. Basic Microbiology. (4 credits). A one semester course in microbiology stressing the principles and applications of microbial activity with emphasis given to the bacterial types. The role of microorganisms in disease, ecology, sanitation, industry, and public health will be stressed. Sterilization techniques, pure culture techniques and other aspects of microbial control will also be considered. Recommended for students in biology, pre-med, predental, nursing, and related medical fields. Three lecture and three laboratory hours per week. Prerequisite(s): BIOL 111-112, or BIOL 121-122.

BUSINESS ADMINISTRATION

BUAD 110. Introduction to Business (3 credits). An overview of the American system of free enterprise with concentration on business and its environment, organization and management of the enterprise, management of human resources, production, marketing, and finance. Primary emphasis is placed on the way American businesses work, what they can do well and what they do poorly. Lecture three hours per week.

BUAD 120. Business Law (3 credits). The Commercial Codes pertaining to contracts, agency, property, sales, modern labor legislation, employment. Lecture three hours per week.

BUAD 130. General Business Mathematics (3 credits). A review of the fundamental arithmetic skills needed in the business world with particular emphasis on fractions, decimals, percentages, simple and compound interests, discounts, commissions, inventories, depreciation, installment sales and purchases, notes and interest, and payroll. Lecture three hours per week.

CHEMISTRY

CHEM 110. Introductory Chemistry for the Allied Health Sciences (4 credits). A survey of the fundamentals of inorganic, and physiological chemistry. This course is designed for students in nursing and other health related fields. Topics covered include: bonding, acids and bases, salts, the gas laws, chemical equations, ionization, organic chemistry, and physiological chemistry. Three lecture and two hours laboratory each week.

CHEM 111-112. Introductory Chemistry I, II (4 credits) (4 credits). These courses are to be taken in sequence. A general course which is designed for those students who do not plan to do further work in science or engineering. Topics covered include: atomic-molecular theory, valence, formulae, chemical equations, gas laws, solutions and an introduction to the various organic functional groups, systematic organic nomenclature, elementary biochemistry, polymer chemistry, and heterocyclics. Three lecture and two hours laboratory per week.

CHEM 121-122. General Chemistry and Analysis (4 credits) (4 credits). These courses are to be taken in sequence. The topics presented include: atomic structure; the periodic classification; the gas laws; reactions involving oxygen and hydrogen; acids, basis, and salts; solutions of electrolytes; ionization, and the halogens. The study of systems involving chemical equilibria and the qualitative analysis of the common cations and anions using semimicro techniques in the laboratory are also emphasized. Three lecture and four laboratory hours per week.

CHEM 210. Quantitative Analysis (4 credits). The fundamental principles of quantitative analysis are emphasized. Determinations are made involving gravimetric and volumetric methods. Acid-base titrations are carried out. Some of the more modern techniques are utilized, which include spectrophotometric and electroanalytical procedures. Two hours of lecture and six hours of laboratory per week. Prerequisite: CHEM 122.

CHEM 211-212. Organic Chemistry (4 credits) (4 credits). These courses are to be taken in sequence. The chemistry of aliphatic hydrocarbons, mono- and polyfunctional aliphatic compounds, amino acids, proteins, and carbohydrates is considered. Emphasis is placed on the preparation, interrelations, nomenclature, properties, and uses of various compounds. The chemistry of aromatic compounds, heterocyclic compounds, dyes, terpenes, organo-metallic compounds, and polymers are also included. Three lecture and four laboratory hours per week. Prerequisite: CHEM 122.

CHILD CARE and DEVELOPMENT

CHCD 110. Pre-School and Day Care Programs (3 credits). A study of child development through pre-school and day care programs. Includes the history, philosophy and practices of specialized care with emphasis on the educational, recreational and health needs of the child. Three lecture hours a week.

CHCD 130. Child Care Services (3 credits). Child care work with troubled, dependent and neglected children and youth away from their own families. Includes history, philosophy and practices of foster care, adoption and related social services agencies. Three lecture hours a week.

CHCD 140. Child Care Recreation (2 credits). An introduction to the fundamental principles of child development through physical activity. Physical activities appropriate to motor development and movement education. One lecture and two laboratory hours a week.

CHCD 150. Introductory Creative Activities (2 credits). Introduction to art media suitable for use with young children. Includes the process of working with paint, clay, wood, paper and other materials. One lecture and two laboratory hours a week.

CHCD 160. Literature for Young Children (2 credits). An introduction to the various forms of children's literature. Examination is made of literature available specifically for the young child. The student is acquainted with authors and illustrations of children's books. One lecture hour and two laboratory hours per week.

CHCD 170. Music for Young Children (2 credits). A study of the fundamentals of music, including rhythms, harmonic and melodic concepts, pitch, key determination; the musical interests of the child at early age levels. Emphasis to methods which will encourage musical participation by children. One lecture and two laboratory hours a week.

CHCD 200. Exceptional Children (3 credits). An introduction to the understanding of exceptional children — the mentally retarded, the visually handicapped, the auditorially handicapped, the child with speech and language disorders, the brain damaged, the child with behavior disorders and the child with serious emotional disturbances. Includes study of theories relevant to treatment and education of exceptional children and types of services available in special education. Three lecture hours a week. Prerequisite: Psyc 130 or consent of Department.

CHCD 210. Creative Activities II (2 credits). Instruction in a variety of simple science media for use with young children. Basic instruction in the use of tools to facilitate the creation and maintenance of play equipment. Techniques for toy making, creative activities for hospitalized children and simple science projects are developed. One lecture and two laboratory hours a week.

CHCD 220. Child Nutrition and Health Care (3 credits). Provides students with basic information on human nutrition, the nutritional value of food, and an understanding of food and food habits in relation to nutrition of the young child. Examination of food purchasing, storage, safe handling and sanitation. Importance of good nutrition in maintaining good health is presented. Three lecture hours a week.

CHCD 230. Advanced Child Growth and Development (3 credits). Provides the student with an understanding of the physical, social, emotional, and mental development of the young child up to preadolescence, with concentration on child guidance. Increases student's understanding of the dynamics of behavior, including attitudes, values and knowledge of growth patterns. Three lecture hours a week.

CHCD 240. Child Care and Development I (4 credits). The history, philosophy, and ethics of child care, types of child caring facilities, laws and standards governing agency management. Understanding the child and the roles of team members within the agency. Emphasis is placed on the responsibilities, personality and involvement of the child care worker. Includes a two-hour visit each week to designated facilities. Three lecture and two laboratory hours a week.

CHCD 250. Child Care and Development II (4 credits). A survey of the differences in children in child caring facilities, special methods of care and study of specific children based upon actual records. A study of communications, reports and agency records on the child. Provides opportunity for extensive observation of curriculum within a selected facility which allows the student to begin specialization in a particular field. Prerequisite: Child Care 240 or consent of instructor. Two lecture and four laboratory hours a week.

CHCD 260. Seminar and Field Work (4 credits). On-the-job experience under the supervision of a professional team with opportunities for direct involvement in program activities in the area of specialization. Three lecture and eight laboratory hours a week.

CHCD 270. Special Project (4 credits). Opportunity for a student or group of students to pursue a special interest in the area of child care. Special projects which would demonstrate a functional capability within an area of child care will be undertaken with the approval of the instructor. Student projects may include child development models in areas of literature, recreation, music, etc. Three lecture and eight laboratory hours a week.

COMMUNICATIONS

COMM 110. Survey of Radio and TV (3 credits). A survey of the broadcasting industry. Historical highlights, technical developments, and regulation of radio and television will be discussed. Operation of radio and TV equipment will be explained. Radio and television programming, cable TV and new electronic media will also be covered. Three lecture hours per week.

COMM 111. Basic Recording Techniques (3 credits). This course is designed to familiarize the student with modern multi-track studio recording techniques. The course includes live 8-track recording sessions offering the student the opportunity to apply the related techniques. One hour lecture and two hours of lab per week.

COMM 210. Radio News Workshop (3 credits). Preparation of news and specialized news program copy for radio presentation. News styles for the electronic media, Spot news, interpretive specials, and analysis. Lab will include airing of newscasts on the College radio station. One hour lecture and four hours of lab per week. Prerequisite: ENGL 111 or 121 and instructor approval.

COMM 211. Radio Production (3 credits). A practical approach to the presentation of announcements and live programs as encountered in the daily operation of the average radio station. Beginning instruction in audio control. The course will include on-air experience at the College radio station. One hour of lecture and four hours of lab per week. Prerequisite: ENGL 111 or 121, F.C.C. Restricted radio permit and instructor approval.

COMPUTER SCIENCE

CSCI 105. Keypunch Operations (3 credits). Introduction to keypunch operations. Designed to train students in the efficient use of the card punching equipment. Primary emphasis will be placed on "hand-on" operation of equipment using a series of exercises which increase in complexity as the student progresses. Program control card preparation using two program levels will be stressed. Lecture 2 hours, laboratory 3 hours. Prerequisite: none.

CSCI 110. Introduction to Computer Science (4 credits). An introduction to Computer Science with FORTRAN IV. FORTRAN IV programming includes input, output, looping, arrays, and sub-programs. Also includes reading and interpreting FORTRAN IV programs. This course also contains computer science history, number systems, algorithms, flowcharts, block concepts of computer organization, applications, compiles overview, overview of other programming languages, review of cards, papertape, magnetic tape, magnetic disc, and keypunch. Three hours lecture and three hours laboratory per week. Prerequisite: High School algebra or equivalent.

CSCI 114. Computer Programming (BASIC). (3 credits). This course is to teach BASIC Computer programming language. BASIC is an interpreter programming language designed for use at a terminal. Three hours lecture and two hours laboratory per week. Prerequisite: None.

CSCI 115. Computer Operations (3 credits). The study of a third generation computer system. Lecture will cover a study of the console operator commands, use of the terminals, use of the editor, and use of the system utility programs. Laboratory exercises are executed involving planning and operation of the equipment. Three hours lecture and two hours laboratory per week. Prerequisite: None.

CSCI 120. RPG Programming (3 credits). Report Program Generator is a compiler language that will process data into a printed report with a minimum of programming effort. The coding forms provided make the programmer's role principally clerical. Lecture will include a detailed description of the language, forms and use. Several programs are constructed, run, and debugged as an aid to comprehending RPG and its capabilities. Three hours lecture and two hours laboratory per week. Prerequisite: None.

CSCI 130. Computer Programming (Introductory COBOL) (3 credits). Students will be required to program, debug, and test specified business problems using COBOL. This high level language is commonly used for business problems. Lectures will cover processing of data from the original document to the final report. Three hours lecture and two hours laboratory per week. Prerequisite: None.

CSCI 170. Structured Programming. (3 credits). A study of the field of software development with special emphasis on reliability, maintainability, extensibility, and programming style. Three hours lecture and two hours laboratory per week. Prerequisite: Consent of the department.

CSCI 210. Computer Programming (Advance FORTRAN) (3 credits). A detailed study of Fortran IV. This high level language is commonly used in scientific

computations. One of the basic objectives is providing the student with the knowledge to handle mathematical and statistical problems on a computer. Three hours lecture and two hours laboratory per week. Prerequisite: CSCI 110, MATH 121 or MATH 180, or consent of the department.

CSCI 215. Digital Computer Fundamentals (3 credits). A study of digital theory, devices, bus-organized computers, architecture, and programming. Three hours lecture and two hours laboratory per week. Prerequisite: Consent of the department.

CSCI 220. Seminar & Project. (3 credits). A study of problems of an advance type. Problems chosen to enhance students' background and to give experience on the system analysis level. The student will design a system and write the necessary programs to implement the system under the supervision of a sponsoring instructor. Three hours lecture and laboratory two hours per week. Corequisite: CSCI 240.

CSCI 225. Special Topics. (3 credits). This course consists of special projects designed to meet individual students needs and interests. Three hours lecture and two hours laboratory per week. Prerequisite: Consent of the department.

CSCI 230. Computer Programming (Advanced COBOL) (3 Credits). This course is designed to acquaint the student with the more advanced aspects of COBOL. Complete business application systems will be implemented, coded, programmed, tested, and documented as one would expect to find in a real life environment. Three hours lecture and two hours laboratory per week. Prerequisite: CSCI 130.

CSCI 240. Systems Analysis. (3 Credits). A study of the area of systems and systems analysis. Topics covered are: scope of systems analysis, systems investigation, input design, output design, designing files, design and documentation, proving the design, communications, justifying the system, implementation, controls and security, hardware, software. Three hours lecture and two hours laboratory per week. Prerequisite: CSCI 230 and Corequisite CSCI 220.

CSCI 250. Computer Programming (3 Credits). A study of assembly languages. The student studies assembly language. Three hours lecture and two hours laboratory per week. Prerequisite: CSCI 110, CSCI 115, and consent of the department.

CSCI 260. Mini/Micro Computers. (3 credits). A study of mini/micro computers and their use in business and industry. Mini/micro computer programming and hands-on operation. Three hours lecture and two hours laboratory per week. Prerequisite: Consent of the deparment.

COOPERATIVE EDUCATION

COOP 111. Seminar and Work Experience. (3 credits). Prerequisite: Approval of Coordinator of Cooperative Education. A comprehensive treatment of internship related activities, individualized objectives, and regularly scheduled seminars. Concentration on proper interviewing techniques, letters of application and resume writing, case study method towards human relations and effective communications on the job, investigation of the career and work environment, and an analysis of the chosen career, which includes appropriate curriculum requirements.

COOP 112. Seminar and Work Experience. (3 credits). Prerequisite: Approval of Coordinator of Cooperative Education. A comprehensive treatment of internship related activities, individualized objectives, and regularly scheduled seminars. Concentration of the development of a philosophy towards work including personal life planning, effective time management, value clarification, professional ethics and moral responsibilities and creative use of leisure time.

COOP 211. Seminar and Work Experience. (3 credits). Prerequisite: Approval of Coordinator of Cooperative Education. A comprehensive treatment of internship related activities, individualized objectives, and regularly scheduled seminars. Concentration on long-term employment considerations, including analysis of employee benefits, involvement in labor organizations, social security, insurance needs, retirement and a continuation of career development and evaluation.

COOP 212. Seminar and Work Experience. (3 credits). Prerequisite: Approval of Coordinator of Cooperative Education. A comprehensive treatment of internship related activities, individualized objectives, and regularly scheduled seminar. Concentration on the concept of career development through an examination of career change and advancement, leadership and management styles and the relationships of professional, civic and social organizations to career advancement.

CORRECTIONAL SCIENCE

CRSC 110. Introduction to Corrections. (3 credits). An examination of the total correctional process from law enforcement through the administration of justice, probation, prisons and correctional institutions. History, philosophy, methods and techniques. Three lecture hours per week.

CRSC 120. Penology (3 credits). Analysis and evaluation of contemporary correctional systems; discussion of recent research concerning the correctional institution and the various field services. Three lecture hours per week.

CRSC 130. American Legal System (3 credits). The court system of the United States is explained at all levels, emphasizing adversary procedures in the criminal and civil procedures in the juvenile court, together with recent Supreme Court decisions regarding both. Three lecture hours per week.

CRSC 140. Crime and Delinquency (3 credits). A survey of the nature and extent of crime and delinquency, together with the major approaches to causation, apprehension, control, and treatment. Three lecture hours per week.

CRSC 150. Introduction to the Criminal Justice System. (3 credits). An overview of the total system of the administration justice provided with emphasis on due process and on the constitution guarantees. Discussion of Texas Criminal Procedure and the Texas Penal Code. Three lecture hours per week.

CRSC 210. Probation, Pardons, and Parole. (3 credits). Probation as a judicial process and parole as an executive function are examined as community-based correctional programs and the use of pardons is reviewed. Three lecture hours per week. Prerequisite: CRSC 110 or CRSC 120.

CRSC 220. Institutional Procedures, Jails and Detention (3 credits). The function of the custodial staff is examined with special emphasis on the correctional officer. Institutional procedures are reviewed, including reception, classification, program assignment, and release procedures. Three lecture hours per week.

CRSC 230. Contemporary Practices in Corrections. (3 credits). Modern trends in corrections, such as the community-based programs in work-release, halfway houses, contract program planning, as well as the therapeutic commu-

nity and treatment team concept in institutions are described and evaluated. Three lecture hours per week. Prerequisite: CRSC 120, CRSC 140, and CRSC 150.

CRSC 240. Corrections I: Organization and Operations. (3 credits). A minimum of three months in an approved correctional setting taken after two semesters of approved work. The organization of correctional institutions is studied. Treatment, custody and support activities are examined. Students utilize functional charts for the various departments within the institution. Prerequisite: Consent of Division Chairman.

CRSC 250. Corrections II: Theory and Practice. (3 credits). A minimum of three months in an approved correctional setting taken in conjunction with CRSC 240. Current theory and practice in state correctional institutions are examined with emphasis on the Texas Department of Correction programs. Prerequisite: Consent of Division Chairman.

COURT REPORTING

CTRP 111. Machine Shorthand Theory (6 credits). Theory of machine shorthand, vocabulary development, and skill building through reading and machine practice. Dictation and transcription of machine shorthand notes. Two theory courses are required of the beginning student. Prerequisite: none. Lecture, 6 hours; Laboratory, 4 hours; Total, 10 hours per week.

CTRP 112. Machine Shorthand I (60-80-100) (6 credits). Development of vocabulary and skill building through concentrated emphasis on live dictation and transcription of machine shorthand notes. The objective of the course is to attain the speed of 100 words per minute. The student advances at his/her own rate. Prerequisite: CTRP 111. Lecture, 6 hours; Laboratory, 4 hours; Total, 10 hours per week.

CTRP 120. Machine Shorthand II (120-140) (6 credits). Emphasis on increased skill and speed. The objective of the course is to attain the speed of 140 words per minute. The student advances at his/her own rate. Prerequisite: CTRP 112. Lecture, 6 hours; Laboratory, 4 hours; Total, 10 hours per week.

CTRP 121. Law and Legal Terminology (3 credits). Course objectives are to insure comprehension of meanings and applications of legal terminology, while instructing in the various fields of law encountered in the practice of the court reporter. Emphasis is placed on the judicial system, types of courts, jurisdictions, and appelate procedures. Court practices and responsibilities of the reporter are fully covered, including ethics of the profession. Course also includes researching of legal reference books and handling of citations in the record. Lecture, 4 hours; Laboratory, 1 hour. Total, 5 hours per week. Prerequisite: None

CTRP 122. Medical Terminology (3 credits). Study of human anatomy, skeletal structure, systems of the body, and medical specialties, coupled with lectures, study guides, tests and exercises designed to insure knowledge of the components in building medical vocabulary and application thereof. Lecture, 4 hours; Laboratory, 1 hour; Total, 5 hours per week. Prerequisite: None

CTRP 130. Transcription I (2 credits). Supervised activity with continued concentration on dictation and transcription of shorthand notes. 0 lecture hours and 5 laboratory hours per week.

CTRP 140. Transcription II (2 credits). Supervised activity with continued concentration on dictation and transcription of shorthand notes. 0 lecture hours and 5 laboratory hours per week.

CTRP 141. Grammar and Punctuation I (2 credits). The study of basic grammar as applied to the reporting profession, with emphasis on parts of speech; formation of plurals and possessives, verbal, adverbial, and adjective comparisons; sentence patterns; capitalization, and vocabulary development. This study approaches English grammar from the proofreading aspect rather than from the writing aspect. (This course is to be given on alternate days with ENGL 111 — Communication Skills I — 3 credits.) Two lecture hours and no lab hours per week.

CTRP 142. Grammar and Punctuation II (2 credits). Specialized English training applied to the reporting profession, including the study of clauses and phrases, rules of punctuation, capitalization, word division, proper transcription, forms for numerals, use of abbreviations, transcript editing, proofreading, and NSRA Punctuation. The student is given numerous dictations for transcribing and is tutored in voice and speech patterns while reading notes aloud. (This course is to be given on alternate days with ENGL 112 — Communication Skills II — 3 credits.) Two lecture hours and no lab hours per week.

CTRP 210. Transcription III (2 credits). Supervised activity with continued concentration on dictation and transcription of shorthand notes. Lecture, 0 hours; Laboratory, 5 hours. Total, 5 hours per week.

CTRP 211. Machine Shorthand III (160-180) (6 credits). Continued emphasis on skill and speed building. The objective is to attain the speed of 180 words per minute. Prerequisite: CTRP 120. Lecture, 6 hours; Laboratory, 4 hours; Total, 10 hours per week.

CTRP 212. Machine Shorthand IV (200-225) (6 credits). Continued emphasis on skill and speed building, culminating in the attainment of the speed of 225 words per minute. Prerequisite: CTRP 120. Lecture, 6 hours; Laboratory, 4 hours; Total, 10 hours per week.

CTRP 220. Transcription IV (2 credits). Supervised activity with continued concentration on dictation and transcription of shorthand notes. 0 lecture hours and 5 laboratory hours per week.

CTRP 221. Courtroom Procedures I (3 credits). Untimed simulated courtroom situations are presented, using attorneys, witnesses, and court personnel. Emphasis is placed on varied courtroom practices, such as voir dire examinations, opening and closing statements, objections, marking of exhibits, indexing and filing of notes, citations, read back, and preparation of transcripts in required format. Prerequisite: CTRP 120. Three lecture hours; Two lab hours per week.

CTRP 222. Courtroom Procedures II (3 credits). Untimed simulated courtroom situations are continued as described in Courtroom Procedures I. Material is presented to develop endurance and machine writing techniques. Court Reporting ethics are stressed with emphasis on the responsibilities of a reporter and the profession. At this level arrangements are made when possible for the student to participate in actual court proceedings with an official court reporter in attendance. Three lecture hours; Two lab hours per week. Prerequisite: CTRP 221.

CTRP 225. Technical Dictation (3 credits). Dictation emphasizing all aspects of technical terminology, involving medical, legal, surveying, engineering, chemical, maritime, patent, aero-space, etc., with read-back and transcription assignments in correct format, including proper transcription of mathematical and chemical formulae. This course utilizes one- and two-voice dictation material. 3 lecture hours and 2 laboratory hours per week.

CTRP 240. General Office Practices (3 credits). The first half introduces the use of office dictation equipment, primarily the Stenorette; stresses dictation from notes, emphasizing enunciation in general and verb tenses, word endings, and punctuation in particular; promotes practice in transcribing from reporters tapes, use of work sheets, marking exhibits, and working with general deposition forms and procedures. The second half introduces techniques of billing, basic bookkeeping and tax records, sample letter writing, indexing and filing of notes, and pertinent office practices. At this level arrangements are made for the student to accompany a practicing court reporter on actual assignments, observing on-the-job techniques and the job preparations at the office. Prerequisite: CTRP 211. Three lecture hours and two lab hours per week.

DRAFTING

DRFT 105. Blueprint Reading I (2 credits). A course designed to introduce the beginning draftsman or tradesman with available catalogs, books and vocabulary used in the engineering field. Classroom instruction will consist of reading and interpreting mechanical blueprints, offering a basic knowledge of sketching, dimensioning, section views, assembly drawings and drafting techniques. Two lecture and one laboratory hours per week.

DRFT 106. Blueprint Reading II (2 credits). A course designed to introduce the beginning draftsman or tradesman with available catalogs, books and vocabulary used in the architectural and construction fields. The study of house and small building blueprints will be used. Designed for persons in all areas of construction, as well as policemen, firemen, business and finance managers. Two lecture and one laboratory hours per week.

DRFT 110. Fundamentals of Drafting (3 credits). A course for students without previous drafting experience or non-drafting majors. A basic course including use of drawing instruments, lettering, geometric construction, orthographic projection with an introduction to specialized areas. Two lecture and four laboratory hours per week.

DRFT 111. Technical Drafting (4 credits). The principles of technical drawing as required to express ideas graphically are introduced. Topics include: use of instruments, geometric construction, orthographic projection, sections, auxiliary views, revolutions, dimensioning, axonometric projection, intersections and developments: Two lecture and six laboratory hours per week. Prerequisite: DRFT 110, the equivalent, or consent of Department.

DRFT 120. Descriptive Geometry (3 credits). Problems relating to point, lines, and planes; intersection and sheetmetal developments; and auxiliary views. Two lecture and four laboratory hours per week. Prerequisite: DRFT 110 or equivalent.

DRFT 130. General Drafting (4 credits). Instruction provides a basic introduction to drafting procedures as applied in various areas of drafting. Such topics as pipe, machine, concrete foundations, pressure vessels, structural steel and architectural drafting techniques are introduced to aid the student in his decision toward an area of specialization. Two lecture and six laboratory hours per week. Prerequisite: DRFT 111.

DRFT 170. Industrial Design (2 credits). A course for students employed in or studying construction trades or related fields. A brief review of basic drafting skills is followed by a study of sheet metal drafting, sizing and placement of ducts, plumbing and electrical layouts. Two lecture and six laboratory hours per week. Prerequisite: Approval of Department.

DRFT 211. Pipe Drafting (4 credits). A basic course designed for the study of engineering standards, pipe and fitting designs, symbols and specifications. Two lecture and six laboratory hours per week. Prerequisite: DRFT 111 or consent of department.

DRFT 212. Pipe Drafting (4 credits). A continuation of DRFT 211 for students desiring a more comprehensive knowledge and skill in pipe drafting. Two lecture and six laboratory hours per week. Prerequisite: DRFT 211.

DRFT 221. Structural Drafting (4 credits). A course designed to cover AISC specifications and standards, design and detail, or structural members and connections. Two lecture and six laboratory hours per week. Prerequisite: DRFT 111, or consent of department.

DRFT 222. Structural Drafting (4 credits). A continuation of DRFT 221 with emphasis on structural steel design and beams and columns working with kip loads. Attention is also given to column details, erection drawings, skewed connections, and miscellaneous detail. Two lecture and six laboratory hours per week. Prerequisite: DRFT 221.

DRFT 231. Electrical Drafting (4 credits). An introduction to electrical schematics and diagrams. Also covers basic electricity and study of electrical and electronic symbols, their application and associated terminology. Two lecture and six laboratory hours per week. Prerequisite: DRFT 111, or consent of Department.

DRFT 232. Electrical Drafting (4 credits). A continuation of DRFT 231 on an advanced level with emphasis on electrical measurements and codes. A general coverage of voltage, currents, resistance and their relationship is included. Two lecture and six laboratory hours per week. Prerequisite: DRFT 231.

DRFT 241. Architectural Drafting (4 credits). Basic drafting techniques as related to the preparation of residential details, with emphasis on floor plans, plot plans, foundations, structural details, sections and elevations. Two lecture and six laboratory hours per week. Prerequisite: DRFT 110 or permission of department.

DRFT 242. Architectural Drafting (4 credits). A continuation of DRFT 241 on an advanced level. Two lecture and six laboratory hours per week. Prerequisite: DRFT 241.

DRFT 251. Machine Drafting (4 credits). Problems relating to detail and assembly drawings of small machines, with emphasis on screw threads, fasteners, gears, and shop processes. Two lecture and six laboratory hours per week. Prerequisite: DRFT 130 or permission of department.

DRFT 252. Machine Drafting (4 credits). A continuation at an advanced level of DRFT 251 developing machine design skills. Two lecture and six laboratory hours per week. Prerequisite: DRFT 251.

DRFT 260. Surveying (3 credits). A course designed to emphasize the principles of surveying, including the use of the tape, level, transit, tabulation of field data, boundary surveys, and basic topography mapping. Two lecture and three laboratory hours per week. Prerequisite: Technical Math I and/or consent of the department.

DRFT 265. Map Drafting (4 credits). Plotting surveyor's notes, plot plans and plats. Streets, highways, waterways and industrial applications are included. Attention is given to lettering and lettering devices as used in civil drafting. Two lecture and six laboratory hours per week. Prerequisite: DRFT 111 or approval of department.

DRFT 270. Construction Drafting (4 credits). A course designed to gain insight into all types and methods of construction, the nature of various building materials and their use, and methods of construction. Two lecture and six laboratory hours per week.

DRFT 275. Industrial Model Construction (4 credits). Construction of models are used to introduce the student to the methods of, uses, principles and techniques used in the building of industrial models. Two lecture and six laboratory hours per week. Prerequisite: DRFT 111 or approval of department.

DRFT 281. Special Problems I (4 credits). A course designed to give the student an opportunity to develop additional skills in an area of major interest or explore an additional specialized field. The student will complete actual job problems in the chosen area of his interest. Two lecture and six laboratory hours per week. Prerequisite: Approval of Department.

DRFT 282. Special Problems II (4 credits). May be repeated for credit when topics vary. Two lecture and six laboratory hours per week. Prerequisite: Approval of Department.

DRAMA

DRAM 111, 112, 211, 212. Rehearsal and Performance (1 credit for each course). This course is an activities course in which the student participates in theatre productions either as actor or crew member. Two lab hours per week.

DRAM 120. The Creative Experience (3 credits). This course is designed to aid the student to find his/her own individual creativity. Through planned exercises the student will study rhythm and time; space and form; and line and silhouette. Three lecture hours per week.

DRAM 130. Introduction to the Theatre Arts. (3 credits). This course is the study of the principles of drama and the development of the Theatre as an Art as evidenced through study of styles and forms of productions past and present. Three lecture hours per week.

DRAM 140. Introduction to Acting (3 credits). This course is designed to study the basic techniques of acting. Included in the course will be character analysis, character movement, and improvisational acting. Lecture two hours, laboratory two hours per week.

DRAM 150. Stage Makeup. (3 credits). A survey of the reasons for stage makeup and the types of makeup available. Principles of defining makeup for characters in a play. Intensive practical application. Lecture two hours, laboratory two hours per week.

DRAM 230. Introduction to Technical Theatre (3 credits). This course is designed to study the basics for working in the areas of construction, properties, costuming, lighting, and sets. Lecture two hours, laboratory two hours per week.

DRAM 235. Intermediate Technical Theatre (3 credits). This course is designed to study the basic concepts of stage design including set design, costume design, and lighting design. The course also studies the principles of execution of these designs. Three lecture hours per week. Prerequisite: DRAM 230.

DRAM 240. Advanced Acting (3 credits). This course studies the different styles to perform in all areas of Theatre. Areas of concentration are Greek, Roman comedy, Elizabethan, and Restoration. Lecture two hours, laboratory two hours per week. Prerequisite: DRAM 140.

DRAM 250. Theatre Speech (3 credits). This course is designed to study the necessary development of the voice for use for the stage. This course includes

voice development, placement, projection and diction. Three lecture hours per week. Prerequisite: DRAM 140.

ECONOMICS

ECON 110. Consumer Economics (3 credits). How to make the most efficient use of business goods and services; and insight into buying problems such as use and evaluation of advertising; consumer financial problems such as banking, credit, personal accounting and budgeting, and installment buying. Three lecture hours per week.

ECON 111. Principles of Economics I (3 credits). Analysis of economic aggregates: inflation, unemployment, economic growth, the distribution of income (including current policies and problems). Principles of fiscal and monetary policy are presented. Primary emphasis placed on critical understanding of the economy's ability to meet the needs of its people participating as workers, consumers, and citizens. Three lecture hours per week.

ECON 112. Principles of Economics II (3 credits). Supply-demand relationships; economics of the firm and resource allocation (price and output determination — pure competition, monopolistic competition, oligopoly, monopoly); economic problems (business, agriculture, labor, etc.); international economic relations. Three lecture hours per week. Prerequisite: ECON 111.

ELECTRONICS

ELEC 110. Introduction to Electronic Technology (3 credits). An introduction to concepts in electronic technology, including a study of basic electronic manufacturing methods and electronic equipment utilization. Lecture three hours per week. Corequisite: ELEC 115.

ELEC 115. Introduction to Electronic Technology Laboratory (1 credit). Three laboratory hours per week. Corequisite: ELEC 110.

ELEC 120. D.C. Theory and Circuit Analysis (3 credits). A study of direct current electricity involving voltage, current and resistance relationships and basic network equations. Three lecture hours per week. Prerequisite: 2 years HS ALGEBRA or equivalent. Corequisite: ELEC 125 and MATH 151.

ELEC 125. D.C. Theory and Circuit Analysis Laboratory (1 credit). Three laboratory hours per week. Corequisite: ELEC 120.

ELEC 130. A.C. Theory and Circuit Analysis (3 credits). The analysis of passive electronic circuits with respect to time varying d.c. and a.c. waveforms. Three lecture hours per week. Prerequisite: ELEC 120. Corequisite: ELEC 135 and Technical Math II or equivalent.

ELEC 135. A.C. Theory and Circuit Analysis Laboratory (1 credit). Three laboratory hours per week. Corequisite: ELEC 130.

ELEC 140. Electronics I (3 credits). An introduction to discrete active components and circuit configurations in preparation for the study of amplifier, oscillator, and digital circuit analysis. Three lecture hours per week. Prerequisites: ELEC 120 and 125. Corequisite: ELEC 145.

ELEC 145. Electronics I Laboratory (1 credit). Three laboratory hours per week. Corequisite: ELEC 140.

ELEC 150. Electronic Problems (3 credits). A study of the application of mathematics and calculations to solve electronic problems. Topics from algebra and trigonometry are selected. Three lecture hours per week.

ELEC 160. Electronic Drafting and Design (3 credits). A study of design, documentation, and drafting techniques involved in the production of electronic equipment for industrial and consumer applications. Three lecture hours per week.

ELEC 165. Electronic Drafting and Design Laboratory (1 credit). Application of design and drafting principles as related to electronic equipment production. Three laboratory hours per week.

ELEC 210. Electronics II (3 credits). Linear amplifier analysis and design including an introduction to oscillators. Three lecture hours per week. Prerequisites: ELEC 140 and 145. Corequisite: ELEC 215.

ELEC 215. Electronics II Laboratory (1 credit). Three laboratory hours per week. Corequisite: ELEC 210.

ELEC 220. Electronics III (3 credits). An introduction to digital circuit analysis and design with emphasis on integrated circuits. Three lecture hours per week. Prerequisites: ELEC 140 and 145. Corequisite: ELEC 225.

ELEC 225. Electronics III Laboratory (1 credit). Three laboratory hours per week. Corequisite: ELEC 220.

ELEC 230. Electronic Instrumentation and Measurement Techniques (3 credits). Theory of operation and application of standard laboratory test equipment. Three lecture hours per week. Corequisite: ELEC 235.

ELEC 235. Electronic Instrumentation and Measurement Techniques Laboratory (1 credit). Three laboratory hours per week. Corequisite: ELEC 230.

ELEC 240. Electronics Seminar and Project (3 credits). A survey of current electronic devices found in industrial applications. Seminar and lecture, three hours per week. Prerequisite: 16 hours of electronics or approval of the department. Corequisite: ELEC 245.

ELEC 245. Electronics Project Laboratory (1 credit). Design and construction of an electronic project or a research report related to the student's occupational objectives. Minimum of three laboratory hours per week. Corequisite: ELEC 240.

ELEC 250. Electronic Logic Design (3 credits). An advanced study of discrete and integrated circuit applications to electronic logic design. Three lecture hours per week. Prerequisites: ELEC 220 and 225.

ELEC 260. Communications Circuits and Systems (3 credits). A study of the circuits, theory, and operations in modern electronic communications systems. Three lecture hours per week. Prerequisites: ELEC 210, 215, ELEC 230, 235, or approval of the department. Corequisite: ELEC 265.

ELEC 265. Communications Circuits and Systems Laboratory (1 credit). Three laboratory hours per week. Corequisite: ELEC 260.

ELEC 270. Survey of Digital Electronic Systems (3 credits). An overview of current theory and application of electronics from a systems viewpoint. Three lecture hours per week. Prerequisite: 16 hours of electronics or approval of the department.

ELEC 280. Industrial Instrumentation and Control (3 credits). Introduction to industrial measurement and control. Three lecture hours per week. Prerequisite: ELEC 230.

ELEC 281. (Brazosport No. — INST 214) Principles of Industrial Measurements (4 credits). Principles and devices for the measurement of pressure, flow, level, and temperature measurements. Prerequisites: PHYS 133-134 or consent of the division chairman.

ELEC 282. (Brazosport No. — INST 204) Principles of Automatic Control (4 credits). Control principles, force and moment balance, and feedback. The use of control signals, power positioners, and components of a control system. Controllers, including on-off, proportional, proportional plus reset and rate response. Adjustment of controllers for speed and stability, relays, switching equipment, and control, valves, and start-up operation.

ELEC 283. (Brazosport No. — INST 224) Advanced Automatic Control (4 credits). A study of computer techniques for automatic control, ratio controllers, cascade control, electronic controllers. Prerequisite: ELEC 282.

ELEC 290. Computers and Computer Controlled Systems (3 credits). A study of digital and analog computer operation and control, including systems organization with respect to hardware, software and interfacing. Prerequisite: 16 hours of electronics or approval of the department.

ELEC 295. Computers and Computer Controlled Systems Laboratory (1 credit). Three laboratory hours per week. Corequisite: ELEC 290.

ENGLISH

ENGL 101. Developmental Writing Lab (1 credit). Designed to accompany ENGL 110, this course provides one hour each week of supervised individual and small-group instruction and practice activities that reinforce 110 class work and deal with specific writing problems.

ENGL 110. Developmental Writing (3 credits). Beginning with identification of the grammatical elements needed for successful writing, this course offers step by step instruction in the development of sound sentences and paragraphs. ENGL 110 is required for the student who scores below 14 in English on the ACT and/or reveals by placement examination a deficiency in English. The course is strongly recommended for those scoring below 16 in English on the ACT. ENGL 110 students must satisfactorily complete the course before they are eligible to take English 111 or 121.

ENGL 111. Communication Skills I (3 credits). Designed for the occupational/technical student, this course features intensive practice in composing informative paragraphs and multiparagraph papers on career-related topics. Three lecture hours per week. Prerequisite: Satisfactory score on English proficiency exam.

ENGL 112. Communication Skills II (3 credits). In this course the occupational/technical student examines communication theory in detail. Assignments include practice in the techniques of proficient writing, speaking, and group problem-solving. Three lecture hours per week. Prerequisite: ENGL 111.

ENGL 121. Composition and Rhetoric I (3 credits). This standard course promotes correct and effective writing through a review of grammar and a progression of written assignments. It includes the study of writing techniques that characterize shorter works of fiction. Three lecture hours per week. Prerequisite: Satisfactory score on English proficiency exam.

ENGL 122. Composition and Rhetoric II (3 credits). This course continues the skills and concepts presented in ENGL 121. There is more intensive practice in theme writing, including a research paper, and attention is given to the techniques of drama and poetry as well as prose fiction. Three lecture hours per week. Prerequisite: ENGL 121.

NOTE: To fulfill the sophomore Engish requirements of ACC programs of study, the English Department recommends either ENGL 211-212 or 221-222, taken in sequence. However, a combination of one course from Group A

and one from Group B, taken in any order, is acceptable. Group A: 211 or 221. Group B: 212 or 222 or 230.

ENGL 211. Survey of Literature I (3 credits). Through a study of masterpieces dating up to the eighteenth century, ENGL 211 features significant contributions of world literature to our cultural heritage. Collateral reports and reading are required. Three lecture hours per week. Prerequisites: ENGL 121 and 122.

ENGL 212. Survey of Literature II (3 credits). This course is a continuation of ENGL 211. World literature ranging from seventeenth century Europe to twentieth century America is within the scope of this survey. Collateral reports and reading are required. Three lecture hours per week. Prerequisites: ENGL 121 and 122.

ENGL 221. Survey of English Literature I (3 credits). This course is a study of British literature from its beginning to the eighteenth century. Collateral reports and reading are required. Three lecture hours per week. Prerequisites: ENGL 121 and 122.

ENGL 222. Survey of English Literature II (3 credits). As a continuation of ENGL 221, this course is a study of British literature from the Romantic Period to the present. Collateral reports and reading are required. Three lecture hours per week. Prerequisites: ENGL 121 and 122.

ENGL 230. American Literature (3 credits). From colonial times to the present, this course surveys significant writings that are part of our national literary heritage. Collateral reports and reading are required. Three lecture hours per week. Prerequisites: ENGL 121 and 122.

FASHION MERCHANDISING

FASH 130. Introduction to Fashion Merchandising (3 credits). This course develops an overview of the fashion industry, its principles, and procedures. Production, distribution, and consumption of fashion apparel will be analyzed. Consumer characteristics and their influence and changing demand for fashion goods will be related to fashion marketing activities. Prerequisite: Consent of instructor. Lecture — three hours; Laboratory — 0 hours. Total — three hours per week.

FASH 140. Fashion Buying and Merchandising (3 credits). The student will study the fundamental concepts in the buying and merchandising of fashion products. The course will develop an understanding of methods of inventory, elements of profit, pricing, mark-up, mark-down, and terms of sale. Sources of buying information, selection of fashion merchandise and responsibilities of buyers will be covered. Field trips to stores will supplement class lectures. Prerequisite: Consent of instructor. Lecture — three hours; Laboratory — 0 hours. Total — three hours per week.

FASH 210. Fashion Sales Promotion (3 credits). This course is designed to introduce the student to general procedures and objectives of sales promotion to stimulate a creative approach to the promotion of fashion merchandise. A study of sales promotion activities, fashion advertisements, media, display, and publicity will be made. Emphasis will be placed on a fashion show presentation as a term project. Prerequisite: Consent of the instructor. Lecture — three hours; Laboratory — 0 hours. Total — three hours per week.

FASH 220. Textiles (3 credits). A study of fibers, yarns, weaves, designs, and finishes with emphasis on information applicable to the selection and performance of textiles normally used in apparel will be used. Prerequisite: Consent of the instructor. Lecture — three hours; Laboratory — 0 hours. Total — three hours per week.

FASH 230. Fashion Fundamentals (3 credits). A course designed to add balance to the Fashion Merchandising curriculum; comprehensive coverage in the personality and grooming fields to help students develop tasteful appearance, attractive personality, and the social refinements that are necessary for success in today's fashion world. Prerequisite: Consent of the instructor. Lecture — three hours; Laboratory — 0 hours. Total — three hours per week.

FASH 112, 122, 212, 222. Internship (3 credits, each). The student works in a qualifying firm 20 hours per week in an occupational situation where he receives practical training and experience compatible with his management career objective. Students may receive credit from an approved full-time job.

FRENCH

FREN 111-112. Elementary French (4 credits) (4 credits). This course is designed for those students who have had no previous instruction in French. Stress is placed on conversational French though care is exercised to teach the essentials of grammar. Three lecture hours and two laboratory hours per week.

FREN 121-122. Intermediate French (3 credits) (3 credits). French readings, grammar, and composition based partly on a formal text and partly on selected readings. Stress will be placed on oral work. Three lecture hours and one laboratory hour per week. Prerequisite: FREN 112 or instructor approval.

GEOGRAPHY

GEOG 110. Principles of Geography (3 credits). A study of the natural and cultural features within the world-wide geographic setting. Emphasis is placed on world climatic regions with discussion and interpretation. Three lecture hours per week.

GEOLOGY

GEOL 111. General Geology I (4 credits). An introduction to the study of rocks, minerals, and physical processes that modify the surface of the earth. Special attention will be given to the practical aspects of geology to society, such as mineral, energy, and water resources; volcanism; and geologic factors that influence the environment. Three lecture and two laboratory hours per week.

GEOL 112. General Geology II (4 credits). Survey of the evolution of the earth and life through geologic time. Includes such topics as earthquakes and the earth's interior; mountain building; drifting continents; the Ice Ages; solar system; history of life; the geological aspects of the environment and its effect on the future of mankind. Three lecture and two laboratory hours per week.

GOVERNMENT

GOVT 211. American National and State Governments I (3 credits). A study of the origin and development of our federal system of government; analysis of federal and state constitutions with special attention to the Texas Constitution; federal-state and inter-state relations; and special emphasis on problems of citizenship in a modern democratic society. Three lecture hours per week.

GOVT 212. American National and State Governments II (3 credits). A study of the functions and services of the government of the United States, the states in general, and Texas in particular. Three lecture hours per week.

HEALTH MEDICAL LABORATORY TECHNOLOGY

(Medical Laboratory Technician)

HMLT 111. Clinical Chemistry I (3 credits). Introduction to Clinical Chemistry. Lecture and laboratory to provide background and practical experience enabling the student to recognize and perform routine clinical laboratory tests; use and evaluate record keeping systems; evaluate and use laboratory safety practices; instruct nurses and patients regarding proper procedures for the collection, preservation, and storage for various chemical tests; use the important components of: spectrophotometers, centrifuges, water baths, ph meters and one-test-modular-semiautomated equipment. Student should be able to perform blood urea nitrogen, glucose (blood and spinal fluid and urine), potassium, chloride, sodium, CO_2 content. Student will be able to use gravimetric and volumetric instruments. Two lecture and four laboratory hours per week. Prerequisite: Completion of MATH 130 or equivalent, completion of CHEM 110 or CHEM 111 or CHEM 121 or equivalent.

HMLT 112. Clinical Chemistry II (3 credits). Lecture and laboratory experience relating chemical testing to disease and preparing the student to perform tests selected to evaluate organ function and metabolism. The following procedures will be included: Liver function tests, blood electrolytes, blood gas analyses, carbohydrate metabolites, cardiac enzymes, creatinine, creatinine clearance and other renal function tests, lipid metabolites, blood and fluid proteins and their fractionation and identification and enzyme analyses. Two lecture and four laboratory hours per week. Prerequisite: Completion of MATH 130 or equivalent, completion of CHEM 110 or CHEM 111 or CHEM 121 or equivalent.

HMLT 113. Hematology I (5 credits). Lecture and laboratory will provide factual background and practical experience enabling student to discuss and perform the following: Blood collection and preservation, preparation and staining a blood smear, use and maintenance of automated equipment (Coulter F,B, and/or S), use and maintenance of non-automated equipment (microhematocrit centrifuges, slide stainers, etc.), use of balance and preparation of solutions, specimen identification, quality control measures, records and retrieval of results, preparation of LE cell smears, sickle cell screening tests, assay for hemoglobin, hematocrit, sedimentation rate. Two lecture and twelve laboratory hours per week.

HMLT 114. Hematology II (3 credits). Lecture and laboratory providing fundamentals and practical experience enabling student to discuss and perform the following: Use and maintenance of the microscope; enumeration and differentiation of cellular elements in cerebrospinal fluid; morphologic study, enumeration and differentiation of leukocytes, erythrocytes, platelets on blood smears; platelet counts, reticulocyte counts, antinuclear factor studies; special stains such as peroxidase; osmotic fragility of red cells; quality control statistics, methods of tabulation of monthly reports; principles of instrumentation in hematology: calibration, trouble shooting and maintenance of Coulter and/or other cell counters and other semi or automated equipment. LE factor study and detection. Two lecture and four laboratory hours per week.

HMLT 115. Phlebotomy-Serology-Immunology (2 credits). This course will deal with phlebotomy and the procedures for withdrawing blood. Also, lecture and laboratory experience enabling student to understand the basic theory of and to perform the following: agglutination, complement fixation, precipitation, quality control. Student should be able to accurately read and record these test results. He/she should clearly understand antigens and antibodies and their relationship to the above procedures. Care and use of commonly-used instruments in a clinical serology laboratory will be taught. One lecture and four lab hours per week.

HMLT 116. Urinology and Clinical Microscopy (2 credits). Lecture and laboratory experience to enable student to perform the routine urinalysis including the chemical and microscopic tests, pregnancy tests, renal function tests, and to discuss the relationship of these tests to disease or malfunction, the fundamental chemistry and biology underlying these tests, and handling of histological and cytological specimens. One lecture and four laboratory hours per week.

HMLT 117. Clinical Microbiology I (3 credits). Introduction to clinical microbiology including introductory mycology, parasitology, and virology. Lecture and laboratory experience should prepare the student to perform the following procedures: specimen collection, processing and shipment; routine staining procedures (Gram's stain, concentration and staining for parasitology, acid fast stain, etc.); preparation of basic reagents; microscopic examination, media preparation and selection or application and quality control procedures as applied to tests performed. Knowledge of operation and maintenance of equipment commonly used in a clinical microbiology laboratory such as microscopes, water baths, centrifuge, ph water, ultrafilter apparatus, etc. Proficiency in microbiological terminology and nomenclature. Two lecture and four laboratory hours per week.

HMLT 118. Clinical Microbiology II (4 credits). Lecture and laboratory experience enabling a student to understand the theory basic to the procedures commonly used in clinical bacteriology, parasitology, mycology, and virology; and to use this knowledge in identifying organisms most frequently encountered clinically. A student should be able to perform antibiotic susceptibility, biochemical, and serological procedures and to read and interpret results of these procedures with the ultimate result in the identification of a specific organism. A general understanding of the relationship of this course to physiology, biochemistry, and immunology as they are associated with the knowledge of disease processes is necessary. Rapid identification procedures for identification of pathogenic bacteria and use of multiphasic test systems. Two lecture and ten laboratory hours per week.

HMLT 119. Clinical Seminar (3 credits). The fundamental concepts of clinical medicine, along with automation, E.K.G., and special laboratory procedures, as well as laboratory problems as they are experienced in a clinical laboratory, will be stressed. The role of the clinical laboratory as a diagnostic tool and the integration of all areas of the laboratory will be studied. The application of concepts to the solution of clinical problems, including the study of the physiological and technical origin of the problems, will also be included. Three lecture and four laboratory hours per week.

HMLT 120. Concepts of Medical Laboratory Sciences (1 credit). The basic role and fundamental concepts of medical laboratory sciences associated with the theoretical application to a clinical laboratory environment. One lecture hour per week.

HMLT 211. Clinical Instrumentation (4 credits). Lecture and laboratory experience so that the student should be able to operate, trouble shoot, calibrate and maintain instruments in the clinical laboratory with particular emphasis on automated equipment. This would include sequential multiple analyzers, discrete sample analyzer, centrifugal fast analyzers, flame emission spectroscopy, fluorimetry, nephelometry, electrophoresis, electronic cell counting, atomic absorption, osmometry, and methods of chromatography. Two lecture and ten laboratory hours per week.

HMLT 212. Immuno Hematology I (2 credits). Lecture and laboratory experience to provide the student with a background so that he should be able to discuss the nature of antigens and antibodies as they relate to blood cell metabolism, blood storage, blood cells and platelets, blood preservation, and so that the student should be able to perform the determination of blood type and group and those subgroups as generally performed and perform a cross match. The student should also be able to interview blood donors and perform a phlebotomy. One lecture and four laboratory hours per week.

HEALTH NURSING HOME ADMINISTRATION

HNHA 111. Introduction to Nursing Home Administration (3 credits). This course assists the administrator in defining and relating the concepts, technology, and other aspects of nursing home operation. This introductory nursing home administrator course includes history and philosophy of the nursing home, organizational structure and application of nursing home standards, and provides guidance in the preparation of job descriptions for nursing home staff. Course also includes functions, methods, and procedures of administering a nursing home with the emphasis on policy writing for admission, discharge, patient care, transfer, and emergency situations. Three lecture hours per week.

HNHA 112. Psychology of Patient Care (3 credits). The course will familiarize the administrator with the personality dynamics involved in helping the geriatric patient adjust to his new dependent environment — understanding of problems specifically related to psychological, emotional, and social needs, with an introduction to alternate courses of action to meet these needs. Three lecture hours per week.

HNHA 113. Principles of Patient Care (3 credits). The course will consist of a study of gerontology, and various aspects of aging. Emphasis will be directed toward the adjustment and dependency problems associated with institutional life. Other areas, such as patient orientation, pharmacology, medical terminology, medical records, physical therapy and rehabilitation, recreational therapy, nutrition, modified diets, safety, and sanitation, will also be included. Three lecture hours per week.

HNHA 211. Nursing Home Administration Internship IK (6 credits). Management internship in an approved facility must be supervised by a Preceptor-Administrator approved by the State Board of Licensure for Nursing Home Administrators. Critique of the current job and its related experiences will be correlated with and supplemented by case studies, classroom discussions, and individual conferences between the student and the Preceptor-Administrator and the college coordinator. Three lecture hours plus twenty hours of on-the-job administrative training per week.

HNHA 212. Nursing Home Administration Internship II (6 credits). A continuation of Nursing Home Administration Internship I, and a general review of all subjects in preparation for licensure examination. Three lecture hours plus a minimum of twenty laboratory hours per week.

HNHA 213. Nursing Home Administration Law (3 credits). This course provides a nursing home administrator with the nature and scope of law, court system, law of contracts, principal and agent, business organizations, community property law, tort, and bailment. The course will also include employer and employee relations involving the legal and ethical aspects relating to union activities, wage and hours, safety and health, civil rights, and equal opportunity. Three lecture hours per week.

HNHA 214. Financial Management of the Nursing Home (3 credits). The course includes techniques and strategies of financial information for management decision-making in the nursing home, emphasizing the budgeting process and relationships between statistical and financial data. Provides a study of special accounting requirements of Medicare and other governmental programs. Three lecture hours per week.

HNHA 215. Dietetic Food Service Supervisor Course (3 credits). To provide students with the opportunity to develop an understanding of dietetic service supervision and an appreciation of nutrition as essential to the planning, preparing, and serving of food which will contribute to the health and satisfaction of patients, residents, and employees. The course will contribute to understanding the importance of dietetic services, and its application to the nursing home organization as a whole. Three lecture hours per week.

HEALTH RESPIRATORY THERAPY TECHNICIAN

HRTT 110. Introduction to Health Sciences (1 credit). Designed as the first course for students interested in the health career field. Includes history and philosophies of patient care, development and inter-relationships of health institutions, agencies, health services personnel, ethics and legal aspects related to health activities, lectures and field trips. Two hours lab.

HRTT 111. Introduction to Respiratory Therapy (4 credits). An introduction to the Respiratory Therapist's role as a member of the health team. Departmental operation, basic design, function and maintenance of equipment are stressed. Medical terminology, types of respiration, types of hypoxia, gas laws, and bloodgas interpretation are introduced. Proficiency in administration of basic therapeutic modalities, as well as indications and contraindications are stressed. Three hours lecture, 3 hours lab.

HRTT 112. Clinical Practical I (4 credits). Supervised clinical practice at an affiliated hospital. Includes orientation to the hospital's Respiratory Therapy Department, and supervised performance of basic therapy task. The student must learn the art of administering basic Intermittent Positive Pressure Breathing (I.P.P.B.) treatments, including aerosol therapy, oxygen therapy, and physical therapy in this clinical practical. Six hours lecture, twenty-two hours lab. SSII.

HRTT 113. Clinical Practical II (3 credits). A continuation of Clinical Practical I, this course stresses the safe and effective administration of basic Respiratory therapeutic modalities; including aerosol therapy, oxygen therapy, physical therapy, and Intermittent Positive Pressure Breathing. Twenty-five hours lab.

HRTT 114. Respiratory Therapy Procedures I (4 credits). Intensive practice in analyzing performance of equipment, maintenance procedures, safety practices, and classification of equipment is stressed. Includes administration of oxygen and other gases, aerosol and humidification devices, and cylinder usage. Three hours lecture, six hours lab.

HRTT 116. Clinical Sciences and Pulmonary Disorders (3 credits). This supervisor or physician-taught course applies techniques and theory to medical, obstetric, pediatric, and surgical patients with specific disease entities. Causes, pathogensis, pathology, natural history, diagnosis, complications, prognosis, occurrence, manifestations, laboratory findings, methods of detection, treatment, and control of various diseases entities relative to the role of the Respiratory Therapist are discussed. Three hours lecture.

HRTT 117. Clinical Application I (3 credits). Sterilization, gas analysis, airway management, chest physiotherapy (including postural drainage), physical examination of the chest (including percussion and auscultation), x-rays, pulmonary function studies, and advanced theory and techniques relating to cardiopulmonary resuscitation for adult and pediatric patients are explored in depth. Three hours lecture.

HRTT 118. Clinical Theory (3 credits). This course is a continuation of theoretical and practical aspects of respiratory therapy. Included cardiopulmonary anatomy and physiology, comprehensive bloodgas evaluation, types of respiration, respiratory centers, types of hypoxia, gas laws, and a comprehensive study of E.K.G.'s. Three hours lecture.

HRTT 119. Clinical Practical III (3 credits). A continuation of Clinical Practical II, this course is designed to complete the basic learning experience necessary to become a safe and competent Respiratory Therapy Technician. The student rotates through specialty areas of the hospital; including Pulmonary Function, Anesthesiology, Emergency Room, Operating Room, Cardiovascular, Pathology, Pediatrics, Obstetrics, and Intensive Care Units. The student is also introduced to departmental management and supervision. Twenty hours lab.

HRTT 120. Pharmacology (3 credits). An introduction to the study of drugs, their origin, nature, properties, classification, and effects upon the living organism. Drugs which affect the respiratory system are emphasized. Three hours lecture.

HISTORY

HIST 111. Western Civilization to 1660 (3 credits). The chief political, social and intellectual developments of occidental civilization from the earliest human cultures to 1660. The origins of languages, literature, governments, and economic and social practices are included. Three lecture hours per week.

HIST 112. Western Civilization since 1660. (3 credits). This course is a continuation of HIST 111. Three lecture hours per week.

HIST 121. History of Latin America I (3 credits). Spanish and Portuguese colonies from discovery to independence. Three lecture hours per week.

HIST 122. History of Latin America II (3 credits). Latin American republics since independence. Three lecture hours per week.

***HIST 131. History of Texas to 1865.** (3 credits). A study of the growth and development of Texas from 1500 until 1865: the Spanish colonial period; the French influence; the end of Spanish rule; the Mexican colonial period; and analysis of the Revolution; the Republic era; the Statehood years; and the role of Texas in the Civil War. Three lecture hours per week.

***HIST 132. History of Texas since 1865** (3 credits). An analysis of cultural, social, industrial, and political developments in Texas from 1865 to the present. Emphasis will be directed to the Reconstruction period, political history since the Civil War, and the emergence of the modern state of Texas. Studies of governors and their administrations will be included. Three lecture hours per week.

***HIST 141. The United States to 1877** (3 credits). American history from colonial origins through reconstruction. Exploration and colonization of the new world, the American Revolution, westward expansion, the Civil War and reconstruction. Three lecture hours per week.

***HIST 142. The United States since 1877** (3 credits). A survey of American history from 1877 to the present. Chief topics: big business, big labor, the United States as a world power, the great depression and the cold war. Three lecture hours per week.

*Texas law stipulates that three hours in Texas history may be applied toward satisfying the United States history requirement.

HORTICULTURE

(ORNAMENTAL)

HORT 101. Principles of Horticulture (4 credits). Fundamental principles and practices of structure, growth, development, maintenance and use of horticultural plants. Commercial horticulture industry and occupational opportunities. An introduction to growing, grounds maintenance, planting and transplanting will form the laboratory experience. Three hours lecture and two hours laboratory per week.

HORT 111. Plant Materials for Landscape Use (4 credits). Ornamental trees, shrubs, vines and ground covers for landscape use with emphasis on their identification, characteristics, adaptability, use and maintenance. Basic concepts and practices used in preparing landscape plans. Three hours lecture and two hours laboratory per week. Prerequisite or corequisite: DRFT 110.

HORT 121. Plant Propagation (4 credits). Theoretical consideration and practical experiences in producing horticultural plants by sexual and asexual methods. It includes laboratory exercises of cutting, layering, division, grow-

ing from seeds, budding and grafting. Three hours lecture and two hours laboratory per week.

HORT 131. Greeenhouse Crop Production (4 credits). Greenhouse production and marketing of foliage and flowering house plants, holiday pot plants, bedding plants and cut flowers. Construction of greenhouses and other related growing structures, arrangement, heating, cooling, lighting and watering facilities. Three hours lecture and two hours laboratory per week.

HORT 201. Soils and Fertilizer (4 credits). Physical and chemical properties of soils and their relation to soil development. Relationship between crops and soils. Use of fertilizers and soil fertility. Three hours lecture and two hours laboratory.

HORT 211. Nursery and Garden Center Management (4 credits). Principles and practices involved in production of field and container grown plants including plant growing, planting, transplanting, balling, burlapping. An introduction to nursery and garden center management: garden center plans, the structures needed for growing and selling plants, and the equipment and supplies necessary. Production costs, markets and marketing nursery plants will be considered. Three hours lecture and two hours laboratory per week.

HORT 221. Chemical Control of Weeds, Plants, Diseases and Pests (4 credits). The identification, cause and control of common weeds, plant diseases, and pests. Study of equipment for their prevention and control. Three hours lecture and two hours laboratory per week.

HORT 231. Turf Management (4 credits). Principles and practices of turfgrass management for such specialized areas as athletic fields, playground areas, golf courses and home lawns. Three lecture hours and two laboratory hours per week.

***HORT 240. Indoor Plants** (4 credits). Identification, planting and placing foliage and flowering plants suitable for indoor use. Environmental conditions, care and maintenance, insects and diseases, and potting and repotting will be covered. Lecture, 3 hours; Laboratory, 2 hours.

***HORT 250. Vegetable Crops** (4 credits). Vegetable production including factors that affect production of important fresh market and processing vegetables in different areas of the United States. Lecture, 3 hours; Laboratory, 2 hours.

*Recommended Related Electives.

HUMANITIES

HUMN 101. Introduction to Humanities (3 credits). A study of representative examples of literature, art, and music of the classical, romantic, realistic, impressionistic and expressionistic periods. The interrelationship of the arts and their philosophies is stressed. Three lecture hours per week.

JOURNALISM

JOUR 120. Journalism Activities (1 credit). This course is designed to give basic journalism training to students through experience on college publications. Two laboratory hours per week. Prerequisite: Instructor approval.

LAW ENFORCEMENT

LWNF 110. Introduction to Law Enforcement. (Credit: 3 semester hours). An introductory course to law enforcement. Covers the history of the police profession and the development of the English and American police systems. Organization of federal, state, and local law enforcement agencies, their authority, duties, and responsibilities. Includes career opportunities, personnel requirements, and standards. Three lecture hours per week.

LWNF 120. Criminal Investigation. (Credit: 3 semester hours). Theories and concepts of the investigator's role in modern criminal investigation; basic skills necessary in conducting an investigation, developing sources of information, the collection and preservation of evidence, and preparation of reports are developed. Three lecture hours per week.

LWNF 130. Legal Aspects of Law Enforcement. (Credit: 3 semester hours). History and philosophy of modern law; laws of arrest, search and seizure; determination of probable cause; Texas penal code; emphasis on practical legal problems confronting the law enforcement officer. Three lecture hours per week.

LWNF 140. Criminal Procedure and Evidence. (Credit: 3 semester hours). Examination of the rules governing the admissibility of evidence as they may affect the law enforcement officer in the administration of criminal justice, including study of the rules of evidence, kinds and degrees of evidence and their application in the legal processes from arrest through probation and parole procedures to final disposition of the case. Three lecture hours per week.

LWNF 150. Police Role in Crime and Delinquency. (Credit: 3 semester hours). Study of deviant behavior and current criminological theories, with emphasis on police applications; crime prevention and the phenomena of crime as it relates to juveniles. Three lecture hours per week.

LWNF 160. Probation and Parole (3 credits). The development, organization, operation and result of systems of probation and parole as substitutions for incarceration, methods of selection and prediction scales. Three lecture hours per week.

LWNF 210. Elements of Police Supervision. (Credit: 3 semester hours). Duties and problems of the police supervisor; recruitment, training, promotion, discipline and morale, duty assignments and shift supervision, human relations and leadership problems, essentials of organization, types of organizations, planning the work of the department. Three lecture hours per week.

LWNF 220. Police Organization and Administration. (Credit: 3 semester hours). An analysis of the duties and responsibilities of police administrators; study of the principles of police organization; police management, coordination and personnel management. Three lecture hours per week.

LWNF 230. Patrol Administration. (Credit: 3 semester hours). Study of the philosophy and history of systems of dealing with patrol functions. An analysis of the principles of organization and function of the patrol operation; contemporary operational activities. Three lecture hours per week.

LWNF 240. Police-Community Relations. (Credit: 3 semester hours). The interrelationship of law enforcement agencies and the community; problems related to police-community relations; emerging law enforcement concept of active involvement in community relations. Three lecture hours per week.

LWNF 250. Traffic Law and Investigation. (Credit: 3 semester hours). A course in the investigation of traffic accidents, laws, and advanced investigation procedures; special emphasis to be placed on the handling of traffic accidents on thoroughfares and expressways. Defensive driving techniques will be

given on an individual basis in a college patrol vehicle. Two lecture hours and four laboratory hours each week.

LWNF 260. Traffic Planning and Administration. (Credit: 3 semester hours). A course designed to provide the student with an understanding of the magnitude and complexities of the traffic problem. Analysis is made of the methods and techniques used by various agencies to control problems. Three lecture hours per week.

LWNF 270. Juvenile Delinquency. (Credit: 3 semester hours). The nature and extent of delinquency. The environments in which juvenile delinquency develops, delinquent sub-cultures and peer groups; evaluation of prevention, control and treatment programs. Prerequisite: SOCI 111 or 122 or approval of instructor. Three lecture hours per week.

LWNF 280. Penology (3 credits). The philosophy and objective of jail operation. Also the study of the administrator's role in setting objectives, planning, decision making, and controlling of the jail. Three lecture hours per week.

LWNF 290. Narcotics Investigation. (3 credits). Identification of narcotics and dangerous drugs subject to abuse; origin, distribution and control; special investigation techniques, recognition of drug users. Three lecture hours per week.

MATHEMATICS

GENERAL MATHEMATICS

MATH 101. Developmental Mathematics Lab (1 credit). The lab is designed to accompany Math 110 and Math 110A. It provides one hour each week of supervised individual and small-group instruction and practice activities that reinforce 110 and 110A class work and deal with specific arithmetic or algebra problems.

MATH 110. Developmental Mathematics-Algebra (3 credits). A course which includes classroom instruction and work in the learning lab. The materials consist of a textbook and audiotutorial tapes with tutoring and peer counseling provided. Some of the topics included are whole numbers, integers, first degree equations, products factors, and fractions. The course is intended to improve the algebraic skills of the students. Math 110 is required for the student who scores below 14 in math on the ACT.

MATH 110A. Arithmetic (3 credits). An individualized course offering instruction and practice in the basic arithmetic operations. The student's program of study is based on diagnostic and prescriptive tests as well as personal interviews. This course is required for those students who must take Math 110 and whose diagnostic tests indicate a need for arithmetic preparation.

MATH 121. College Algebra (3 credits). This course includes a brief review of elementary algebra topics followed by a more intensive study of linear equations in one variable, relations, functions, graphs, products and factoring of polynomials, algebraic fractions, fractional equations, systems of linear equations, exponents, radicals, quadratic equations and inequalities. Three lecture hours per week. Prerequisite: Two years of high school algebra or consent of instructor.

MATH 132. Plane Trigonometry (3 credits). Mastery of trigonometric functions with applications; functions of acute angles; functions of obtuse, and multiple angles; identities; derivation of formulas; logarithms; solution of both right triangles and obtuse triangles; practical problems involving heights and

distances; graphical representation of trigonometric functions and geometric applications. Three lecture hours per week. Prerequisite: Math 121 or two years of high school.

MATH 150. Analytic Geometry (3 credits). A course in the solution of geometric problems through applied algebra by the graphical representation of points, lines, curves and the transformation of coordinates, polar coordinates, transcendental curves, vectors, parametrics and space formulas, with special emphasis on rapid curve sketching. Three lecture hours per week. Prerequisites: MATH 121, 132, or consent of instructor.

MATH 210. Statistics (3 credits). Topics included in the course are mathematics of finance, probability, testing hypotheses, sample theory, parameter estimation, frequency functions, correlation and regression. Prerequisite: 6 semester hours of math.

MATH 213-214. Differential and Integral Calculus (4 credits) (4 credits). These two courses are designed to meet the needs of mathematics, engineering, and science students. Topics of Math 213 include inequalities, functions, limits, the derivative, differentiation of algebraic functions, the differential, and the definite integral. Topics of Math 214 include the trigonometric functions, logarithmic functions, exponential functions, parametric equations, arc length, polar coordinates, formulas and methods of integration, applications of the integral, and solid analytic geometry. Each course is four lecture hours per week. Prerequisite: Math 150 or consent of instructor.

MATH 215. Calculus Applications (4 credits). Topics included in Math 215 are elements of infinite series, partial derivatives with applications, multiple integration, vectors, power series, Taylor's series, gradient, and linear algebra. Four lecture hours per week. Prerequisite: Math 214.

MATH 221. Differential Equations (3 credits). This course is designed to meet the needs of engineering students. The following topics are included: equations of the first order, singular solutions, linear equations with constant coefficient, miscellaneous methods of solving equations of higher order than the first, with geometric and physical applications. Three lecture hours per week. Prerequisite: Math 214 or 212.

MATHEMATICS FOR LIBERAL ARTS MAJORS

MATH 111-112. Selected Topics I, II (3 Credits) (3 Credits). These two courses are designed to satisfy the mathematics requirements for liberal arts majors. The topics included are: the nature of mathematical thought, the nature of numeration systems, the nature of computers, the nature of mathematical systems, the development of our number system, the nature of number theory, the nature of logic, the nature of geometry, the nature of counting, probability, and statistics. Three lecture hours per week.

MATHEMATICS FOR ALLIED HEALTH PROGRAMS

MATH 130. Mathematics for Allied Health I. (3 credits). This course is designed to serve as an introductory course in mathematics for the Allied Health fields. Topics covered will include the use of whole numbers, fractions, percentage, and measurements in both metric and apothecary systems. Other topics will be ratio, proportion, simple equations, and graphs. Three lecture hours per week.

MATH 131. Mathematics for Allied Health II. (3 credits). This course is designed to meet the needs of the medical laboratory technology and environmental health technology students. Topics covered will include computations using logarithms, slide rule, and hand calculators. Other topics will be scientific notation, exponents, equations, stated problems, volumes, and statistical measure. Three lecture hours per week. Prerequisite: Math 130 or consent of instructor.

MATHEMATICS FOR ELEMENTARY EDUCATION MAJORS

MATH 160. Foundations of Mathematics (3 credits). Modern methods will be used to develop skill and understanding in the use and meaning of sets, number symbols, operations, properties, equivalence and number relations, modular systems and bases, scientific notation, measurements, coordinate systems, equations, and various number systems. Three lecture hours per week.

MATH 170. Modern Topics in Mathematics (3 credits). Topics will include studies in modern geometry, sets, relations and functions, ratio and percent, systems of logic, statistics and graphs, probability, systems of equations, and problem solving with practical applications. Three lecture hours per week. Prerequisite: Math 160 or consent of instructor.

MATHEMATICS FOR BUSINESS MAJORS

MATH 180. Finite Mathematics (3 credits). This course is designed to meet the needs of students majoring in business and other related fields. The course includes a review of the elementary topics of algebra followed by a study of logic, sets, equations, relations, functions, linear systems, vectors, matrices, linear programming, and non-linear functions. Three lecture hours per week. Prerequisite: Math 121.

MATH 190. Analysis (3 credits). This course is designed to meet the needs of students majoring in business management, science, quantitative analysis or other related fields. The course includes a review of the real number system, relations and functions, sequences and series, and then follows these topics with a study of the differential and integral calculus. Three lecture hours per week. Prerequisite: MATH 180 or the equivalent.

MATHEMATICS FOR TECHNICAL PROGRAMS

MATH 151. Technical Mathematics I (3 credits). A course for technology students. Topics covered will include a review of arithmetic, and proceed through a treatment of measured data, slide rule operation, tables and interpolation, algebra, analytic geometry, and determinants. Three lecture hours per week.

MATH 152. Technical Mathematics II. (3 credits). Topics covered will include logarithms, exponential functions, numerical trigonometry of the right triangle, and analytical trigonometry. Three lecture hours per week. Prerequisite: MATH 151 or consent of instructor.

MATH 250. Advanced Technical Mathematics (3 credits). This course is designed for technology students who require a deeper understanding of definitions and procedures used in mathematics. Topics covered will include vector operations, differential calculus, integral calculus, and special functions. Three lecture hours per week. Prerequisite: MATH 152 or consent of instructor.

MID-MANAGEMENT

MMGT 111. Introduction to Mid-Management (3 credits). The student is introduced to the concept of middle level management, prepared for initial employment as an intern, and is continually involved in seminars and case study problems relating to his work. Experience is gained so that the student may more meaningfully relate to the principles and theories of management in the following course. Three lecture hours per week.

MMGT 112. Internship (3 credits). The student works in a qualifying firm 20 hours per week in an occupational situation where he receives practical training and experience compatible with his management career objective. Students may receive credit from an approved full-time job.

MMGT 121. Principles of Management (3 credits). An overview of organization and human behavior within the organization. Functions of management are presented such as creating, planning, organizing, motivating, communicating, and controlling. Considerable attention is given to management practices. Three lecture hours per week.

MMGT 122. Internship (3 credits). The student works in a qualifying firm 20 hours per week in an occupational situation where he receives practical training and experience compatible with his management career objective. Students may receive credit from an approved full-time job.

MMGT 211. Personnel Management (3 credits). Principles and practice of personnel management; emphasis on the procurement, development, compensation, integration, and maintenance of the labor force. Prerequisite: MMGT 121. Three lecture hours per week.

MMGT 212. Internship (3 credits) The student works in a qualifying firm 20 hours per week in an occupational situation where he receives practical training and experience compatible with his management career objective. Students may receive credit from an approved full-time job.

MMGT 221. Problems in Management (3 credits). Extension of management principles to administrative strategy in solving problems. Case studies and simulated games are utilized in a decision-making, problem-solving environment. Prerequisite: MMGT 111 or 121. Three lecture hours per week.

MMGT 222. Internship (3 credits). The student works in a qualifying firm 20 hours per week in an occupational situation where he receives practical training and experience compatible with his management career objective. Student may receive credit from an approved full-time job.

MUSIC

MUSC 110. Introduction to Music (3 credits). This course is designed to familiarize students with the meaning of musical notation through the study of scales, chords, and rhythm. Especially adapted for elementary education majors and other students who wish to gain a working knowledge of music. Enrollment in class piano is recommended when a student enrolls in this course. Three lecture hours per week.

MUSC 111-112. Survey of Music Literature (3 credits) (3 credits). A required course for music majors studying the fundamentals of music terminology and standard instrumental and vocal forms. Representative composers and compositions from secular and sacred music of most major eras are studied by means of records, lecture, and reports. Three lecture hours (and one lab hour per week).

MUSC 120. Music Appreciation (3 credits). The aim of this general survey course is to provide a foundation for the enjoyment and understanding of music. Representative composers and their works are studied through recorded music. Three lecture hours per week.

MUSC 121-122-223-224 Ear Training and Sight-Singing (2 credits for each course). Required courses for music majors. A four semester presentation of basic aural, visual, and vocal experiences in dictation and sight-singing. Three lab hours per week. Prerequisite: Approval of the instructor.

MUSC 131-132. Class Piano (1 credit) (1 credit). Class piano is designed for students with little or no previous experience. A study of basic techniques, scales, chords and basic repertoire. Meets two hours per week. May be repeated for credit. Prerequisite: Instructor approval.

MUSC 131B. Brass Class (1 credit). A required course for music education majors with instrumental concentrations. Techniques of performing and instructing beginning instrumentalists on trumpet, french horn, trombone and tuba are examined. Class meets three hours per week.

MUSC 131W. Woodwind Class (1 credit). A required course for music education majors with instrumental concentrations. Techniques of performing and instructing beginning instrumentalists on flute, oboe, clarinet, bassoon, saxophone and piccolo are examined. Class meets three hours per week.

MUSC 131P. Percussion Class (1 credit). A required course for music education majors with instrumental concentrations. Techniques of performing and instructing beginning instrumentalists on snare drum, tympani, xylophone, cymbals and other percussions instruments are examined. Class meets three hours per week.

MUSC 131G-132G. Guitar Class (1 credit) (1 credit). A course designed for beginning guitar students. A study of basic techniques, chords and basic repertoire. Class meets three hours per week.

MUSC 141-142. Music Theory (3 credits) (3 credits). A study of the fundamentals of musicianship. Includes a study of scales, intervals, diatonic triads, inversions, written and keyboard harmony and a study of the dominant seventh chords and inversions. Three lecture hours per week.

MUSC 243-244. Music Theory (3 credits) (3 credits). A continuation of the first year course with advanced aural and written study with emphasis on chromatic harmony and harmonic analysis. Class meets three hours per week. Prerequisite: MUSC 142.

ENSEMBLES

MUSC 151, 152, 253, 254. Concert Choir (1 credit for each course). This choir presents in concert many selections of the world's fine literature. In addition to local concerts, this group will participate in campus activities and will make several concert tours to other cities. In order to obtain credit, members are to attend all called rehearsals and public performances. Five rehearsal hours per week.

MUSC 161, 162, 263, 264. College Singers (1 credit for each course). This organization is limited in membership. Students are selected through auditions from the membership of the college choir. Four rehearsal hours per week. Prerequisite: Previous experience in choral music, a member in good standing of the concert choir, ability to sight-read and approval of the instructor.

MUSC 181, 182, 283, 284. Stage Band (1 credit for each course). This organization is the largest performing instrumental group. Numerous concerts both on and off campus include contemporary jazz and rock music as well as standard big band literature. Membership is open to all college students by approval of the instructor. Four rehearsal hours per week.

MUSC 185-186-287-288. Concert Band (1 credit hour for each course) A concert group of brass, woodwind, and percussion performing traditional repertoire and original works for wind ensembles. Five rehearsal hours per week.

MUSC 191, 192, 293, 294. Jazz Lab (1 credit for each course). This organization performs for many special occasions on and off campus. Music includes small band jazz-rock with emphasis on individual improvization. Membership is open to all college students by approval of the instructor. Three rehearsal hours per week.

APPLIED MUSIC

MUSC 115X, 115Y, 215X, 215Y. Applied Music — Piano (2 credits for each course). One hour of individual instruction a week. Requires four lab practice hours per week. Prerequisite: Approval of instructor.

MUSC 117X, 117Y, 217X, 217Y. Applied Music — Piano (1 credit for each course). One-half hour of individual instruction a week. Requires four lab practice hours per week. Prerequisite: Approval of instructor.

MUSC 125X, 125Y, 225X, 225Y. Applied Music — Voice (2 credits for each course). One hour of individual instruction a week. Requires four lab practice hours per week. Prerequisite: Approval of instructor.

MUSC 127X, 127Y, 227X, 227Y. Applied Music — Voice (1 credit for each course). One-half hour of individual instruction a week. Requires four lab practice hours per week. Prerequisite: Approval of instructor.

MUSC 135X, 135Y, 235X, 235Y. Applied Music — Brass (2 credits for each course). One hour of individual instruction is offered in trumpet, trombone, French horn and tuba. Requires four lab practice hours per week. Prerequisite: Approval of instructor.

MUSC 145X, 145Y, 245X, 245Y. Applied Music — Woodwind (2 credits for each course). One hour of individual instruction is offered in bassoon, clarinet, flute, oboe and saxophone. Requires four lab practice hours per week. Prerequisite: Approval of instructor.

MUSC 155X, 155Y, 255X, 255Y. Applied Music — Percussion (2 credits for each course). One hour of individual instruction in the use of percussion instruments. Requires four lab practice hours per week. Prerequisite: Approval of instructor.

MUSC 175X, 175Y, 275X, 275Y. Applied Music — Guitar (2 credits for each course). One hour of individual instruction is offered in guitar. Required four lab practice hours per week. Prerequisite: Approval of instructor.

NURSING

ADN — Associate Degree Nursing

NURS 110. Introduction to Nursing (8 credits). This is the basic course in the nursing curriculum, and it provides the foundation upon which other courses build and expand. It is designed to help the student further develop an understanding of the physical and biological sciences. It introduces the scientific principles of nutrition, pharmacology, communications, mental health con-

cepts and technical skills basic to nursing care. Through the use of problem-solving, the student is guided to an awareness and use of intellectual evaluation. The course is concerned with health care and the related stages of the nursing process. The student is introduced to deviations from wellness so that he has the opportunity to develop an increased knowledge of the different levels of the health-illness continuum. Clinical experiences include adult and pediatric services. Four lecture hours, twelve laboratory hours. Pre- or co-requisites: BIOL 121, ENGL 121, PHED.

NURS 121. Principles and Practice of Pharmacology (3 credits). This course is designed to offer the students pursuing a career in health care delivery, a thorough understanding of concepts and principles involved in drug therapy. The content will include classification of drugs, drug metabolism, drug toxicity and the administration of drugs. Prerequisites: Approval of instructor.

NURS 122. Principles and Practice of Nutrition (3 credits). This course is designed to offer the student pursuing a career in health care delivery a thorough understanding of the concepts and principles involved in dietary therapeutics. The content will include: the nutrients and the normal diet; special nutritional needs throughout the life cycle; and the modification of the normal diet for medical and surgical conditions. Prerequisites: Approval of instructor.

NURS 130. Psychiatric Nursing (5 credits). This course focuses on the conceptual model of wellness, health care and related stages of the nursing process. Opportunity is afforded the student to utilize the thinking and perceiving abilities and knowledge to explain events, facilitate change and solve problems. Clinical experience working with patients, individually, in groups, and with their families is provided. Rehabilitative methods are goal directed toward the patient's return to optimum mental health. The role of the nurse in treatment modalties is stressed. Four lecture hours; eight laboratory hours. Prerequisites: BIOL 121, PSYC 130; NURS 110, 211, CHEM 110.

NURS 210. Medical Terminology (3 credits). The course is designed for students pursuing medical and allied health careers. Study and practice of biomedical and other vocabularies common to health activities will be included. Three lecture hours. Prerequisite: Approval of instructor, or BIOL 121.

NURS 211. Medical-Surgical Nursing I (8 credits). This course familiarizes the student with the basic elements of medical-surgical nursing. It emphasizes the interrelatedness of medical, surgical, dietary, pharmacological, psychological, sociological and community aspects of nursing management. Major emphasis is placed on meeting the needs of the patient. Deviations from wellness afford the student an opportunity to practice in the hospital setting. The student is provided responsibilities and experiences on a level higher than that practiced on the introductory levels. Auto-tutorial materials are provided to assist the student in assuming responsibility for part of his learning. Four lecture hours, twelve laboratory hours. Prerequisite: NURS 110. Pre- or co-requisite: BIOL 122, ENGL 122, PHED.

NURS 212. Medical-Surgical Nursing II (8 credits). This course is a continuation of Medical-Surgical Nursing I in which medical, surgical, dietary, psychological, sociological and community aspects of nursing management are interrelated. However, Medical-Surgical Nursing II is on a more in-depth level and includes nursing practice in intensive care units. The student is given an opportunity of assuming greater responsibility and experience in the nursing care of adults. The student will learn to synthesize the knowledge and skills of the nursing courses and the social science courses. Guidance is afforded the student in making individual contributions to the total needs of the patient. The course material will be presented by the behavorial outcomes approach to the nursing course of study. Four lecture hours, twelve laboratory hours. Prerequisites: NURS 110, 130, 211.

***NURS 213. Maternal Nursing** (4 credits) (8 weeks). This course approaches the family at the establishment phase and includes the antepartal phase, parturition, and the post-partal phase of childbearing. It also incudes the care of the newborn. The conceptual framework is based on meeting the physiological and psychological needs of the family with emphasis on the normal aspects of childbearing. Deviations from normal are included with the focus on the assessment and nursing management. Experiences are provided in clinical agencies for caring for the mother and the newborn. Four (4) lecture hours and twelve (12) laboratory hours. Prerequisites: NURS 212; BIOL 122; BIOL 225; CHEM 110.

***NURS 214. Child Health Nursing** (4 credits) (8 weeks). The theoretical base for this course includes the care of the child from birth through adolescence. The stages of growth and development offered as a prerequisite course form the theoretical foundation for the nursing care. Short-term and long-term illnesses of children are studied with the emphasis on the assessment and nursing management. Experiences are provided in clinical agencies for caring for children. Four (4) lecture hours and twelve (12) laboratory hours. Prerequisite: NURS 212; BIOL 122; BIOL 225; CHEM 110.

NURS 221. Professional Development (3 credits). This course is designed to offer the student of nursing a better understanding of the nursing profession as it relates to the health care delivery system. The content will include: contemporary and future issues in nursing; legal responsibilities; professional behavior and ethics; professional organizations; opportunities and employment responsibilities in nursing; and concepts of management. Prerequisites: Approval of instructor.

*Pending Texas Education Agency approval, NURS 213 and NURS 214 will replace NURS 120 (8 credit hours) (16 weeks).

NURSING

VN — Vocational Nursing

NURS 001. Personal and Vocational Relationships (10 contact hours). This course introduces history of vocational nursing, nursing ethics, legal aspects, personal hygiene and grooming, and the role of the vocational nurse as part of the health team.

NURS 002. Introduction to Vocational Nursing Skills, including Pharmacology and Nutrition (225 contact hours). This is a basic course which introduces the new students to pharmacology, nutrition, mental health concepts, communication and manual skills to nursing care. Vocational nursing skills shall include laboratory and hospital setting experiences.

NURS 003. Maternal and Child Health Nursing (50 contact hours). This is a basic course approaching the family at the establishment phase and follows the family through the expectant, child bearing, including complications specific to mother and newborn. Continued study of related pharmacology and nutrition. Clinical experience in hospital setting, 3 weeks obstetrics, 2 weeks newborn.

NURS 004. Pediatric Nursing (50 contact hours). This is a basic course in childhood diseases. The effect of disease on normal growth and development. Nursing care measures necessary to meet the emotional and physical needs.

Continued pharmacology and nutrition. Clinical experience in hospital setting or clinic, 3 weeks.

NURS 005. Mental Health and Mental Illness (20 contact hours). This is a course defining the basic concepts of positive mental health; the various aspects of emotional behavior due to illness, environment, and religious beliefs. Continued study of related pharmacology and nutrition. Clinical experience in hospital setting and mental health clinics, 2 weeks, if available.

NURS 006. Medical-Surgical Nursing (125 contact hours). A study of basic nursing care of medical-surgical patients, including the progressive steps in treatment and recovery. The course is designed to aid the student in meeting the needs of the adult and geriatric patient in the hospital, nursing home, and in the home. First aid is introduced. Continued study of related pharmacology and nutrition. Clinical experience in hospital settings, 6 weeks medical, 6 weeks surgical.

NURS 007. Body Structure and Function (50 contact hours). A basic course in anatomy and physiology as a background for nursing care.

NURS 008. Disease Control and Prevention (10 contact hours). A basic course in microbiology with emphasis on disease prevention, disease control programs and community resources.

NURS 009. Child Growth and Development (10 contact hours). This course is intended to provide the basic aspects of growth and development from birth through adolescence.

PHYSICAL EDUCATION

ACTIVITY COURSES FOR MEN AND WOMEN

PHED 115-116. Individual and Dual Sports. (1 credit) (1 credit). This course provides instruction and participation in the fundamentals of beginning tennis, badminton, archery, gymnastics, karate, handball, racquetball, yoga, scuba diving, bowling, weight training, dance and golf for the development of fitness, skills, knowledge and appreciation for all students. Equipment is furnished by the college. Three hours of class instruction and participation per week.

PHED 117-118. Volleyball. (1 credit) (1 credit). This course consists of instruction and participation in both beginning and advanced volleyball. Three lab hours per week.

PHED 125-126. Fundamentals of Movement. This course provides instruction and participation in the fundamentals of beginning folk dance or beginning modern dance with a brief study of history and philosophy of the dance. Three hours of class instruction and participation per week.

PHED 121-122. Physical Fitness and Weight Training. (1 credit) (1 credit). A study of basic fundamental skills and techniques of an overload and strength and conditioning program is included in this course. Three hours of class instruction and participation per week.

PHED 127-128. Badminton. (1 credit) (1 credit). This course consists of instruction and participation in both beginning and advanced badminton. Three hours of class instruction and participation per week.

PHED 137-138. Bowling. (1 credit) (1 credit). Designed for both the beginner and the advanced bowler. After a four week instruction period, a class league is formed with students receiving experience in league etiquette, procedures, scoring, etc. Three hours of class instruction and participation per week.

PHED 147-148. Golf. (1 credit) (1 credit). The course is designed to give students beginning instruction in golf and will deal with the history, skills, rules and safety of the game. Three hours of class instruction and participation per week.

PHED 151-152. Team Sports. (1 credit) (1 credit). Activities taught may include flag football, basketball, volleyball, soccer, speedball and softball. Three hours of class instruction and participation per week.

PHED 165-166. Physical Conditioning. A planned program of exercise to provide a condition of fitness and figure improvement through increased cardiovascular activity and large muscle exercise. Three hours of class instruction and participation per week.

PHED 215-216. Individual and Dual Sports. (1 credit) (1 credit). Prerequisite: Sophomore standing. Three lab hours per week.

PHED 217-218. Volleyball. (1 credit) (1 credit). Prerequisite: Sophomore standing. Three lab hours per week.

PHED 221-222. Physical Fitness and Weight Training. (1 credit) (1 credit). Prerequisite: Sophomore standing. Three lab hours per week.

PHED 225-226. Fundamentals of Movement. (1 credit) (1 credit). Prerequisite: Sophomore standing. Three lab hours per week.

PHED 227-228. Badminton. (1 credit) (1 credit). Prerequisite: Sophomore standing. Three lab hours per week.

PHED 237-238. Bowling. (1 credit) (1 credit). Prerequisite: Sophomore standing. Three lab hours per week.

PHED 247-248. Golf. (1 credit) (1 credit). Prerequisite: Sophomore standing. Three lab hours per week.

PHED 251-252. Team Sports. (1 credit) (1 credit). Prerequisite: Sophomore standing. Three lab hours per week.

PHED 265-266. Physical Conditioning. (1 credit) (1 credit). Prerequisite: Sophomore standing. Three lab hours per week.

VARSITY SPORTS

PHED 131-132, 231-232. Varsity Volleyball. (1 credit) (1 credit). A course for advanced volleyball players who are competing on a collegiate level. Prerequisite: Instructor approval. Three lab hours per week.

PHED 161-162, 261-262. Varsity Tennis. (1 credit) (1 credit). A course for advanced tennis players who are participating on a collegiate level. Prerequisite: Instructor approval. Three lab hours per week.

PHED 171-172, 271-272. Varsity Baseball. (1 credit) (1 credit). A course for advanced baseball players who are competing on a collegiate level. Prerequisite: Instructor approval. Three lab hours per week.

PHED 181-182, 281-282. Varsity Basketball. (1 credit) (1 credit). A course for advanced basketball players who are competing on a collegiate level. Prerequisite: Instructor approval. Three lab hours per week.

PHED 191-192, 291-292. Varsity Golf. (1 credit) (1 credit). A course for advanced golf players who are competing on a collegiate level. Prerequisite: Instructor approval. Three lab hours per week.

THEORY COURSES:

PHED 110. Foundations of Physical Education. (3 credits). Designed for professional orientation in physical education, health and recreation. Brief history, philosophy and modern trends of physical education, teacher qualification, vocational opportunities and skill testing comprise the contents of the course. Three lecture hours per week.

PHED 120. Personal and Community Health. (3 credits). This course presents the essential present-day knowledge of personal and community health. Stress is placed on physiological and anatomical background showing the student how to make a sound appraisal of the effects of health practices upon the body. Pollution and prevention and control of diseases are also discussed under community health.

PHED 130. Coaching Athletics. (3 credits) A course in the coaching of football, basketball, baseball, tennis, golf, and volleyball for students who would like to assist in this sport, but who prefer to emphasize this phase of physical education. Methods of coaching are studied through lectures, demonstrations, practice, and reading of present day literature on the sports. Three lecture hours per week.

PHED 210. First Aid. (3 credits). The theory and practice in the standard and advanced courses of the American Red Cross in first aid and home and farm study. Three lecture hours per week.

PHED 220. Officiating. (3 credits). This course is designed to teach the rules of various sports. Opportunities for experience will be provided in intramurals, practice games and tournaments. Three lecture hours per week.

PHED 230. Athletic Injuries. (3 credits) A course in the practical and theoretical study of massage, taping, bandaging, care of sprains, bruises, strains, and wounds. A course designed to acquaint the student with the problems of the athletic training room and to provide him with the practical instruction to aid in the solution of these same problems. Three lecture hours per week.

PHED 240. Sports Appreciation for the Spectator. (3 credits) A course specifically designed as an elective course for all students who desire a broader knowledge of major and minor sports. Rules, terminology, and the finer points of many sports are studied. Three lecture hours per week.

PHYSICS

PHYS 111, 112. Physical Science I, II (4 credits) (4 credits). A survey course of the physical science field. Topics are selected from physics, chemistry, geology, astronomy, and meteorology. Experiments are chosen to illustrate the philosophy and methods of science. This course is designed and taught for the non-science major. Three lecture and two laboratory hours per week.

PHYS 121-122. General Physics I, II (4 credits) (4 credits). These courses are to be taken in sequence. An introductory course which includes mechanics, heat, electricity, magnetism, light and nuclear physics. Three lecture and three laboratory hours per week. Prerequisite: MATH 110 or the equivalent.

PHYS 133-134. Technical Physics I, II (4 credits) (4 credits). Instruction includes motion, Newton's laws, sound, electricity and magnetism. Students are also introduced to atomic structure, inorganic reactions, bonding, organic nomenclature, heat, spectra, and optical instruments. This course is designed primarily for students in the technology program that need a fundamental understanding of physics and chemistry. Three lecture and three laboratory hours per week. Prerequisite: MATH 110 or the equivalent.

PHYS 141. Mechanics and Heat (3 credits). This is a course designed to meet the needs of science and engineering students. Topics covered include: vectors and vector products, equilibrium, moments of force, motion, Newton's laws, and heat. Three lecture hours per week. Corequisite: MATH 212 or 214.

PHYS 146. Mechanics and Heat Laboratory. (1 credit). A laboratory course for those students taking PHYS 141. One three-hour meeting per week. Corequisite: PHYS 141.

PHYS 242. Electricity and Magnetism (3 credits). A course in electricity and magnetism designed for science and engineering students. Three lecture and three laboratory hours per week. Prerequisite: PHYS 141.

PHYS 247. Electricity and Magnetism Laboratory (1 credit). A laboratory course for those students taking Physics 242. One three-hour meeting per week. Corequisite: PHYS 242.

PHYS 243. Wave-Motion, Sound, Light (3 credits). A course for students in science, engineering, and other related fields. Topics covered include: nature and propogation of light, reflection interference, diffraction, lens, polarization, natural radioactivity and nuclear energy. Three lecture hours per week. Prerequisite: PHYS 242.

PHYS 248. Wave-Motion, Sound, Light Laboratory. (1 credit). A laboratory course for those students taking Physics 243. One three hour meeting per week. Corequisite: PHYS 243.

PRODUCTION MID-MANAGEMENT

PROD 230. Industrial Management (3 credits). Modern industrial concepts as applied to specific business situations. Course deals with automation, managerial skills, organizational trends, employee motivation, and principles of industrial relations. Three lecture hours per week.

PROD 240. Production Planning and Control (3 credits). The function of managerial planning and control are given more detailed treatment. Relationship of objective to different types of planning is presented. Attention is directed to effective control systems, human factors in controlling, and other topics to study the meaning and practice of planning and controlling modern business. Three lecture hours per week.

PROD 250. Materials Management (3 credits). A study of manufacturing processes including general procedure, cutting and noncutting processes. Destructive and nondestructive testing of materials, automation, safety, product materials and production materials management will also be encountered. Three lecture hours per week.

PROD 260. Methods Analysis and Work Measurement (3 credits) Operational problems and control of production and logistics systems; application of management tools (both qualitative and quantitative) to operating systems. Three lecture hours per week.

PSYCHOLOGY

PSYC 120. General Psychology (3 credits). This course is designed to give the student a broad view of the field and acquaint him with the fundamental laws of behavior that have to do with daily conduct in various life situations. The study of human behavior relating experimental data to practical problems, the measurement of ability, sensory and perceptive processes, organic basis

of behavior, heredity, maturation, learning and thinking, motivation, emotion, personality and social factors in behavior. Three lecture hours per week.

PSYC 130. Child Growth and Development (3 credits). A study of physical and psychological development from conception to adolescence with emphasis on factors which influence growth and development. Designed to help the individual develop skills in observing and interpreting children's behavior. Three lecture hours per week.

PSYC 230. Adolescent Psychology (3 credits). This course will provide a survey of adolescent development including physical, intellectual, social and emotional factors. It will focus on the problems of adjustment and typical manifestations of anit-social behavior during adolescence.

PSYC 240. Statistical Methods in Psychology (3 credits). Measures of central tendency and variability; statistical inference; correlation and regression. Prerequisite: PSYC 120.

PSYC 250. Fundamentals of Behavior Pathology. (Credit: 3 semester hours). Introduction to behavioral disorders; the dynamics of human behavior; analysis of the biological, cultural, sociological, and psychological factors in the development, diagnosis, and treatment of disorders. Three lecture hours per week. Prerequisite: PSYC 110 or 120.

PSYC 260. Human Development: Biofeedback Training (3 credits) This course is designed to provide the student with some simple skills in self-control through the use of biofeedback equipment. It will provide a means for learning appropriate responses to stress and for improving the individual's self-concept. Two lecture and two laboratory hours per week.

READING

RDNG 101. Developmental Reading Lab I (1 credit). Designed to accompany RDNG 110, this course provides one hour each week of supervised activities that reinforce 110 class objectives and deal with specific reading problems.

RDNG 110. Developmental Reading (3 credits). Designed to improve reading comprehension and speed, vocabulary, and study skills, this course prepares the student to deal more successfully with the study materials required in many college courses. RDNG 110 is offered in a laboratory setting.

RDNG 115. Speed Reading (3 credits). This is a transferrable course for the average or advanced reader. As in RDNG 110, the focus in RDNG 115 is on reading comprehension and speed, vocabulary development, and study skills. The course is offered in a laboratory setting. Prerequisite: An ACT score of 14 or higher in Social Sciences or a Nelson-Denny Reading Test score of tenth-grade level or higher.

REAL ESTATE MID-MANAGEMENT

REAL 130. Principles of Real Estate (3 credits). A beginning course in real estate fundamentals and principles. The development of real estate in Texas. Introductory study of ownership appraisal, law, practices, financing, land and location values, transfers, trends, regulations and economic effects. Three lecture hours per week.

REAL 140. Real Estate Mathematics (3 credits). Provides both student and practitioner the means for acquiring and maintaining a sound proficiency with the mathematics of basic real estate transactions. This course will allow the student to learn how to compute the figures that underlie most real estate

transactions: costs, values, income, expenses, profits, taxes and money, money variations and innovations. Three lecture hours per week.

REAL 220. Real Estate Practice (3 credits). Deals with the problems of establishing and conducting a real estate business. Includes establishing the office, securing and listing prospects, showing properties and closing sales, financing, property management, rentals and leases, appraisals, and the Texas Real Estate Act. Three lecture hours per week. Prerequisite: REAL 130.

REAL 230. Real Estate Law (3 credits). A study of Texas real property law. Includes the history of land titles, real property estates, including acquisition and transfer and methods and incidents of ownership, easements, fixtures, land descriptions, recording, homesteads, land contracts, mortgages, and trust deeds, liens, taxes and assessments, covenants, conditions, and restrictions, zoning ordinances, leases, brokers, and types of listing agreements, escrows, title insurance, and probate proceedings. Three lecture hours per week. Prerequisite: REAL 130.

REAL 240. Real Estate Finance (3 credits). Techniques of using security devices, legal aspects of mortgages and related instruments, return mortgage and equity capital, where and how best to obtain funds, procedures in financing and mathematics of real estate finance. Problems, policies, and risks involved in financing of various types of real property. Three lecture hours per week. Prerequisite: REAL 130.

REAL 250. Real Estate Brokerage (3 credits). The course emphasizes planning and organizing for brokerage operations, selecting and training real estate sales personnel, and managing sales activities. Treatment is given also to control systems, effective advertising practices, and "professionalism" in real estate brokerage. Prerequisite: REAL 130. Three lecture hours per week.

REAL 260. Real Estate Appraisal (3 credits). Methods of real estate appraisal are presented including market value, income, and cost. Emphasis is placed on case studies to provide maximum practice in appraising real estate. Prerequisite: REAL 130. Three lecture hours per week.

RETAIL MID-MANAGEMENT

RETL 130. Principles of Retailing (3 credits). This course is designed to introduce the student to the essential principles of retailing, including consumer motivation, market segmentation, retail research, buying, retail pricing, inventory control, and store location. Three lecture hours per week.

RETL 230. Principles of Marketing (3 credits). This course is designed to provide treatment of the broad range of business activities that direct the flow of goods and services of businesses and individuals. Activities considered include product planning, standardization, buying, pricing, promotion, selling, credit, storage, transportation, and marketing research. Three lecture hours per week.

RETL 240. Advertising (3 credits). Advertising is considered as an integral part of the overall marketing strategy. Topics covered include marketing planning, evaluating the advertising opportunity, product development, branding, packaging, pricing, marketing research, consumer behavior, and budgeting as these relate to advertising. Prerequisite: RETL 130. Three lecture hours per week.

RETL 250. Selling and Salesmanship (3 credits). Attention is given to general principles of successful selling, qualification, and training programs. Role-

playing techniques and media center materials complement the classroom and the text. Prerequisite: RETL 130. Three lecture hours per week.

RETL 260. Retail Merchandise Management (3 credits). Effective methods of merchandise control are presented including minimizing investment in inventory, guides to use in buying, pricing policies, and computing stock turnover. Merchandise budgeting techniques are also presented. Prerequisite: RETL 130. Three lecture hours per week.

SECRETARIAL SCIENCE

SECT 111-112. Shorthand I, II (3 credits) (3 credits). Aims at mastery of the principles of Gregg shorthand with drills in the correct formation of work outlines and phrase forms; the study of word signs, phrasing, dictation, transcription, and speed building. Lecture three hours, laboratory two hours per week.

SECT 121-122. Typewriting I, II (3 credits) (3 credits). The typewriting keyboard and skills essential to obtain employment in an office occupation. Correct typing techniques and practice in production problems such as centering, letters, manuscripts, simple tabulations, and forms. Both courses are structured for individualized learning. Lecture 2 hours, laboratory 3 hours per week.

SECT 130. Business Communications (3 credits). A study of the use of correct and forceful English and the application of positive qualities in writing business letters and reports. Lecture three hours per week.

SECT 140. Secretarial Practice (3 credits). A study of secretarial occupations and secretarial duties in the business office including handling of mail, filing, personality and human relations, grooming, and office routine. Lecture three hours and laboratory two hours per week. Prerequisite: SECT 112.

SECT 150. Office Machines (3 credits). Introduction to operations of ten-key adding machine, electronic printing calculator, electronic display calculator, and transcriber. Designed as a survey course to give the student an insight into the use of these machines and to develop sufficient skill for machines to be used later in offices. Lecture two hours and laboratory three hours per week.

SECT 210. Shorthand III. (3 credits). Improvement of shorthand speed and office efficiency through practice. Further emphasis is given to widening vocabulary. Accurate transcription is stressed. Lecture three hours and laboratory two hours per week. Prerequisite: SECT 112.

SECT 212. Secretarial Internship. (3 credits). The student works in a qualifying firm 20 hours per week in an occupational situation where he receives practical training and experience compatible with his management career objective. Students may receive credit from an approved full-time job.

SECT 215. Dictation and Transcription. (3 credits). Intensive training designed to develop additional speed and accuracy in writing and transcribing shorthand to meet the demands for secretarial efficiency. Lecture three hours and laboratory two hours per week. Prerequisite: SECT 210.

SECT 220. Typewriting III (3 credits). This advanced typing course places emphasis on production typing with additional training given in letter writing, tabulation, stencil cutting, and creation of office atmosphere. Lecture two hours and laboratory three hours per week. Prerequisite: SECT 122.

SECT 222. Secretarial Internship. (3 credits). The student works in a qualifying firm 20 hours per week in an occupational situation where he receives practical training and experience compatible with his management career objective. Students may receive credit from an approved full-time job.

SECT 230. Records Management (3 credits). A study of basic filing procedures and records control, providing instruction in the fundamentals that are essential to the managing of the records of a business. Lecture two hours and laboratory two hours per week.

SECT 240. Office Management and Procedures (3 credits). Office management and procedures represents a comprehensive survey of the most acceptable methods and practices of office administration with a constant emphasis on two basic concepts of successful business management: satisfactory human relations and continuous cost reduction. This course is designed for the Administrative Secretary.

SECT 250. Word Processing (3 credits). Office simulation of business typing, transcribing, and production work utilizing equipment currently found in word processing centers. Develops concept of word processing in business for both the administrative secretary and the corresponding secretary. Includes a review of grammar, punctuation, and vocabulary, as well as training in decision making. Prerequisite: SECT 122 or equivalent. Two lecture hours and three laboratory hours per week.

SOCIOLOGY

SOCI 110. Marriage and Family Relationships (3 credits). A contemporary study of the freedom and growth potential of the individual in marriage and family life. The many parameters of the marital and parental relationships are explored and emphasis placed on raising current questions with comprehensive examination of the values and goals of the individual as well as the institution of the family.

SOCI 111. Principles of Sociology (3 credits). The scientific examination of the organization of human social life, the unique forms and social order of group life, and the products of group living with special emphasis on social interaction patterns, the processes and institutions developed by man to facilitate his progress.

SOCI 122. Social Problems (3 credits). The scientific examination of conditions that are disruptive to society today, those seen as problematic for society as a whole and those that represent violations of the norms of special groups in society: population, poverty, social minorities, mass society, delinquency, crime, drugs, sexual deviance, and disorganization of family, education and religion.

SOCI 230. Introduction to Anthropology (3 credits). Principles of physical and cultural anthropology; analysis of the cultures of prehistoric and existing preliterate people; impact of modern western culture on preliterate societies. Prerequisite: SOCI 111.

SPANISH

SPAN 111-112. Elementary Spanish I, II. (4 credits) (4 credits). While this course is definitely aimed toward proficiency in conversational Spanish, care is taken to give the student the necessary background in pronunciation, verb forms, and grammatical construction to enable him to take Intermediate Spanish. Three lecture and two laboratory hours per week.

SPAN 121-122. Intermediate Spanish I, II (3 credits) (3 credits). This course includes more complex grammatical points. Reading of classical and contemporary literature with a view to furthering cultural appreciation and gaining a

better understanding of international affairs. Three lecture hours and one laboratory hour per week. Prerequisite: SPAN 112 or instructor approval.

SPAN 211-212. Advanced Conversation and Composition (3 credits) (3 credits). This course is designed to further the student's study and use of Spanish after the fourth semester of college study in the language. Three lecture hours per week. Prerequisite: instructor approval.

SPEECH

SPCH 110. Fundamentals of Speech. (3 credits). The Fundamentals of Speech consists of the study of the importance of speech as an aid in social adjustment; the improvement of articulation and pronunciation; the study of the use of bodily activity and its relation to effective speaking; vocabulary development; the study of the general ends of speech and preparation toward the achieving of these ends. Three lecture hours per week.

SPCH 120. Public Speaking (3 credits). Public Speaking is devoted to the methods of organization and the techniques of delivery of the platform speech, emphasis upon explanation and persuasion. Study of group methods of problem solving and parliamentary procedure. Three lecture hours per week. Prerequisite: SPCH 110 or consent of instructor.

SPCH 130. Oral Interpretation (3 credits). Oral Interpretation is the study of platform interpretation of literature. Emphasis will be placed upon improvement in voice, pronunciation, and enunciation for interpreting lyric poetry, narrative prose and poetry, descriptive essay, monologue, and dramatic scenes. This course is particularly recommended for English and elementary majors. Three lecture hours per week. Prerequisite: SPCH 110.

SPCH 140. Business Speech (3 credits). Business Speech is devoted to the study of the techniques of technical reporting (i. e., speeches to instruct, speeches of special reporting); the study of special situation speeches; the study of techniques of problem-solving through public discussion (i. e., panel discussion, symposium, etc.); the study of the techniques of parliamentary law for purposes of learning to preside at various meetings; to give interview experience. Three lecture hours per week.

WELDING

WELD 110. Welding Processes (4 credits). Theory and practice in techniques of oxy-acetylene welding and cutting. Layout and preparation of commonly used joints. Servicing and regulation of oxy-acetylene equipment and basic shop practice. Basic welding machine theory and set up procedures of electronic arc welding machine. Two lecture and six laboratory hours per week.

WELD 121. Arc Welding (Plate I) (4 credits). Metal cutting with oxygen and acetylene equipment. Theory of plate welding. Plate welding in three positions: flat, vertical up, and horizontal. Two lecture and six laboratory hours per week.

WELD 122. Arc Welding (Plate II) (4 credits). Advanced theory of plate welding. Plate welding in five positions: flat, vertical up, horizontal, vertical down, and overhead. Root and Face Bend tests for qualifications of plate welders. Advanced theory and troubleshooting procedures for electronic arc welding machines. Two lecture and six laboratory hours per week. Prerequisite: WELD 121 or approval of department head.

WELD 131. Basic MIG and TIG (4 credits). Theory of Tungsten Inert Gas Welding and Metallic Inert Gas Welding. Laboratory experiences in gas shielded arc welding. Two lecture and six laboratory hours per week. Prerequisite: WELD 121 or approval of department head.

WELD 160. Shop Equipment and Safety (2 credits). An introductory course in safety to be used while in the shop or on the job. Shop and job safety will be taught and carried out at all times. One lecture and two laboratory hours per week.

WELD 231. Advanced MIG and TIG (4 credits). Advanced theory of Tungsten Inert Gas Welding and Metallic Inert Gas Welding. Advanced laboratory experiences in gas shielded arc welding. Two lecture and six laboratory hours per week. Corequisite: WELD 131 or approval of department heads.

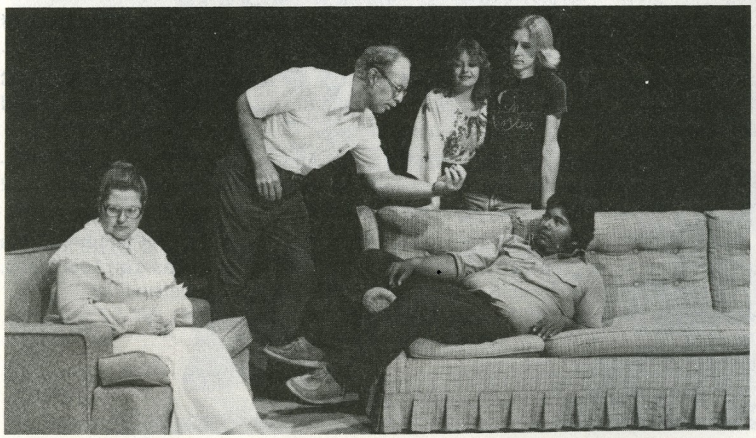
WELD 241. Basic Layout Design and Fabrication (3 credits). Introduction to design and construction of various types of layouts according to specifications. Related welding experiences involved in structure fabrication. One lecture and four laboratory hours per week. Prerequisite: WELD 121 or approval of department head.

WELD 242. Advanced Layout Design and Fabrication (3 credits). Advanced design and construction of various types of layouts according to specifications. Related welding experiences involved in structure fabrication. One lecture and four laboratory hours per week. Prerequisite: WELD 241 or approval of department head.

WELD 251. Pipe Welding I (4 credits). Theory of pipe welding. Cutting and beveling pipe with oxygen and acetylene equipment. Pipe welding in two positions: Rolling and horizontal. Two lecture and six laboratory hours per week. Prerequisite: WELD 122 or approval of department head.

WELD 252. Pipe Welding II (4 credits). Advanced theory of pipe welding. Pipe welding in four positions: Rolling, horizontal, downhill, and overhead. Code test under Section IX, A. W. S. Two lecture and six laboratory hours per week. Prerequisite: WELD 251 or approval of department head.

WELD 270. Welding Specifications and Testing (3 credits). Testing welds by means of coupons cut out of a welded section. Sample testing of weld sections. How to use the bend test machine. The difference between nondestructive and destructive testing. Two lecture and three laboratory hours per week. Prerequisite: WELD 122.



TEXAS DEPARTMENT OF CORRECTIONS PROGRAMS

*AUTOMOBILE MECHANICS

AUTO 110. Basic Automotive (3-6) (4 credits). The course will acquaint the student with service trade information, use and care of shop equipment and tools, standard transmission, brakes, clutches, rear axle, drive line principles, and a limited application of automotive shop practice.

AUTO 120. Internal Combustion Engine (3-6) (4 credits). An introduction to the gasoline internal combustion engine. Technique and skill in inspection, repairing and overhauling of engine components, valve timing, use of special tools and equipment.

AUTO 130. Automotive Electricity and Ignition System (3-6) (4 credits). An introduction into the fundamentals of electricity as applied to the automotive vehicle. Classroom theory and laboratory practices of magnetic principles of electricity, functions of the diode and transistor, the storage battery, D.C. and A.C. charging systems, generators and alternators, and complete wiring systems.

AUTO 140. Carburetion and Fuel Systems (3-6) (4 credits). A study of fuels and their applications, requirements, and effect on carburetion. Students will disassemble, clean, overhaul, reassemble, and adjust various types of carburetors.

AUTO 150. Automotive and Truck Chassis (3-6) (4 credits). A study of designs, construction, and frame alignment fundamentals of the vehicle chassis. Classroom theory and laboratory practices will include front end alignment, shock absorbers, springs steering mechanism, wheel balancing, and power steering.

*DRAFTING

DRFT 112. Technical Drafting (3-6) (4 credits). The principles of technical drawing as required to express ideas graphically are introduced. Topics include: use of instruments, geometric construction, orthographic projection, sections, auxiliary views, revolutions, dimensioning, axonometric projection, intersections and developments.

DRFT 213. Pipe Drafting (3-6) (4 credits). A basic course designed for the study of engineering standards, pipe and fitting designs, symbols and specifications.

DRFT 223. Structural Drafting (3-6) (4 credits). A course designed to cover AISC specifications and standards, design and detail, or structural members and connections.

DRFT 233. Electrical Drafting (3-6) (4 credits). An introduction to electrical schematics and diagrams. Also covers basic electricity and study of electrical and electronic symbols, their application and associated terminology.

DRFT 243. Architectural Drafting (3-6) (4 credits). Basic drafting techniques as related to the preparation of residential details, with emphasis on floor plans, plot plans, foundations, structural details, sections and elevations.

*RADIO AND TELEVISION REPAIR

RATV 120. Basic Television Receivers (3-7) (4 credits). Study of television circuits as applied to the black and white home and industrial closed circuit receivers. Servicing experiments in lab will be done on actual lab TV receivers using up-to-date equipment and schematics. The use of the VTVM and the scope is emphasized.

RATV 220. Basic Color Television (3-7) (4 credits). The study of color television circuits as they are applied to the modern receiver. The student will study color, mixing both additive and subtractive methods, requirement of the composite color signal, makeup of the color picture tube, convergence, and troubleshooting procedures. All lab experiments are performed on live color receivers, using up-to-date equipment and schematics. Prerequisite: RATV 120 or equivalent.

RATV 230. Advanced Service Techniques (3-7) (4 credits). A course of study designed for the technician who is famiiar with television circuitry and wants to progress to advance servicing techniques. Includes visual alignment and overall response analysis. Corequisite: RATV 120 or equivalent.

RATV 110. Basic Radio Receivers (3-7) (4 credits). An introduction to radio receivers and radio circuitry. Prepares the student for radio servicing and is the basic foundation for further study in television servicing of black and white, color and industrial closed circuit as well as home receivers.

RATV 260. Communications I (3-7) (4 credits). Theory and application of electronics from basic through transmitters and antennas. Lab includes application, operating and testing of communication equipment. This course prepares students to qualify for the F.C.C. Second Class Radio-Telephone Operator's License.

*Courses offered only at the Texas Department of Corrections.

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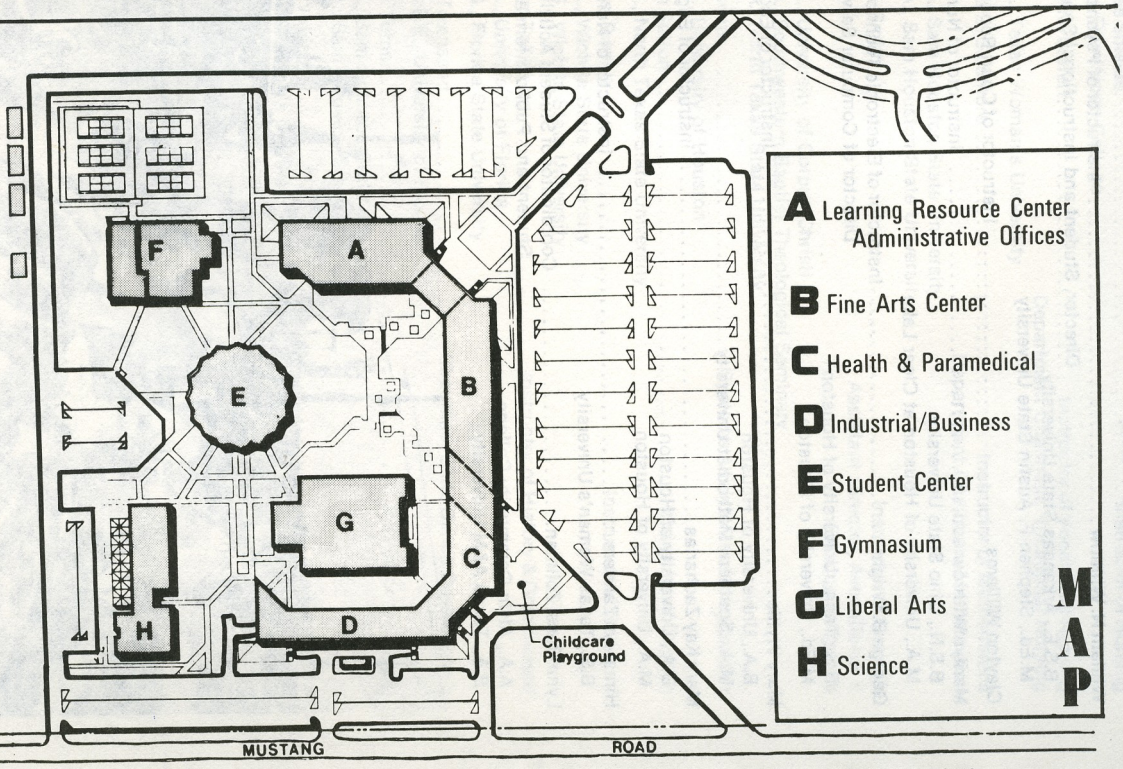

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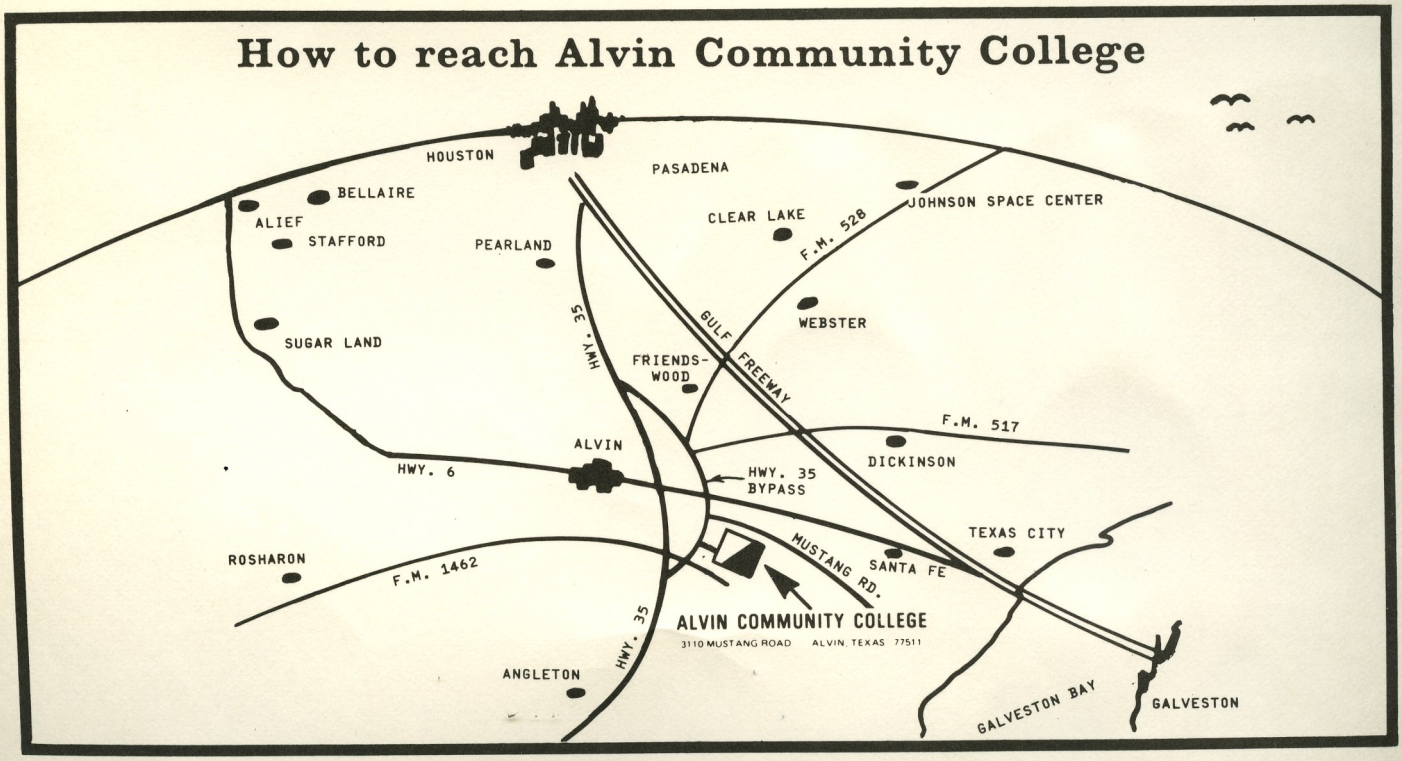

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