1972–1973

MOUNTAIN VIEW COLLEGE

OF THE DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

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R. L. Thornton, Jr., Chairman of the Board

Mrs. Eugene McDermott, Vice Chairman of the Board

Loncy L. Leake

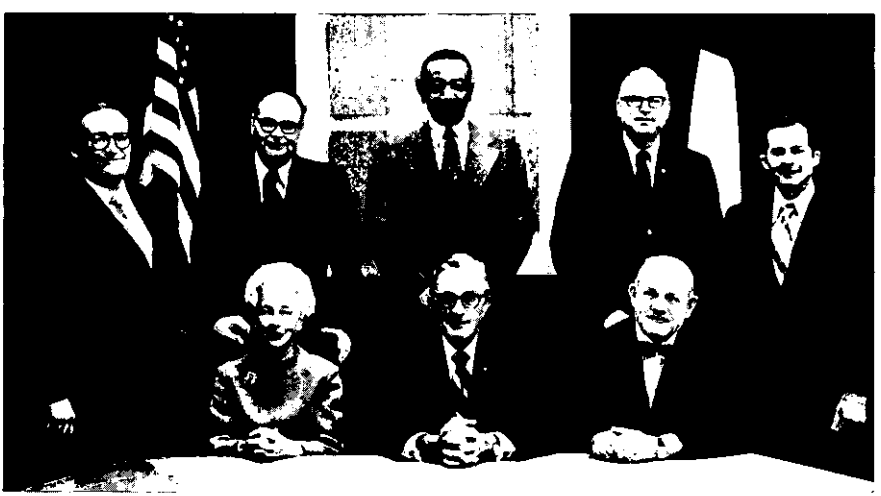
Mildren Montgomery

Jim Scoggins

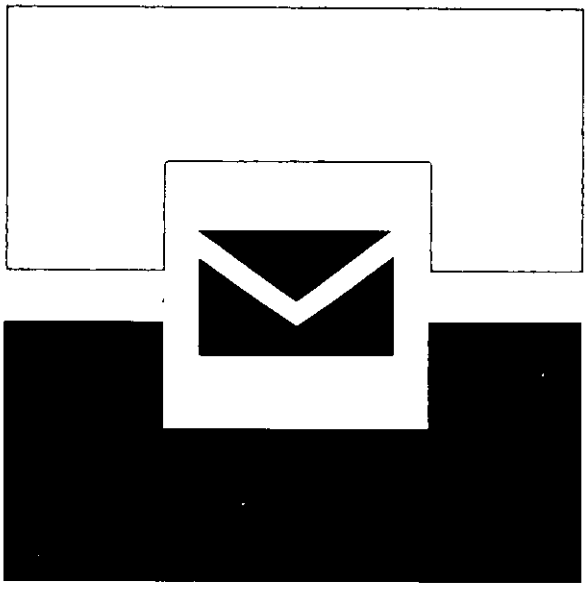
Durwood A. Sutton

Carie E. Welch

BOARD OF TRUSTEES



Left to right, Standing: Durwood A. Sutton, Loncy L. Leake, Mildren Montgomery, Carie E. Welch, Jim Scoggins. *Seated:* Mrs. Eugene McDermott, vice-chairman; R. L. Thornton, Jr., chairman; Dr. Bill J. Priest, Chancellor.



MOUNTAIN VIEW COLLEGE

OF THE

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

The regulations in this bulletin are based upon present conditions and are subject to change without notice. The college reserves the right to modify any statement in accordance with unforeseen conditions.

TABLE OF CONTENTS

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

ADMINISTRATIVE STAFF

MOUNTAIN VIEW COLLEGE

President	Sims, David M.
Dean of Instruction	Miller, Eldon L.
Dean of Student Services	Milton, Furman D.
Associate Dean of Business Services	Hughes, Ted B.
Associate Dean of Evening Program	Jordan, William H.
Assistant Dean of Instruction	Bounds, Glen I.
Assistant Dean of Community Services	Sorrells, Bill R.
Assistant to the President	Gibbons, H. Eugene
Registrar and Admissions	Thomas, Kenneth W.
Director of Counseling	Tallant, Weldon J.
Director of Financial Aids and Placement	Taylor, Keith A.
Director of Student Activities	Wood, Stayton A.
Director of Health Services	Richards, Donna B.
Public Information Assistant	Herndon, Nona G .

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

Chancellor	Priest, Bill J.
Vice-Chancellor of Academic Affairs	LeCroy, R. Jan
Vice-Chancellor of Business Affairs	Pike, Walter L.
Director of Planning and Research	James, Gary A.
Director of Data Processing	Hill, James R.
Construction Coordinator and District Coordinator of Maintenance and Operations	Robinson, George L.
Director of Personnel	Boyle, Robert B.
Director of Program Development	Betts, Dexter L.
District Coordinator of Technical/ Occupational Education	Owens, Claude C.
Director of Special Services & Government Relations	Leo, Robert J.
Technical Assistant for Faculty Planning	Pritchard, Stanley E.
District Instructional Media Specialist	Smith, Richard E.
District Director of Public Information	Hamilton, Sibyl
Coordinator of Research	Hamilton, Douglas G.
Director of Business Services	Phipps, Bill W.

GENERAL INFORMATION

1972-73 ACADEMIC CALENDAR

FALL SEMESTER

August 28	Monday	Faculty reports
August 29-31	Tuesday-Thursday	Registration
September 1	Friday	Faculty Orientation
September 4	Monday	Labor Day Holiday
September 5	Tuesday	Classes begin 8 a.m.
November 22	Wednesday	Thanksgiving Holiday begins 10 p.m.
November 27	Monday	Classes resume 8 a.m.
December 8	Friday	Last day to withdraw with a grade of "W" 8 p.m.
December 15	Friday	Last day of classes
December 18-22	Monday-Friday	Final examinations
December 22	Friday	Semester closes 5 p.m.

SPRING SEMESTER

January 3	Wednesday	Faculty reports
January 9-11	Tuesday-Thursday	Registration
January 15	Monday	Classes begin 8 a.m.
April 13	Friday	Spring break begins 5 p.m.
April 23	Monday	Classes resume 8 a.m.
May 4	Friday	Last day to withdraw with a grade of "W" 8 p.m.
May 11	Friday	Last day of classes
May 14-18	Monday-Friday	Final examinations
May 18	Friday	Semester closes 5 p.m.

The Academic Calendar may be subject to change or modification. A Summer Session is scheduled at Mountain View College during 1973. Information regarding the Summer Session will be available from the Admissions Office in the spring of 1973.

History/Philosophy

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

Each of the district's colleges — Eastfield, El Centro, Mountain View and Richland — are committed to providing a quality educational experience for every person in Dallas County regardless of academic preparation. The colleges of the district are truly comprehensive open door institutions offering a variety of programs including technical and professional, college transfer and community service courses. Each college offers associate degree and certificate programs. The student body is as diverse as its curriculum. Honor students, high school "drop-outs", housewives, veterans, employed people and community and civic leaders are served by the four campuses.

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

This approach to education brings together into a single college setting a multitude of personalities with divergent interests, ambitions and backgrounds, creating an educational community not unlike the "real" community in which people live, work and play and further enhancing the district's desire for total education.

The district is committed to providing an educational program to meet the needs, abilities and ambitions of the student. The philosophy of the district is to create an educational program for an individual, rather than to shape an individual to fit an "educational mold."

In keeping with this philosophy, competent, intensive counseling and guidance is offered to every student to help him discover his goals and special abilities and to update his educational program if those goals change during his college experience. This emphasis on counseling, rare in some institutions, is routine procedure at all district colleges.

The traditional "junior college" label, therefore, doesn't fit. True enough, the district's colleges are two-year colleges which provide the freshman and sophomore years of the conventional four-year baccalaureate program. However, their function, philosophy and breadth make the label inadequate. Therefore, on the first day of 1972, the district became the Dallas County Community College District to more accurately reflect the mission of its colleges, that of meeting the varied educational needs of the entire metropolitan family.

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

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

—For the employed person wishing to improve his knowledge of his field—or train for a move into a new occupational field—the colleges offer a broad range of Community Service courses.

—For the person who simply wants to enrich his life there are Community Service courses offering a myriad of subjects on cultural, civic, and avocational topics.

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

The following year the district's first college, El Centro, opened its doors for the Fall Semester in the heart of downtown Dallas. In August 1970, Eastfield College and Mountain View College enrolled their first students and the multi-campus district envisioned by the district planners became a reality. Richland College became the district's fourth college with the start of the 1972-1973 school year.

In addition to these four colleges, sites have been purchased for three future colleges, Brookhaven College, Cedar Valley College, and North Lake College.

These unique facilities and innovative faculties combine with the district's effective philosophy and the strong support of the people and institutions of Dallas County to create four outstanding educational communities within the bustling metropolitan county.

League for Innovation

Mountain View College of the Dallas County Community College District is a member of the League for Innovation in the Community College. Fifteen outstanding community college districts throughout the nation compose the League membership. Innovative experimentation and the continuing development of the community college movement in America are the purposes and goals of the League. Membership commits the Dallas County Community College District to research, evaluation and cooperation with other community college districts in providing the best possible educational program and fullest utilization of its resources to serve the needs of its community.

Accreditation

The Dallas County Community College District is a full member of the American Association of Junior Colleges, and is recognized and sanctioned by the Coordinating Board of The Texas College and University system. In December, 1971, Mountain View College was granted "Candidacy" status by the Southern Association of Colleges and Schools, the second step leading to its full accreditation. The academic transfer curriculum is coordinated with senior colleges and universities to facilitate the transfer of credits to these institutions.


EVENING COLLEGE
& COMMUNITY
SERVICE PROGRAMS

Evening College

In a dynamic, growing community such as that in which Mountain View College is located, people are involved. Their involvement often creates a need for gaining and developing knowledge and skills. Because of their involvement it is often impossible for them to attend college during normal daytime hours. The evening program was created to meet the needs of students who work or have other obligations during the day. The evening program offers these students the same broad spectrum of educational programs that is available to full-time day students.

It may be that the student desires to renew old skills or to acquire new ones. In the evening program there are courses to aid in building occupational, avocational, aesthetic, economic, civic, social and domestic skills. There are courses from all disciplines, both credit and non-credit. College transfer and technical-occupational programs of two years or less are available. The direction a student takes will be determined by his personal goals. As a comprehensive community college Mountain View offers the student the option of electing the program best suited for him and of changing the direction of his studies if his goals change. In this manner students, with the help of qualified counselors, can draw a personalized blueprint for themselves in higher education. The course load which is attempted should be realistically determined by the amount of time available for doing quality work.

The evening program offers high quality instruction, excellence of facilities, and a variety of student services as provided in the areas of counseling, health, bookstore, food, and recreation. Instructors in the evening program are selected from Mountain View's full-time staff and from among outstanding Dallas area educators and other professional specialists who are interested in teaching.

To enroll in the evening program at Mountain View College, call or write the Director of Admissions for an application for admission.

Community Service Programs

The community service program of Mountain View College offers programs directed toward finding educational solutions to localized problems which are not met by the formal degree and certificate programs of the college. These courses are designed to help individuals in exploring new fields of study, increase their proficiency in a particular profession, develop their potential or enrich their life

through planned cultural and recreational studies, regardless of the student's age or previous educational experience.

Instructors for community service programs are leading professional men and women, Mountain View College faculty members and other educators who bring to our community exciting learning opportunties.

Community service programs are non-credit courses—there are no entrance requirements. Classes are offered both on and off campus as circumstances warrant. Special assistance will be given to companies who wish to conduct courses, workshops or seminars in conjunction with their own training programs.

Courses may be offered in areas such as:

Business and Secretarial Programs
Languages and Guided Studies Programs
Management Development Programs
Vocational-Occupational Programs
Physical Performance Programs
Special Interest Programs
Engineering & Industrial Programs
Continuing Education for Women

For additional information about Community Service programs, please contact the Mountain View Community Service office — Phone 746-4114.

STUDENT SERVICES

General Admission Policy

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

ADMISSION REQUIREMENTS

1. Beginning Freshmen

   A student in college for the first time may apply if he is:

   a. A graduate from an accredited high school.
   b. A graduate from an unaccredited high school who has been admitted by the Committee on Admissions and Retention.
   c. A non-high school graduate who is eighteen years of age and whose high school class has graduated.
   d. A high school student recommended by the high school principal. (In this case, a limited number of high school seniors may be concurrently enrolled for special study.)

2. Transfer Students

   College transfer applicants will be considered for admission based on their previous college record. Scholastic standing of transfer applicants will be determined by the Mountain View College Office of Admissions based upon the Mountain View grade point system.

   Students on scholastic or disciplinary suspension from another institution must be approved for admission by the Committee on Admissions and Retention.

3. Former Students

   Former Dallas County Community College District students will be required to submit an application for re-admission to any one of the district colleges.

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

4. Non-Credit Students

   It is not necessary for a student who plans to register for non-credit courses to apply for regular college admission. Applications for admission to these courses should be sent to the director of Community Services Programs.

Admission Procedures

It is the responsibility of each applicant to complete his admission file. Only those applicants who have fulfilled all admission require-

ments will be considered for admission. Applications will be processed until enrollment limits have been reached for each class offered.

Applicants residing in Dallas County will be given priority admission in any semester.

Students who are accepted for admission will have appointments scheduled with a counselor. The counselor will assist in planning a program of study.

Full-Time Applicants (12 semester units or more)

Students planning to take 12 semester hours or more must submit to the Office of Admissions the following items:

1. Application for Admission (Social Security number required).
2. Official Trascript from last school attended (high school or college).

   College transfer students are required to submit transcripts of all previous college work prior to the end of the first semester. Students never having attended college will supply a high school transcript.
3. Results of the American College Testing Program (ACT).

   The results of the ACT are used for counseling and placement. Students entering with ACT scores of 11 or below will generally be enrolled in the Guided Studies program. Individual decisions will, however, be made in conference with a counselor.

   College transfer applicants who have earned at least 6 units of college credit with a grade of "C" are exempt from this requirement. District colleges may submit other standard testing scores for placement purposes.

   Information about the ACT testing program may be obtained from a high school counselor or the office of the Director of Counseling. The ACT code for *Mountain View College is 4089.*
4. Medical Form.

   Full-time applicants are required to submit the medical form completed on **both** sides. This form should be returned by mail or in person directly to the Health Center. Written proof of innoculation is required for the following:
   a. A negative tuberculin skin test or chest x-ray.
   b. Polio immunization if applicant is under nineteen years of age.
   c. Diphtheria/tetanus injection within ten years.

Part-Time Applicants (Less than 12 semester units)

Part-time students (less than 12 semester hours) must submit to the Office of Admissions the following items:

1. Application for admission (Social Securty number required).
2. Official Transcript from last school attended (high school or college).

College transfer students are required to submit transcripts of all previous college work prior to the end of the first semester. Students never having attended college will supply a high school transcript.

3. Medical Form.

   Part-time applicants are required to submit the medical form completed on the Health History Report side only. This form should be returned by mail or ni person directly to the Health Center. Written proof of innoculation is required for the following:

   a. A negative tuberculin test or chest x-ray.
   b. Polio immunization if applicant is under nineteen years of age.
   c. Diphtheria/tetanus injection within ten years.

Transfer of Credit

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

Students who are admitted with a grade point deficiency will be required to earn additional grade points at district colleges to offset this deficiency. Students will not be graduated from Mountain View College until this deficiency has been cleared.

Credits earned in military through the U.S. Armed Forces Institute will be reviewed by the Director of Admissions and credit granted if applicable.

Student Diversity

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

Concurrent Enrollment

The colleges of the Dallas County Community College District have no geographical boundary restrictions for enrollment at any of the campuses. Admission requirements for all of the colleges are established by the DCCCD Board of Trustees and are the same for all District colleges. Students may enroll in more than one college at the same time.

Tuition and Fees

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

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

Tuition — Fall or Spring Term

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

Tuition — Summer Session

Residents of Dallas County	
1-6 Credit Hours	Minimum $25; $10 per credit hour.
7 credit hours	$64.
Residents of Other Texas Counties	
1-6 Credit Hours	$30 per credit hour.
7 Credit Hours	$184.
Non-Texas Residents**	
1-6 Credit Hours	$45 per credit hour.
7 Credit Hours	$310.
Out-of-Country	
1-6 Credit Hours	Minimum $100; $45 per credit hour.
7 Credit Hours	$310.

* In case of concurrent enrollment at more than one district college, tuition will be paid at college of residence which will be defined as the college in which student will take the majority of his credit hours.

** A non-resident student is hereby defined to be a student less than twenty-one (21) years of age, living away from his family and whose family resides in another state or whose family has not resided in Texas for the twelve (12) months immediately preceding the date of registration; or a student twenty-one (21) years of age or older who resides out of the state or who has not been a resident of the state or who has not been a resident of the state twelve (12) months immediately preceding the date of registration.

Special Fees and Charges

Student Service Fee	
12 or more credit hours	$7 a semester.
6 to 11 credit hours	$4 a semester.
Laboratory Fee (per lab)	$2 to $8 a semester.
Physical Education Activity Fee	$5 a semeser.
Bowling Class Fee	$10 a semester.
Private Music Lessons Fee*	$35 for 1 hour per week (maximum for one course) $20 for ½ hour per week.
Audit Fee	The charge for auditing a course is at the same rate as taking a course for credit regardless of the number of hours enrolled, except that a student activity fee is not charged.
Credit by Examination	Examination fee of $12 per examination.

Additional Fees

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

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

Refund Policy

The refund policy for Mountain View College is based on the fact that student tuition and fees provide only a fraction of the cost of providing educational opportunities. When a student enrolls in a class, he reserves a place which cannot be made available to another student until he officially drops the class. Also, a student's original enrollment represents a sizeable cost to the district whether or not he continues in that class. Therefore, refunds will be made only under the following conditions:

1. No 100% refunds are granted unless college error is involved.
2. 80% refund of tuition and fees if the class is dropped during the first week of classes for each semester.
3. A refund of less than $4 for tuition and fees will not be made.
4. No refund will be made after the first week of classes. An exception may be made for students inducted into the armed services if a copy of the induction notice is filed with the Petitions Committee.
5. The first two days of a six week summer session are considered to be the equivalent of one week for purposes of this policy.
6. Request for refund must be submitted before the end of the semester or summer session for which this refund is requested.

Transcript of Credit from Mountain View College

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

Any student who has borrowed money under the Hinson-Hazlewood College Student Loan Plan, alias Texas Opportunity Plan Loan, at any institution in the State of Texas must obtain a release authorized by the Director of Financial Aids before any records are made available by the Registrar.

Foreign Students

Mountain View College is authorized under Federal Law to enroll non-immigrant alien students. However, under present conditions, no foreign students are admitted without the special permission of the President of the College.

Counseling and Guidance

Students and prospective students who have provided all necessary admissions information to the college will find a staff of professional

counselors available to help them resolve questions of career choice, college transfer requirements, study skills, self-understanding and other kinds of personal problems. Group and individual techniques are employed by counselors to meet students' needs. A partial review of additional materials and services available through the counseling center is listed for students' information:

1. Psychological tests of personality, vocational interests and aptitudes,
2. Occupational and vocational information,
3. Catalogues from a wide selection of colleges and universities,
4. Registration information,
5. Information about the general services offered in other divisions of the college,
6. Tutoring services,
7. Referral for students requiring therapy for psychological problems,
8. Educational planning of courses to meet specific degree requirements.

All students are assigned a counselor by the Admissions Office. Those who desire services of a counselor should contact their assigned counselor for an appointment. Students are encouraged to express any desire for change in their assigned counselor.

Advisement

For students who have been admitted to the college, educational planning and advisement is provided. A staff of full-time counselors is available to the students of Mountain View College but faculty members as well, also serve as program advisors to aid students in defining their educational and vocational goals.

Financial Aid and Placement

The financial aid and placement program at Mountain View College is designed to function as a multi-purpose financial assistance service for students. The objective is to provide assistance to students who, without such aid, would be unable to attend college. Basic to this philosophy is the belief that the educational opportunities of able students should not be controlled by their financial resources.

Students who anticipate the need for financial assistance for college should complete an application well in advance. Thus a realistic determination of their need may be made.

Requests for information should be directed to the Director of Financial Aid and Placement, Mountain View College, 4849 West Illinois Avenue, Dallas, Texas 75211.

Federal and State Programs

Veteran Benefits. Veterans of the Korean War and Cold War who are interested in details should contact the person in charge of Veteran's Benefits in the Admissions Office.

Social Security Administration. Benefits under this program are available to students who meet the criteria set up by the Social Security Administration. The Office of Admissions acts as liaison between Mountain View College students and the Social Security Administration.

Vocational Rehabilitation. The Texas Education Agency, through the Vocational Rehabilitation Division, offers assistance for tuition and fees to students who are vocationally handicapped as a result of a physically or mentally disabling condition. For further information, contact Vocational Rehabilitation, 4333 North Central Expressway.

Hazlewood Act — All veterans, honorably discharged and serving on active duty 180 days, excluding training, who have no remaining G. I. educational benefits and who are now residents of Texas and were residents of Texas at the time they entered the armed forces are eligible to have their tuition and fees waived. Contact the Office of Financial Aid and Placement for additional information and applications.

State Sponsored Scholarships. These scholarships waive payment of tuition for two semesters for the highest ranking graduate of each accredited high school in Texas each year.

Loans

Mountain View College has several loan funds for students needing long-term as well as short-term assistance.

Hinson-Hazlewood College Student Loan Program. The necessary requirements for this loan are:

1. Legal residence in Texas.
2. Enrolled or accepted for enrollment for at least a half-time course of study.
3. Established financial need.

The amount of loan for which a student may qualify depends upon the income of his family. Married applicants are qualified considering the income of both husband and wife.

Qualified students may receive up to $1,500 for the nine month school session.

Repayment begins no later than nine months from the day a student ceases to be enrolled for at least half the normal course load. Repayment may extend up to 10 years; however, a minimum payment of $30 a month is required. Interest is seven percent per year (adjusted).

Short-Term Loans. A student may borrow up to $100 at no interest if funds are available. This loan must be repaid within 90 days or before the semester ends in which the money is borrowed.

Grants

Educational Opportunity Grant. This grant is authorized under the Higher Educational Act of 1965 and is designed to help students with financial need. To be eligible a student must prove financial need, and make satisfactory progress toward the completion of his educational goal.

Institutional Scholarships. This program is designed to aid the student who exhibits financial need.

Scholarships

Mountain View College offers a few scholarships to students who exhibit scholastic ability, and/or need. Individuals, private industries and groups make these scholarships available through the Office of Financial Aid and Placement.

Revocation of Aid

The Financial Aid and Placement Office reserves the right to review and cancel awards at any time for the following reasons:

1. Failure to maintain an acceptable academic record.
2. Failure to meet the minimum course load requirements.
3. Changes in the financial status of the student or his family.
4. Any student in violation of any regulation governing the program from which he is receiving aid.

It is understood that the student is aware of the conditions under which aid is offered and agrees to meet all the necessary requirements.

Placement

The Financial Aid and Placement Office will assist any student desiring job placement, either on or off-campus.

Terminal placement assistance is available for students nearing completion of their course of study. All students should register with the Financial Aid and Placement Office at least one full semester prior to their graduation.

Student Employment

Part-time employment. Typically, part-time employment is designed as a financial aid to assist students while they are in college through:

1. On-campus placement.
2. Work/study program.
3. Off-campus placement.

Student Activities

Student Activities at Mountain View College are visualized as an integral part of the learning experience available at the college.

Through direct contact with a professionally trained staff, the student will be encouraged to find new ways of expressing himself, to develop skills in relating to other people to formulate a new understanding *of* and respect *for* himself and his environment. The division will be under the jurisdiction of a student, faculty, administration composed policy-making board and will include the general areas of student association and student organizations, each designed to provide unique atmospheres in which classroom experiences can be extended and expanded. Student planned activities such as games, tournaments, speakers, dances, films, art shows, entertainers, intramurals, special interest groups, clubs, and organizations provide opportunities for a more complete college experience for each individual student.

Intercollegiate Athletics

Mountain View College offers qualified students an opportunity for participation in intercollegiate athletics in the following sports:

1. Basketball.
2. Baseball.
3. Golf.
4. Tennis.

Other sports shall be included at a later date as interest demands.

Participation is available on athletic teams for all full-time students on a voluntary non-scholarship basis.

Health Services

Health services are provided for the students at Mountain View College in keeping with the philosophy that optimal health is essential if an individual is to achieve his full potential.

The Health Center offers various services for the student, with emphasis on health education and counseling programs, referral to physicians and agencies in the community, as well as health screening programs and emergency first aid.

A physician is on call at all times and is available to see students on the campus by appointment if this is indicated.

Housing

Mountain View College does not operate dormitories of any kind nor maintain listings of available housing for students. Students who do not reside in the area must make their own arrangements for housing as their own responsibility.

Standards of Conduct

The college student is considered a responsible adult. The student's enrollment indicates acceptance of those standards of conduct which appear in the Student Handbook. A copy of the Student Handbook may be obtained from the Office of Student Activities.

ACADEMIC INFORMATION

Definition of Acceptable Scholastic Performance

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

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

Grade Reports

Grade reports are issued to each student at the end of each semester within the week following the last scheduled final examination.

Credit by Examination

Under special circumstances, a student regularly enrolled and in good standing who believes he is qualified by experience or previous training may take a special examination to establish credit in a particular course. Ordinarily, the privilege of taking an examination for credit will be granted only to students who have at least a "B" grade average in all courses attempted at Mountain View.

A maximum of 12 semester hours may be earned by examination. The only exception to this rule is when the total number of semester hours credit involved in any 3 specific courses is greater than 12 semester hours. Credit by examination may be attempted only one time in any given course and a grade of "B" or better on the examination is required in order to receive credit. Requests for examinations should be made to a counselor who will provide the necessary petition forms and advise the student of the procedure. A student, whether full-time or part-time, will pay an examination fee of $12.00 per examination. There is no refund of this in case of failure to establish credit.

Only after the student has completed in residency or is currently enrolled in 12 semester hours credit in residency will the semester hours earned through examination become a part of the student's permanent record. The last 15 semester hours required for graduation in any degree or certificate must be earned in residency and may not be earned through credit by examination.

Honors

A full-time student who has completed at least 12 hours of credit and who earns a grade point average of 3.00-3.49 will be listed

on the college Honor Roll. Full-time students who complete at least 12 hours of credit and who average 3.50-4.00 will be placed on the Dean's Honor List. The Honor Roll and Dean's Honor List will be published each semester.

Scholastic Probation and Scholastic Suspension

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

The following criteria will be used to determine academic standing:

1. Students who have completed one or more semesters in a college will be placed on probation if they fail to maintain a 2.0 cumulative grade point average.
2. Students who have been placed on scholastic probation may be removed from probation when they earn a 2.0 cumulative grade point average.
3. Students on scholastic probation who achieve either a cumulative grade point average of 1.5 or above or a previous semester grade point average of 2.0 or above may continue on scholastic probation.
4. Students on probation who do not meet the requirements of paragraph 3 will be placed on scholastic suspension.

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

Students previously enrolled in college who are placed on scholastic probation are expected to enroll in Human Development 106. Under special circumstances a counselor may waive this course for probationary students.

Students who have been suspended must file a petition for re-admission. The conditions for re-admission are established and administered by the Dean of Students.

Waiving of Scholastic Suspension

Any student pursuing an academic transfer program who wishes to transfer to a technical-occupational program may have his earned credits evaluated for the possibility of disregarding any grade below "C" as long as the student follows the technical-occupational program. The logic of this procedure is that many students do poorly while pursuing a course of studies for which they are not suited but make rapid improvements when faced with tasks more suited to their interests and aptitudes. This procedure is contingent upon the student remaining in a technical-occupational program. A change to an academic transfer program places the student under the original conditions of the academic transfer program including the calculation of a

cumulative grade point average of all college credits earned. This procedure will apply both to Mountain View College students and to students transferring from other institutions. The student who wishes to avail himself of this opportunity should state his intentions in writing to the Director of Admissions prior to pre-registration and should assume the responsibility of informing his counselor during the preregistration advisement session.

Library Obligations

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

All books and other library materials must be returned before the end of each semester. No grades will be sent to students who have not returned all such materials or who have unpaid library fines. No transcripts of grades may be sent until the library record is cleared.

Class Attendance

Students are expected to attend regularly all classes in which they are enrolled. Class attendance is the responsibility of the student. It is also the responsibility of the student to consult with his instructors when an absence must be excused. Instructors are given the prerogative of determining the excusability of student absences.

Instructors are required to report students to the Dean of Students for excessive absences. Generally, first excessive absence reports are made when absences have reached 3 consecutive times or an accumulation of 6 times. At this point, students are warned that failure to attend class may result in suspension from that class. Second excessive absence reports are filed with the Dean of Students when, in the opinion of the instructor, a student's continued absences warrant his suspension from class.

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

Dropping a Course or Withdrawal from College

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

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

Students who drop a class or withdraw from college will receive

a "W" in each class from which they have withdrawn. The deadline for receiving a "W" is two weeks prior to the end of the semester. After that time a student will receive a performance grade in the course.

If a student leaves without officially withdrawing, he will receive "F" in all subjects.

Classroom Dishonesty

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

Change of Schedule

Request for change of schedule must be initiated through the student's counselor and will be determined on the basis of whether space is available in the class to which he wishes to change. The change action is not completed until it has been received and processed by the Registrar's Office with the instructor being notified of the change. *No change action will be accepted by the Registrar after the first week of classes.*

Auditing a Course

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

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

Recommended Academic Load

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

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

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

Scholastic Standards: Grades and Grade Point Average

GRADE	INTERPRETATION	GRADE POINT VALUE
A	Excellent	4 points
B	Good	3 points
C	Average	2 points
D	Poor	1 point
P	Progress	Not Computed
F	Failing	0 points
I	Incomplete	Not Computed
W	Withdrawn	Not Computed

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

Incomplete grades may be given when an unforeseen emergency prevents a student from completing the work in a course. Incomplete grades must be converted to grade point-bearing grades within 90 days after the first day of classes in the subsequent regular semester. After 90 days, the "I" grade will to converted to a "W" grade if the student has failed to complete the course requirements.

DEGREE REQUIREMENTS
ASSOCIATE IN ARTS & ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS

A total of 60 units (hours) exclusive of physical education activity courses must be presented with an average grade of at least "C" (2.0). Courses numbered 99 and below may not be counted toward the 60 units (hours) minimum.

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

English 101-102, plus an additional 6 units (hours) of English	12 units
A minimum of 6 semester units (hours) of a laboratory science. (Music Majors are exempt from this requirement. Check listings under subject field.)	6 units

History 101-102 and Government 201-202 (No substitutions allowed)	12 units
Humanities: To be selected from Theatre 101, Art 104, Music 104 or Humanities 101	3 units

In addition to the course requirements, each degree candidate must earn the last 15 units (hours) as a resident student in the district colleges or accrue 45 units (hours) in residence. The degree will be granted by the college in which the student took the last 15 units (hours) or where the majority of units (hours) were accrued. No more than ¼ of the work required for any degree or certification may be taken by correspondence. Permission must be granted by the Director of Admissions for correspondence work.

All students who expect to transfer to a four year institution are urged to complete their four semester requirement in physical education during their freshman and sophomore years.

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

At the time a student files an application for graduation he must designate whether he desires to receive the Associate in Arts or Associate in Science Degree. Only one degree may be earned.

ASSOCIATE IN APPLIED ARTS & ASSOCIATE IN APPLIED SCIENCE DEGREES*

A minimum of 60 units (hours) exclusive of physical education activity courses and those courses numbered 99 and below must be presented with an average grade of at least "C" (2.0). All of the prescribed requirements for the specific technical or occupational program for which the student is enrolled must be completed and for some programs, the semester unit (hour) total is over 60.

At the time a student files an application for graduation, he must designate whether he desires to receive the Associate in Applied Arts or Associate in Applied Science Degree. Only on degree may be earned.

Procedure for Filing Degree Plan

1. Students should request a degree plan from the Registrar's Office at the end of his first semester.
2. Students following a 1-year certificate program should request an official plan during his first semester.
3. Application for the granting of the degree or certificate should be filed in the Registrar's Office prior to the college catalog calendar deadline.

4. Candidates for graduation in June will be required to attend the commencement program unless granted prior permission by the Dean of Students to graduate in absentia.
5. January and August graduates may attend the next commencement if they desire, but are not required to do so. Should the graduating student wish to attend, the Registrar's Office should be notified of his intention.
6. For information concerning graduation fee, see page .... under "Additional Fees." Instruction concerning graduation will be mailed to all candidates 30 days prior to commencement.

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

COURSES BY DIVISION

BUSINESS DIVISION	Credit
Accounting Technician	
Business 131—Bookkeeping	3
Business 132—Bookkeeping	3
Business	
Business 105—Introduction to Business	3
Business 136—Principles of Management	3
Business 139—Introduction to Supervision	3
Business 201—Principles of Accounting	3
Business 202—Principles of Accounting	3
Business 230—Salesmanship	3
Business 233—Advertising and Sales Promotion	3
Business 234—Business Law	3
Computer Science 101—Introduction to Computing Science	3
Computer Science 102—FORTRAN Programming	3
Mid-Management	
Business 150-151—Management Training	4 - 4
Business 154 —Management Seminar—Role of Supervision	2
Business 155 —Management Seminar—Personnel Management	2
Business 250-251—Management Training	4 - 4
Business 254 —Management Seminar—Organizational Development	2
Business 255 —Management Seminar—Business Strategy, The Decision Process & Problem Solving	2
Secretarial Science	
Business 160—Machine Transcription	3
Business 161—Office Machines	2
Business 162—Secretarial Training	3
Business 163—Beginning Shorthand	3
Business 164—Intermediate Shorthand	3
Business 173—Beginning Typing	2
Business 174—Intermediate Typing	2
Business 231—Business Correspondence	3
Business 263—Advanced Shorthand	3
Business 264—Shorthand Transcription	3
Business 273—Advanced Typing	2

COMMUNICATIONS DIVISION	Credit
Communications	
Communications 131—Applied Composition and Speech	3
Communications 132—Applied Composition and Speech	3

English	Credit
English 101—Composition and Expository Reading	3
English 102—Composition and Literature	3
English 103—Creative Writing	3
English 201—Masterpieces of English Literature	3
English 202—Masterpieces of English Literature	3
English 203—Literary Classics of the Western World	3
English 204—Literary Classics of the Western World	3
English 205—Major American Writers	3
English 206—Major American Writers	3
English 207—Contemporary Literature	3
English 208—Life and Literature in the Southwest	3
German	
German 101—Beginning German	5
German 102—Beginning German	5
Journalism	
Journalism 101—Introduction to Mass Communications	3
Journalism 102—News Gathering and Writing	3
Journalism 103—News Gathering and Writing	3
Journalism 104, 105—(Freshman), 202, 203 (Sophomore) Special Assignment to the Cornerstone (Lab)	1
Journalism 201—Editorial and Feature Writing	3
Journalism 204—News Editing and Copy Reading	3
Photography 110—Introduction to Photography and Photo-Journalism	3
French	
French 101-102—Beginning French	5 - 5
French 201-202—Intermediate French	3 - 3
Spanish	
Spanish 101-102—Beginning Spanish	5 - 5
Spanish 201-202—Intermediate Spanish	3 - 3
Speech	
Speech 105—Fundamentals of Public Speaking	3
Speech 106—Voice and Articulation	3
Speech 110—Reader's Theatre Workshop	1
Speech 201—Forensic Workshop (Lab)	1
Speech 205—Discussion and Debate	3
Speech 206—Oral Interpretation	3

DIRECTED STUDIES

Directed Studies 901	1
Directed Studies 902	2
Directed Studies 903	3

GUIDED STUDIES DIVISION

Developmental Studies	
Developmental Mathematics 090—Basic Mathematics	3

Developmental Studies (Continued)	**Credit**
Developmental Mathematics 091—Basic Mathematics	3
Developmental Reading 090—Basic Reading	3
Developmental Reading 091—Basic Reading	3
Developmental Reading 092—Reading Lab	1
Developmental Writing 090—Basic Writing	3
Developmental Writing 091—Basic Writing	3
Developmental Writing 092—Writing Lab	1
Human Development	
Human Development 092—A Group Approach to Self Understanding	3
Human Delevopment 101—Developing Learning and Study Skills	2
Human Development 105—Basic Processes of Interpersonal Relationships	3
Human Development 106—Personal and Social Growth	3
Human Development 107—Developing Leadership Behavior	3
Oral Communications	
Guided Studies Oral Communications 120—Oral Communications	3
Reading	
Reading 101—Advanced Reading	3

HUMANITIES DIVISION

Art	
Art 104—Art Appreciation	3
Art 105-106—Survey of Art History	3-3
Art 110—Basic Design I	3
Art 111—Basic Design II	3
Art 114-115—Basic Drawing I, II	3-3
Art 201—Life Drawing I	3
Art 202—Life Drawing II	3
Art 205—Painting I	3
Art 206—Painting II	3
Art 208—Sculpture I	3
Art 209—Sculpture II	3
Art 215—Ceramics I	3
Art 216—Ceramics II	3
Art 228—Three Dimensional Design	3
Humanities	
Humanities 101—Introduction to the Humanities	3
Music	
Music 095—Applied Instruction: Beginners	1
Music 101—Freshman Theory I	4
Music 102—Freshman Theory II	4

Music (Continued)	Credit
Music 104—Music Appreciation	3
Music 105—Italian Diction	1
Music 106—French Diction	1
Music 107—German Diction	1
Music 110—Music Literature	3
Music 111—Music Literature	3
Music 113—Foundations in Music I	3
Music 114—Foundations in Music II	3
Music 117—Piano Class I	1
Music 118—Piano Class II	1
Music 119—Guitar Class I	1
Music 120—Guitar Class II	1
Music 121-140—Applied Music	1
Music 150—Chorus	1
Music 151—Voice Class I	1
Music 152—Voice Class II	1
Music 155—Vocal Ensemble	1
Music 171—Woodwind Ensemble	1
Music 172—Brass Ensemble	1
Music 173—Percussion Ensemble	1
Music 174—Keyboard Ensemble	1
Music 175—String Ensemble	1
Music 176—Symphonic Wind Ensemble	1
Music 160—Band	1
Music 181—Lab Band	1
Music 199—Recital	1
Music 201—Sophomore Theory I	4
Music 202—Sophomore Theory II	4
Music 221-240—Applied Music	2
Music 251-270—Applied Music	3
Philosophy	
Philosophy 102—Introduction to Philosophy	3
Philosophy 105—Logic	3
Philosophy 203—Ethics	3
Philosophy 207—History of Ancient Philosophy	3
Philosophy 208—History of Modern Philosophy	3
Theatre	
Theatre 100—Rehearsal and Performance	1
Theatre 101—Introduction to the Theatre	3
Theatre 102—Contemporary Theatre	3
Theatre 103—Stagecraft I	3
Theatre 104—Stagecraft II	3
Theatre 106—Acting I	3
Theatre 107—Acting II	3
Theatre 109—Voice and Articulation	3
Theatre 115—MIME	2
Theatre 201—Television Production I	3

Theatre (Continued)	Credit
Theatre 202—Television Production II	3
Theatre 203—Broadcasting Communications I	3
Theatre 204—Broadcasting Communications II	3

PHYSICAL EDUCATION DIVISION

Physical Education 100—Lifetime Sports Activities I	1
Physical Education 101—Fundamentals of Health	3
Physical Education 104M—Touch Football/Soccer	1
Physical Education 110—Community Recreation	3
Physical Education 111—Beginning Wrestling	1
Physical Education 113—Handball and Racketball	1
Physical Education 115—Physical Performance Activities	1
Physical Education 120—Bowling	1
Physical Education 121—Folk Dance	1
Physical Education 122—Tumbling and Gymnastics	1
Physical Education 124—Social Dance	1
Physical Education 125W—Figure Training and Conditioning Exercise	1
Physical Education 127M—Volleyball and Basketball for Men	1
Physical Education 127W—Volleyball and Basketball for Women	1
Physical Education 129—Modern Dance	1
Physical Education 131M—Weight Training and Conditioning for Men	1
Physical Education 144—Introduction to Physical Education	3
Physical Education 147—Sports Officiating I	3
Physical Education 148—Sports Officiating II	3
Physical Education 200—Lifetime Sports Activities II	1
Physical Education 210—Sports Appreciation for the Spectator	3
Physical Education 218—Intermediate and Advanced Golf	1
Physical Education 219—Intermediate and Advanced Tennis	1
Physical Education 222—Intermediate and Advanced Gymnastics	1
Physical Education 236—The Coaching of Football and Basketball	3
Physical Education 257—Standard and Advanced First Aid	3

SCIENCE AND MATH DIVISION

Aviation Administration

Aviation Administration 131—Introduction to Aviation	3
Aviation Administration 133—Air Transportation	3
Aviation Administration 134—Aviation Law	3
Aviation Administration 231—Air Cargo	3
Aviation Administration 233—Transportation and Traffic Management	3

Aviation Administration (Continued)	Credit
Aviation Administration 235—Airline Management	3
Aviation Administration 236—Aviation Marketing	3
Aviation Administration 237—Transportation Regulations and Revenue	3
Aviation Administration 239—Airport Management	3
Avionics Technology	
Avionics Technology 130—Introduction to Aircraft Electronic Systems	2
Avionics Technology 131—Aircraft Communications Systems	4
Avionics Technology 230—Aircraft Navigation Systems	4
Avionics Technology 231—Aircraft Electrical and Instrumentation Systems	4
Avionics Technology 232—Aircraft Radar Systems	4
Avionics Technology 233—Aircraft Systems Installation, Wiring and Modification	3
Avionics Technology 234—Aircraft Electronic Systems Checkout and Trouble-Shooting Procedures	4
Blueprint Reading	
Blueprint Reading 121—Blueprint Reading	2
Blueprint Reading 122—Blueprint Reading	2
Drafting	
Drafting 130—Technician Drafting	2
Drafting 132—Basic Drafting	4
Drafting 133—Intermediate Drafting	3
Drafting 135—Reproduction Processes	2
Drafting 136—Geological and Land Drafting	3
Drafting 138—Architectural Drafting	4
Drafting 230—Structural Drafting	3
Drafting 231—Electronic Drafting	3
Drafting 232—Technical Illustration	3
Drafting 233—Machine Design	4
Drafting 234—Advanced Technical Illustration	4
Drafting 235—Building Equipment (Mechanical and Electrical)	3
Electronics Technology	
Electronics Technology 120—D.C. Circuits and Electrical Measurements	4
Electronics Technology 131—A.C. Circuits	4
Electronics Technology 133—Active Devices	4
Electronics Technology 134—Instrumentation	3
Electronics Technology 135—D.C.-A.C. Theory and Circuit Analysis	6
Electronics Technology 231—Special Circuits with Communications Applications	4

Electronics Technology (Continued)	**Credit**
Electronics Technology 232—Analysis of Electronics Logic and Switching Circuits	4
Electronics Technology 233—Industrial and Microwave Electronic Technology	4
Electronics Technology 234—Electronic Circuits and Systems	3
Engineering	
Engineering 101—Engineering Analysis	2
Engineering 105—Engineering Graphics	3
Engineering 106—Descriptive Geometry	3
Engineering 107—Engineering Mechanics I	3
Engineering 131—Manufacturing Processes	2
Engineering 201—Engineering Mechanics II	3
Engineering 202—Engineering Mechanics of Materials	3
Engineering 203—Engineering Production Techniques	3
Engineering 240—Statics	3
Engineering 241—Characteristics and Strengths of Materials	3
Environmental Science	
Environmental Science 101—Environment and Man	3
Machine Shop	
Machine Shop 133—Basic Lathe	5
Machine Shop 134—Basic Milling Machine	5
Machine Shop 135—Intermediate Lathe	5
Machine Shop 136—Intermediate Milling Machine	5
Machine Shop 233—Advanced Lathe	5
Machine Shop 234—Advanced Milling Machine	5
Machine Shop 235—Applied Lathe	5
Machine Shop 236—Applied Milling Machine	5
Mathematics	
Mathematics 093—Intermediate Algebra	3
Mathematics 100—Fundamentals of Mathematics	1
Mathematics 104—Elementary Functions and Coordinate Geometry I	5
Mathematics 105—Elementary Functions and Coordinate Geometry II	5
Mathematics 106—Elementary Functions and Coordinate Geometry	5
Mathematics 111—Mathematics for Business and Economics I	3
Mathematics 112—Mathematics for Business and Economics II	3
Mathematics 115—College Mathematics I	3
Mathematics 116—College Mathematics II	3
Mathematics 121—Analytic Geometry	3
Mathematics 126—Introductory Calculus	5
Mathematics 130—Business Mathematics	3

Mathematics (Continued)	Credit
Mathematics 131—Technical Mathematics	3
Mathematics 132—Technical Mathematics	3
Mathematics 139—Applied Mathematics	3
Mathematics 202—Introductory Statistics	3
Mathematics 221—Linear Algebra	3
Mathematics 227—Mathematical Analysis I	4
Mathematics 228—Mathematical Analysis II	3
Plastics Technology	
Plastics Technology 131—Introduction to Plastics	4
Plastics Technology 133—Extrusion Molding	4
Plastics Technology 134—Thermo Forming	4
Plastics Technology 135—Properties of Materials	4
Plastics Technology 136—Injection Molding	4
Plastics Technology 138—Plastic Finishing	4
Plastics Technology 231—Thermo Plastic Process Equipment Maintenance	3
Plastics Technology 232—Plastic Fabrication Manufacture	4
Plastics Technology 233—Testing and Quality Control	4
Plastics Technology 234—Production Planning and Process Control	3
Plastics Technology 235—Fundamentals of Electricity	4
Plastics Technology 236—Hydraulics and Pneumatics	3
Industrial Welding	
Industrial Welding 130—Pattern Layout	3
Industrial Welding 133—Introductory Welding	4
Industrial Welding 134—Welding Applications	4
Industrial Welding 135—Quality Control in Welding	4
Industrial Welding 136—Special Welding Applications	4

SCIENCE

Biology	
Biology 101-102—General Biology	4 - 4
Biology 115—Biological Science	4
Biology 116—Biological Science	4
Biology 203—Intermediate Botany	4
Biology 214—Field Biology	6
Biology 215—Human Anatomy and Physiology	4
Biology 216—General Microbiology	4
Biology 221-222—Anatomy and Physiology	4 - 4
Biology 230—Mammalian Physiology	4
Chemistry	
Chemistry 101—General Chemistry	4
Chemistry 102—General Chemistry	4
Chemistry 115—General Chemistry	4
Chemistry 116—General Chemistry	4

Chemistry (Continued)	**Credit**
Chemistry 201—Organic Chemistry	4
Chemistry 202—Organic Chemistry	4
Chemistry 203—Quantitative Analysis	4
Geography	
Geography 101—Geography (Physical)	3
Geography 102—World Geography (Economic)	3
Geology	
Geology 101—General Geology (Physical)	4
Geology 102—General Geology (Historical)	4
Physical Science	
Physical Science 115—Physical Science	3
Physical Science 116—Physical Science	3
Physics	
Physics 111-112—General Physics	4-4
Physics 131-132—Applied Physics	4-4
Physics 201—General Physics	4
Physics 202—General Physics	4
Physics 203—General Physics	4

SOCIAL AND BEHAVIORAL SCIENCE DIVISION

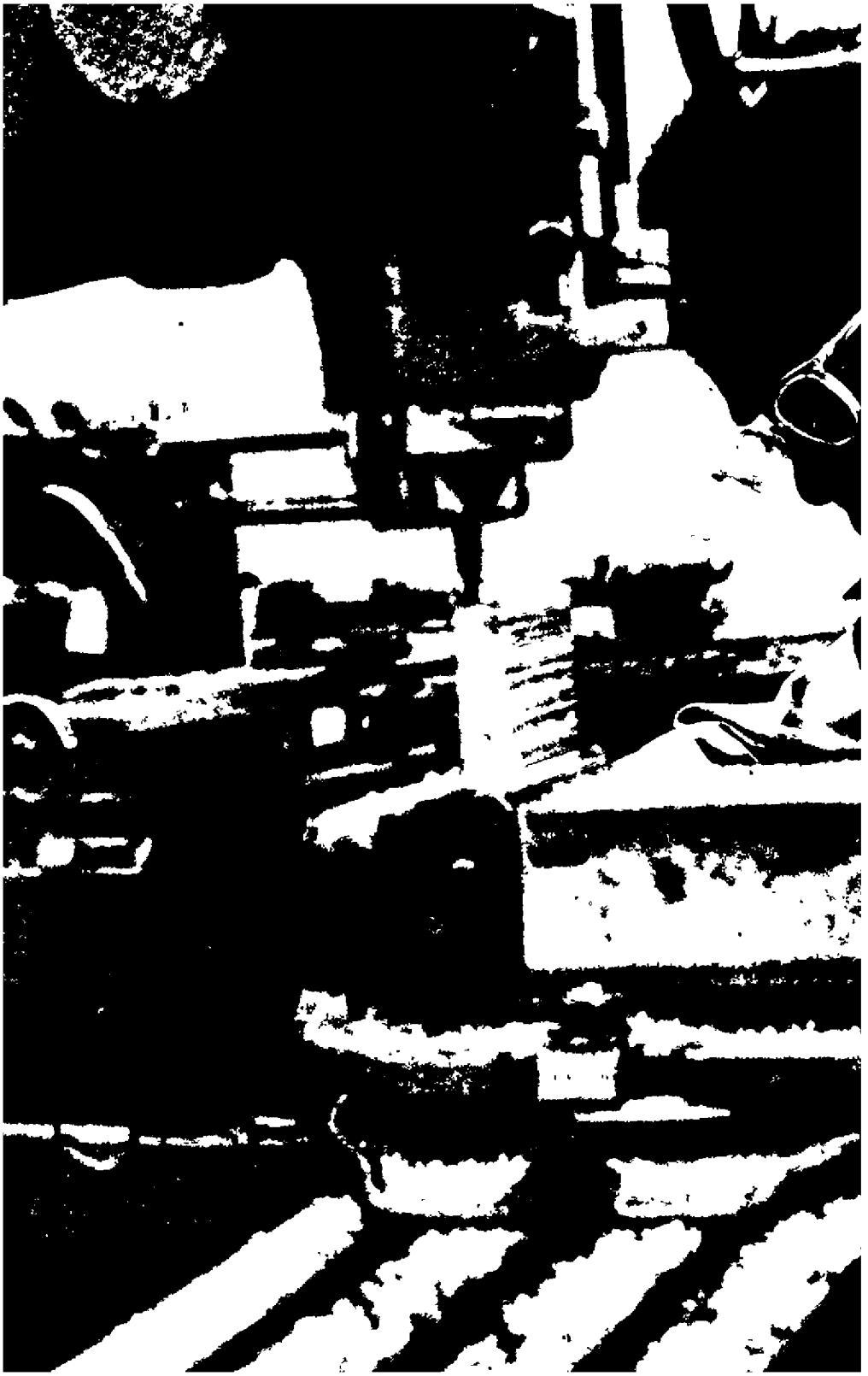
Anthropology	
Anthropology 100—Introduction to Anthropology	3
Anthropology 101—Cultural Anthropology	3
Economics	
Economics 201—Principles of Economics	3
Economics 202—Principles of Economics	3
Government	
Government 201—American Government	3
Government 202—American Government	3
Government 231—Municipal and County Government	3
History	
History 101—History of the United States	3
History 102—History of the United States	3
History 105—Western Civilization	3
History 106—Western Civilization	3
History 120—Afro-American History	3
Psychology	
Psychology 105—Introduction to Psychology	3
Psychology 131—Human Relations	3
Psychology 201—Human Growth and Development	3
Psychology 202—Applied Psychology	3
Psychology 205—Psychology of Personality	3
Psychology 208—Experimental Psychology	3

Religion	Credit
Religion 101—Religion in American Culture	3
Religion 102—Contemporary Religious Problems	3
Religion 201—Major World Religions	3
Social Science	
Social Science 131-132—American Civilization	3-3
Sociology	
Sociology 101—An Introduction to Sociology	3
Sociology 102—Social Problems	3
Sociology 203—Marriage and Family	3
Sociology 204—American Minorities	3
Sociology 231—Urban Social Problems	3

LEARNING RESOURCES DIVISION

A wide range of instructional materials, equipment and services are provided through the Learning Resources Center. The Center is composed of Media Services and the Library. Media Services, located in W137, selects and prepares various types of audio-visual materials and equipment for classroom use. Consultants assist users in choosing appropriate materials from available films, filmstrips, slides, audio and visual tapes, and produce or borrow materials to meet special needs.

The Library, located in W181, houses print and non-print materials for reference, research, and recreation. Materials include extensive collections of newspapers, pamphlets, art reproductions, audio tapes, microfilm, and recordings of popular music, spoken arts and classical selections. Services includy copy machines for printed matter and microfilm, typewriters, microfilm readers, study carrels, a seminar room and study lounges. A librarian is on duty to assist users in selection of materials.



COURSES BY ALPHABETICAL LISTING

Anthropology 100 Introduction to Anthropology (3) **3 hrs. Lec.**

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

Anthropology 101 Cultural Anthropology (3) **3 hrs. Lec.**

A survey of the cultures of the world with emphasis on those of North America. The concept of culture, social and political organization, language, religion and magic, elementary anthropological theory. Consent of instructor recommended.

Art 104 Art Appreciation (3) **3 hrs. Lec.**

Films, lectures, slides, and discussion on the theoretical, cultural, and historical aspects of the visual arts. Attempts to develop visual and aesthetic awareness, thus relating art to the student as an individual.

Art 105-106 Survey of Art History (3) (3) **3 hrs. Lec.**

These courses give attention to the chronological sequence of the major styles of art. (Art 105 — covers periods through the Renaissance; Art 106 — Baroque through the present). Relates the thoughts behind each historical period to the visual concepts embodied in individual works of art of the specific period. Proposes to give the art major a broader range of ideas which will enable him to better relate the past to his own work and to offer him stimuli for his future works of art.

Art 110 Basic Design I (3) **2 hrs. Lec.**
4 hrs. Lab.

A study of basic concepts of design, using two-dimensional materials. Use of line, color, illusion of area or mass and texture, and shape in composition. Required of all art majors. Open to all interested students.

Art 111 Basic Design II (3) **2 hrs. Lec.**
4 hrs. Lab.

A study of basic concepts of design with three dimensional materials, using mass, space, movement and texture. Required of all art majors. Open to all interested students.

Art 114-115 Basic Drawing I, II (3) (3) — **2 hrs. Lec. 4 hrs. Lab.**

Prerequisite: Art 114 to Art 115. A study of drawing, both as a major medium and as a flexible research tool with emphasis on structure and the illusions of space, volume, and movement. Required of all art majors. Open to others who are interested.

Art 201 Life Drawing I (3) — **2 hrs. Lec. 4 hrs. Lab.**

Prerequisites: Art 110, 114, sophomore standing and/or permission of the Humanities Chairman. Analytic and expressive drawing of the human figure, stressing study of movement and volume.

Art 202 Life Drawing II (3) — **3 hrs. Lec. 4 hrs. Lab.**

Prerequisites: Art 110, 114, 201, sophomore standing and/or permission of Humanities Chairman. Analytic and expressive drawing of the human figure, stressing study of movement and volume.

Art 205 Painting I (3) — **2 hrs. Lec. 4 hrs. Lab.**

Prerequisites: Art 110, 114, 205 or permission of the instructor. studio course stressing fundamental concepts of painting with acrylics and/or oils. Emphasis on painting from still life, models and the imagination.

Art 206 Painting II (3) — **2 hrs. Lec. 4 hrs. Lab.**

Prerequisites: Art 110, 11D, 205 or permission of the instructor. A studio course stressing fundamental concepts of painting with acrylics and/or oils. Emphasis on painting from still life, models and the imagination.

Art 208 Sculpture I (3) — **2 hrs. Lec. 4 hrs. Lab.**

Prerequisites: Art 110, 111, 114 or permission of the instructor. A studio course designed as a means of original expression in three dimensional media.

Art 209 Sculpture II (3) **2 hrs. Lec.**
4 hrs. Lab.

Prerequisites: Art 110, 111, 114, 208 or permission of the instructor. A studio course designed as a means of original expression in three dimensional media.

Art 215 Ceramics I (3) **2 hrs. Lec.**
4 hrs. Lab.

Prerequisite: Art 111 or permission of instructor. Introductory work and basic techniques. Emphasis upon the development of construction methods, surface treatment, and glaze application.

Art 216 Ceramics II (3) **2 hrs. Lec.**
4 hrs. Lab.

Prerequisites: Art 111, Ceramics 1 or permission of instructor. A study of glaze technology and advanced problems in the creation of sculptural and utilitarian ceramic ware.

Art 228 Three Dimensional Design (3) **2 hrs. Lec.**
4 hrs. Lab.

Prerequisite: Art Majors — Art 110, 111, and 114; Drafting Technology majors — Drafting 132 and Engineering 131. Development of three-dimensional projects in metal, plastic and wood through the stages of design: idea, sketches, research, working drawing, model and finished product. Emphasis is on function, material and esthetic form.

Aviation Administration 131 Introduction to Aviation (3) **3 hrs. Lec.**

General introductory course to the total Aviation Industry covering the history, development and advances in aircraft from balloon flight to the supersonic transport (SST), economic impact on the business economy, and the sociological effect on people and communities both local and worldwide. Special emphasis on origin and growth of airlines and the aviation industry.

Aviation Administration 133 Air Transportation (3) **3 hrs. Lec.**

Prerequisite: Introduction to Aviation. A study of the need, nature and structure of the air transportation segment of the aviation industry relating to passengers and cargo, both domestic and international. Covers the levels and categories of utilization such as air carrier, air-taxi, commuter, business, and pleasure. Explores basic costs and revenue sources; describes present status, future limiting and growth factors, and legal aspects and characteristics.

Aviation Administration 134 Aviation Law (3) 3 hrs. Lec.

Prerequisite: Introduction to Aviation, credit or concurrent enrollment in Air Transportation. A study of procedural laws and regulations, local, national and international relating to both public and private sectors of air commerce. Outlines the development of aviation law from enactment through judicial decisions on application of those laws. Identifies regulatory agencies and quasi-official study and advisory groups along with functions. Special emphasis on flight procedures (flight plans), ports of entry, customs, clearances, contraband, quarantines, aviation hazards and liabilities as relates to passenger and cargo movements. Develops present legal structure and possible future changes, including reciprocity agreements.

Aviation Administration 231 Air Cargo (3) 3 hrs. Lec.

Prerequisite: Aviation Administration Freshman Core. Presents the evolution of air cargo; the purpose, application and benefits of air mail, air express and air freight to modern industry. Discusses the nature of air cargo, problems, automation, trends and future development.

Aviation Administration 233 Transportation and Traffic Management (3) 3 hrs. Lec.

Prerequisite: Aviation Administration Freshman Core, credit or concurrent enrollment in Bus 136. A study of present day transportation modes and how these may interface effectively to provide efficient transport of passengers and cargo from point of origin to destination. Emphasis on managerial definition and solution of problems involved at transition/transfer terminals where compatibly scheduled traffic movement is crucial to the journey continuation and/or ending.

Aviation Administration 235 Airline Management (3) 3 hrs. Lec.

Prerequisite: Aviation Administration Freshman Core, Bus 136. A course designed to cover the complex organization, operation and management of an airline today. Includes planning, facility requirements, financing, aircraft selection criteria, route feasibility studies, market and passenger trends, population trends affecting load factors. Explores the managerial problem areas unique to airline operations.

Aviation Administration 236 Aviation Marketing (3) 3 hrs. Lec.

Prerequisite: Aviation Administration Freshman Core, Bus 233. The significance and functions of marketing in aviation stressing the

airline viewpoint. Includes market research, sales, unique advertising and promotion concepts, traffic, demand analysis, and price determination theory.

Aviation Administration 237 Transportation Regulations and Revenue (3) **3 hrs. Lec.**

Prerequisite: Aviation Administration Freshman Core, Air Cargo. An in-depth study of regulations, domestic and international, relating to accommodations, tariffs, import-export licensing, rate structuring, bonded warehousing, liability assumption and transfer and other regulatory factors which directly and indirectly affect the revenues in air transport of passengers and cargo.

Aviation Administration 239 Airport Management (3) **3 hrs. Lec.**

Prerequisite: Aviation Administration Freshman Core, Bus 136. A presentation of the major functions of airport management: adequacy of facilities and services, financing, organization, personnel, maintenance, planning and zoning, operations, revenues and expenses, public relations, ecology and safety. Includes a study of the socio-economic effect of airports on the communities they serve.

Avionics Technology 130 Introduction to Aircraft Electronic Systems (2) **2 hrs. Lec.**

A survey course introducing the student to the aircraft, the aircraft's electronic systems and their function related to the aircraft, basically how the systems operate, and the information supplied to the aircraft operator.

Avionics Technology 131 Aircraft Communications Systems (4) **3 hrs. Lec. 3 hrs. Lab.**

Prerequisites: Credit or concurrent enrollment in ET 133 or equivalent: An indepth study of aircraft VHF and interphone systems, circuit analysis of typical systems, specialized circuitry, bench maintenance and alignment procedures, related bench and aircraft test equipment, introduction to UHF and HF systems, and related FCC regulations.

Avionics Technology 230 Aircraft Navigation Systems (4) **3 hrs. Lec. 3 hrs. Lab.**

Prerequisites: ET 133 and AV 130. A study of typical aircraft navigation systems including VOR, ILS, ADF and marker beacon. Topics covered for each system include the operation of the system in relation to the ground station, circuit analysis of a typical system, special circuitry, bench maintenance and alignment procedures, and related bench and aircraft test equipment.

Avionics Technology 231 Aircraft Electrical and Instrumentation Systems (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisites: ET 133 and AV 130. A study of aircraft electrical power sources, buses, fusing, monitoring and warning devices and the associated instrumentation, magnetic and electronic compasses and basic autopilot systems.

Avionics Technology 232 Aircraft Radar Systems (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisites: ET 133 and AV 130. A study of aircraft electronic systems utilizing radar principles such as weather radar, ATC transponder, DME radio altimeters and Doppler Navigation. X-band weather radar and the ATC transponder will be covered in depth with an introduction to principles of operation of radio altimeters, DME and Doppler systems. Bench check and alignment procedures, trouble-shooting and repair of aircraft radar systems.

Avionics Technology 233 Aircraft Systems Installation, Wiring and Modification (3) — **1 hr. Lec. 5 hrs. Lab.**

Prerequisites: ET 133 and AV 130. A laboratory oriented course which gives the student practical experience in installing aircraft equipment, modifying systems and associated wiring, repairing damaged wiring, and performing equipment installations inspections and accomplishing necessary repairs.

Avionics Technology 234 Aircraft Electronic Systems Checkout and Trouble-Shooting Procedures (4) — **2 hrs. Lec. 5 hrs. Lab.**

Prerequisites: AV 130 and a passing grade and/or concurrent enrollment in three additional Avionics Technology courses. Primarily a laboratory course in which the student will perform systems checks of electronic equipment on the aircraft. Procedures for determining the operational condition of the equipment and techniques for correcting equipment malfunctions will be covered. Practical experience in aircraft trouble-shooting and repair will be provided for the student. Application of related test equipment to problem solutions will be stressed.

Biology 101-102 General Biology (4) (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisite to all higher level biology courses and must be taken in sequence. Recommended for science majors.

A two-semester course surveying in depth the principal concepts of biology, including a study of the cell, levels of organization, an introduction to metabolism, and evolutionary relationships.

Biology 115 Biological Science (4) — **3 hrs. Lec. 3 hrs. Lab.**

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

Biology 116 Biological Science (4) — **3 hrs. Lec. 3 hrs. Lab.**

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

Biology 203 Intermediate Botany (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisite: Biology 101-102. A survey of the major plant group with emphasis placed on morphology, physiology, classification, life cycles, evolutionary relationships to each other and the economic importance to man.

Biology 214 Field Biology (6) — **3 hrs. Lec. 6 hrs. Lab. or field work**

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

Biology 215 Human Anatomy and Physiology (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisite: Biology 101-102 or equivalent preparation. An intermediate level course comparing the structure and function of organ systems in various vertebrates with emphasis upon the human body. Attention will be given to the histology, embryology, and genetics of the animals studied.

Biology 216 General Microbiology (4) — **3 hrs. Lec. 4 hrs. Lab.**

Prerequisite: Biology 102. A study of microbes with emphasis on classification, growth, nutrition, metabolism, reproduction, and the genetics of microorganisms.

Biology 221-222 Anatomy and Physiology (4) (4) **3 hrs. Lec. 3 hrs. Lab.**

Prerequisite: 102. Structure and function as related to the human skeletal, muscular, nervous, cardiovascular, digestive, respiratory, reproductive and endocrine systems. Emphasis placed on the inter-relationships between these systems. Basic principles of disease transmission and detection.

Biology 230 Mammalian Physiology (4) **3 hrs. Lec. 3 hrs. Lab.**

Prerequisite: 12 hours in Biology, 8 hours of Inorganic Chemistry, concurrent registration in Organic Chemistry and consent of instructor. A study of the function of various mammalian systems with emphasis placed on the inter-relationships that exist. Utilization of instrumentation to measure various physiological parameters will be employed.

Blueprint Reading 121 Blueprint Reading (2) **1 hr. Lec. 3 hrs. Lab.**

A course covering basic principles which are essential for visualization and training in the interpretation of blueprints and freehand sketches of simpler machine parts. Emphasis is placed upon orthographic projection principles. Fundamental symbols, signs, and techniques are stressed.

Blueprint Reading 122 Blueprint Reading (2) **1 hr. Lec. 3 hrs. Lab.**

Instruction is offered in the interpretation of blueprints which show job procedure methods and their relation to drafting. Specific attention is given to representation of common machine processes, special forms of dimensioning, sections, and other drafting and design principles.

Business 105 Introduction to Business (3) **3 hrs. Lec.**

Provides over-all picture of business operation; includes analysis of specialized fields within business organizations; identifies role of business in modern society.

Business 131 Bookkeeping (3) **3 hrs. Lec.**

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

Business 132 Bookkeeping (3) 3 hrs. Lec.

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

Business 136 Principles of Management (3) 3 hrs. Lec.

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

Business 139 Introduction to Supervision (3) 3 hrs. Lec.

Prerequisite: Enrollment in Technical/Occupational Program or consent of the instructor. A course studying today's supervisor and his problems. The course objective is to describe the practical concepts of modern-day, first line supervision. Emphasis is placed on discussing the supervisor's major functions: relations with others, motivation, communication, grievances recruitment, and counseling and the fundamentals of cost accounting.

Business 150-151 Management Training (4) (4) 20 hrs. Lab.

Prerequisite: Concurrent enrollment in approved Mid-Management Program. Supervised employment in the student's chosen field. Intended to provide practical experience for students preparing for careers in business management. Business 150 will be offered first semester; Business 151 will be offered second semester.

Business 154 Management Seminar — Role of Supervision (2) 2 hrs. Lec.

Prerequisite: Concurrent enrollment in Business 150 and preliminary interview by Mid-Management faculty. Problem analysis and project development for students majoring in Mid-Management. Special emphasis is placed upon development of management, goal setting and planning, leadership, communication and motivation as applied to student's work experiences.

Business 155 Management Seminar — Personnel Management (2) 2 hrs. Lec.

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

Business 160 Machine Transcription (3) **3 hrs. Lec.**

Prerequisite: Satisfactory completion of Business 173 or one year of typing in high school. Intensive course in transcribing from recording machines using predicated business letters and other forms of business communication from a variety of professions, industries, and Government agencies. Training in use of major dictating-transcribing machines with electric typewriters. Goal is development of employable skill. Familiarization with typewriter related equipment.

Business 161 Office Machines (2) **1 hr. Lec.**
2 hrs. Lab.

Training for familiarization and competence on those machines common to most business offices, such as adding machines and calculators.

Business 162 Secretarial Training (3) **3 hrs. Lec.**

Prerequisite: Satisfactory completion of Business 173 or one year of typing in high school. Special emphasis is given to the most frequently performed secretarial duties. Units of work include filing; skill in the use of duplicating machines; mail, telegraph, postal and shipping service; handling travel details and meeting arrangements. Duties of the receptionist and development of a desirable secretarial appearance and personality are studied.

Business 163 Beginning Shorthand (3) **2 hrs. Lec.**
3 hrs. Lab.

Prerequisite: Satisfactory completion of or concurrent enrollment in Business 173 or one year of typing in high school. Introduction of fundamental principles of Gregg Shorthand, Diamond Jubilee Series. Includes development of ability to read, write, and transcribe shorthand outlines. Development of knowledge of mechanics of English.

Business 164 Intermediate Shorthand (3) **2 hrs. Lec.**
3 hrs. Lab.

Prerequisite: Satisfactory completion of Business 163 or one year of shorthand in high school; satisfactory completion of Business 173 or one year of typing in high school. Application of principles of Gregg Shorthand to develop the ability to take and accurately transcribe shorthand notes at increased dictation speeds. Includes oral reading of shorthand outlines, speed building dictation and timed mailable transcripts. Training to strengthen knowledge of English mechanics and reinforce typing skills.

Business 173 Beginning Typing (2) **1 hr. Lec. 2 hrs. Lab.**

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

Business 174 Intermediate Typing (2) **1 hr. Lec. 2 hrs. Lab.**

Prerequisite: Satisfactory completion of Business 173 or one year of typing in high school. Further development of techniques. Emphasis will be placed on increasing speed and accuracy with practice in typing business forms, correspondence and manuscripts.

Business 201 Principles of Accounting (3) **3 hrs. Lec.**

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

Business 202 Principles of Accounting (3) **3 hrs. Lec.**

Prerequisite: Business 201. Accounting procedures and practices applicable to partnerships and corporations; the use of cost data, budgetary controls, analysis and interpretation of financial reports for use by creditors, investors, and management.

Business 230 Salesmanship (3) **3 hrs. Lec.**

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

Business 231 Business Correspondence (3) **3 hrs. Lec.**

Prerequisite: Satisfactory completion of Business 173 or one year of typing in high school; satisfactory completion of Commmunications 131 or English 101. A practical course that includes a study of letter forms, the mechanics of writing, and composing various types of communications. A critical analysis of the appearance and content of representative business correspondence is made.

Business 233 Advertising and Sales Promotion (3) **3 hrs. Lec.**

Introduces the fundamental principles, practices and common media used in persuasive communication. Includes an insight into buyer behavior, use of advertising media to motivate consumer, and methods of stimulating salespeople and retailers. Familiarizes the student with the management of promotion programs with respect to goals, strategies, evaluation and control of promotional activities.

Business 234 Business Law (3) **3 hrs. Lec.**

This course is designed to acquaint the student with the historical and ethical background of the law and to familiarize him with present-day principles of law. Particular emphasis on contracts, property (bailments, sales, leases, wills, and estates), and torts.

Business 250-251 Management Training (4) (4) 20 hrs. Lab.

Prerequisite: Business 150-151; concurrent enrollment in Business 254-255. Continuation of supervised employment in the student's chosen field. Intended to provide increased supervisory responsibility for students preparing for careers in business management. Business 250 will be offered first semester; Business 251 will be offered second semester.

Business 254 Management Seminar — Organizational Development (2) **2 hrs. Lec.**

Prerequisite: Business 151, Business 155 and concurrent enrollment in Business 250. A study of the organizational objectives and management of human resources including the various approaches to organizational theory as applied to student's work experiences.

Business 255 Management Seminar — Business Strategy, The Decision Process and Problem Solving (2) **2 hrs. Lec.**

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

Business 263 Advanced Shorthand (3) **2 hrs. Lec. 3 hrs. Lab.**

Prerequisite: Satisfactory completion of Business 164 or two

years of shorthand in high school; satisfactory completion of Business 174 or two years of typing in high school. Further development of shorthand skills to attain proficiency required for stenographic work. Emphasis on speed building dictation, timed typewritten transcription of shorthand notes for mailable letters.

Business 264 Shorthand Transcription (3) — **2 hrs. Lec. 3 hrs. Lab.**

Prerequisite: Satisfactory completion of Business 263; satisfactory completion of Business 273. Emphasis upon specialized dictation, mailable transcriptions, and vocabulary building. Development of high-level skill in production work meeting office standards.

Business 273 Advanced Typing (2) — **1 hr. Lec. 2 hrs. Lab.**

Prerequisite: Satisfactory completion of Business 174 or two years of typing in high school. Timed production of all types of business material is emphasized. A continuation of skill development and a review of typing techniques are also stressed. This course will demand accuracy at advanced speeds.

Chemistry 101 General Chemistry (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisite: MTH 093 or equivalent. Designed for science and science-related majors, the course includes the fundamental laws and theories dealing with the structure and interactions of matter and the use of these principles in understanding the properties of matter, chemical bonding, chemical reactions, the physical states of matter, and changes of state. The fundamental principles are applied to the solution of quantitative problems relating to chemistry.

Chemistry 102 General Chemistry (4) — **3 hrs. Lec. 3 hrs. Lab.**

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

Chemistry 115 General Chemistry (4) — **3 hrs. Lec. 3 hrs. Lab.**

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

Chemistry 116 General Chemistry (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisite: CHM 115. Designed for non-science majors. This course covers organic chemistry and biochemistry. The important classes of organic compounds are surveyed with the concept of structure providing the central theme. The biochemistry section includes carbohydrates, proteins, lipids, and chemistry of heredity, disease and therapy and plant biochemistry.

Chemistry 201 Organic Chemistry (4) — **3 hrs. Lec. 4 hrs. Lab.**

Prerequisite: CHM 101 and 102. Designed for Science and Science related majors. An integrated introductory course in organic chemistry dealing with the fundamental types of organic compounds their nomenclature, classification, reactions, and applications. The reactions of aliphatic and aromatic compounds are discussed in terms of modern electronic theory with emphasis on reaction mechanisms, stereo-chemistry, transition state theory and technique of organic synthesis.

Chemistry 202 Organic Chemistry (4) — **3 hrs. Lec. 4 hrs. Lab.**

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

Chemistry 203 Quantitative Analysis (4) — **2 hrs. Lec. 6 hrs. Lab.**

Prerequisite: CHM 101, 102, and MTH 104. This course includes the principles of chemistry as applied by the analytical chemist to quantitative determinations. Topics include gravimetry, oxidation

reduction, indicators, and acid-base theory. Laboratory experience focuses on the fundamentals of gravimetric and volumetric analysis with an introduction to colorimetry.

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

The study of English as a practical means of preparing for successful performance in the student's chosen vocation. Emphasis placed upon assembling, organizing, and evaluating material for the composition of letters, applications, resumes, and short reports. Practice in oral expression.

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

Prerequisite: Communications 131 or consent of instructor. Enrichment of communication processes with emphasis on oral and written persuasion directly related to vocational training and work experience. Expository techniques of business letters and documented reports. Wide periodical reading.

Computer Science 101 Introduction to Computing Science (3) 3 hrs. Lec.

Provides a basic understanding of the computer and how it is used in a variety of applications. Covers the history of computer development, vocabulary and broad concepts of design and function. Intended for non-programmers who need a familiarization with computers and its effect on their career.

Computer Science 102 FORTRAN Programming (3) 2 hrs. Lec. 2 hrs. Lab.

Prerequisite: Mth 104. Designed to provide programming skills for those students who need to use the computer as a tool in solution of problems in their curriculum. FORTRAN is especially suitable for mathematical formulas and will provide valuable assistance for students in the math and science disciplines.

Developmental Mathematics 090 Basic Math (3) 3 hrs. Lec.

Mathematics 090 is designed to develop an understanding of fundamental operations using whole numbers, fractions, decimals,

and percents to strengthen basic skills in mathematics. The course is planned primarily for students who need to review basic mathematical processes. It is the first step in the math sequence and includes an introduction to algebra.

Developmental Mathematics 091 Basic Math (3) 3 hrs. Lec.

Prerequisite: DM 090 or equivalent. Mathematics 091 is designed to develop an understanding of first year algebra. It includes special products and factoring, fractions, equations, graphs, functions, and an introduction to geometry. The sequence, DM 090-191 and Math 093 is preparatory to Math 104 as well as foundation for technical math.

Developmental Reading 090 Basic Reading (3) 3 hrs. Lec. and Lab.

Developmental Reading 090 is concerned with the improvement of comprehensive skills, vocabulary building, and study skills. The course is designed for those students who wish to strengthen the basic reading skills necessary for success in vocational, terminal, and transfer educational programs. Developmental Reading is offered in a laboratory setting employing individualized instruction methods.

Developmental Reading 091 Basic Reading (3) 3 hrs. Lec. and Lab.

Developmental Reading 091 is designed to increase proficiency in reading comprehension and rate, word recognition and vocabulary development, and study skills and reading in the content areas. It also includes reading experiences which have been developed to broaden the general reading background of the student. It is offered in a laboratory setting.

Developmental Reading 092 Reading Lab (1) 3 hrs. Lab.

The reading lab is a workshop designed to examine and present writings of various subject matters to students needing additional proficiency in comprehension and rate, to supplement their course work. The patterns and underlying structures peculiar to a given subject area are investigated. The course is held in a laboratory setting utilizing individualized instruction techniques.

Developmental Writing 090 Basic Writing (3) 3 hrs. Lec.

Developmental Writing 090 emphasizes the diagnosis and correction

of deficiencies in basic writing skills. Mechanics of writing will include spelling, comprehension techniques, vocabulary improvement, principles of sentence and paragraph structure and various types of paragraph development. The course provides experience in finding and organizing ideas and materials for written compositions with an introduction to essay writing. It is held in a laboratory setting utilizing individualized instruction techniques.

Developmental Writing 091 Basic Writing (3) 3 hrs. Lec.

Prerequisite: Developmental Writing 090 or equivalent. Developmental Writing 091 includes a review of paragraph and essay development. It encompasses research techniques and writing, reports and analyses. Individual instruction in basic skills is included.

Developmental Writing 092 Writing Lab (1) 3 hrs. Lec.

Developmental Writing Lab 092 is a workshop to facilitate writing success for course work and other individual interests. Students are given instruction and supervision in written assignments, research papers, re-writing and editing, organization, vocabulary development, and correction of errors in grammar, mechanics and spelling. It develops the ability to write effectively spontaneously and creatively from individual opinions and reactions.

Directed Studies 901 Directed Studies 1 hr. Lec.
902 Directed Studies 2 hrs. Lec.
903 Directed Studies 3 hrs. Lec.

Prerequisite: Completion of twelve semester hours in residence and the approval of a division chairman and the Dean-Instruction. Recommended for honor students in a major area offered by a division or for students requesting study in depth in a particular area. The course may include special projects, honors, seminars, field study, or independent study. May be repeated for credit.

Drafting 130 Technician Drafting (2) 1 hr. Lec.
3 hrs. Lab.

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

Drafting 132 Basic Drafting (4) 2 hrs. Lec.
6 hrs. Lab.

A beginning course for students who have had little or no

previous experience in drafting. The principle objectives are basic understanding of orthographic projections; skill in orthographic, axonometric, and oblique sketching and drawing; lettering fundamentals; applied geometry; fasteners, sectioning; tolerancing; auxiliaries; experience in using handbooks and other resource materials; and development of design skills. U.S.A.S.I., government, and industrial standards are used. Emphasis is placed on both mechanical skills and graphic theory.

Drafting 133 Intermediate Drafting (3) **2 hrs. Lec. 4 hrs. Lab.**

Prerequisite: DFT 132. The instructional units provide additional understanding of drafting problems, places emphasis on the design function and introduces several specialized drafting areas. This course includes the detailing and assembling of machine parts, gears, and cams, jigs and fixtures. A study of metals and metal forming processes, drawing room standards and reproduction of drawings. The student is assigned to work that requires him to make complete and accurate detail and assembly drawings.

Drafting 135 Reproduction Processes (2) **1 hr. Lec. 3 hrs. Lab.**

A study of equipment and processes used to reproduce technical art: graphic arts process, camera, lithographic offset printing, diazo reproduction, blueprinting, photodrafting, microfilming, photocopying, silk screen printing, printed circuit board etching, thermography, typographics, xerography, engraving, and others. A special section of the course is a study of the rapidly expanding field of computergraphics. Laboratory work includes the preparation of flats for the printing of a brochure.

Drafting 136 Geological and Land Drafting (3) **2 hrs. Lec. 4 hrs. Lab.**

Prerequisites: Drafting 133 and Math 132. Involves study of symbols, abbreviations, classifications, scales, types of maps, cartographic and topographic maps, petroleum and geophysics maps, and application of drawing techniques to land surveying, including boundaries, roads, buildings, elevations, plan and profile sheets, cross sections, plotting surveyor's notes, traverses, plot plans and plats.

Drafting 138 Architectural Drafting (4) **2 hrs. Lec. 6 hrs. Lab.**

Prerequisite: Drafting 132. A course in basic architectural drafting beginning with the development of techniques in architectural lettering, drafting of construction details, using appropriate material

symbols and conventions. Working drawing including plans, elevations, sections and details as prepared for building construction including steel concrete and timber structural components will be emphasized. Reference materials will be used to provide the draftsman with skills in locating data and in using handbooks.

Drafting 230 Structural Drafting (3) — **2 hrs. Lec. 4 hrs. Lab.**

Prerequisites: Drafting 132 and Math 132. A study of stresses, thermal and elastic qualities of materials such as beams and columns, etc.; requires the student to develop structural plans, details and shop drawings of components of buildings to include steel, reinforced concrete, and timber structures. Emphasis will be placed on drafting of appropriate drawings for fabrication and erection of structural components.

Drafting 231 Electronic Drafting (3) — **2 hrs. Lec. 4 hrs. Lab.**

Prerequisite: DFT 132. Develops skill in drawing and understanding of drawings used in the electronics industry. Topics include logic diagrams, schematic diagrams, interconnecting wiring diagrams, printed wiring boards, integrated circuits, component packaging, chassis design and current practices.

Drafting 232 Technical Illustration (3) — **2 hrs. Lec. 4 hrs. Lab.**

Prerequisite: Drafting 132. Instruction and experience in the rendering of three-dimensional drawings. Orthographic views and engineer's sketches are developed into isometric, dimetric, perspective, and diagramatic drawings of equipments and their environments. Mechanical lettering, air brush retouching of photographs, use of commercially prepared pressure sensitive materials, and layout of electronics schematics are included in the course.

Drafting 233 Machine Design (4) — **2 hrs. Lec. 6 hrs. Lab.**

Prerequisites: Physics 132, Engineering 240, and Drafting 133. Consists of the application of the principles of physics, statics, strength of materials and physical properties of materials to the design of machine elements. Factors considered are function, environment, production, problems and cost. Emphasis is placed on the practical application of design principles in graphic form.

Drafting 234 Advanced Technical Illustration (4) **8 hrs. Lec. 6 hrs. Lab.**

Prerequisite: Drafting 232. An area of specialization is chosen and pursued in depth. Examples are pictorials for color separation printing, air brush renderings, letterforms for logos and hand lettering, complex exploded views in isometric, perspective renderings, design of commercial displays, and art for slide presentations.

Drafting 235 Building Equipment (Mechanical and Electrical) (3) **2 hrs. Lec. 4 hrs. Lab.**

Prerequisite: DFT 132. Involves the drawing of plans and details as prepared for mechanical equipment such as air conditioning, plumbing, and electrical systems by using appropriate symbols and conventions. Consideration is given to coordination of mechanical and electrical features with structural and architectural components.

Economics 201—Principles of Economics (3) **3 hrs. Lec.**

The fundamental principles of macroeconomics. Economic organization, national income determination, money and banking, monetary and fiscal policy, economic fluctuations and growth. Sophomore standing recommended.

Economics 202 Principles of Economics (3) **3 hrs. Lec.**

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

Electronics Technology 120 D.C. Circuits and Electrical Measurements (4) **3 hrs. Lec. 3 hrs. Lab.**

Prerequisites: Credit or concurrent enrollment in Math 131E or equivalent. Combines mathematical theory and laboratory fundamentals in direct current circuits. Elementary principles of magnetism, electric concepts and units, diagrams, resistance, series and parallel circuits, simple meter circuits, conductors and insulators will be emphasized.

Electronics Technology 131 A.C. Circuits (4) **3 hrs. Lec. 3 hrs. Lab.**

Prerequisites: ET 120 and credit or concurrent enrollment in Math 132E or equivalent. Devoted to the study of fundamental theories of alternating current and their applications in various

circuits. Laboratory experiments will include power factor, sine wave analysis, resonant circuits, capacitance, inductance, Q of coils, electromagnetism and resistance.

Electronics Technology 133 Active Devices (4) **3 hrs. Lec. 3 hrs. Lab.**

Prerequisites: ET 120 and credit or taken concurrently with ET 131. This is a course in semiconductors (active devices). This course will cover topics such as the physical structure, parameters, linear and non-linear characteristics, and operation action as applied to amplifiers, rectifiers, and electronic switching devices.

Electronics Technology 134 Instrumentation (3) **2 hrs. Lec. 3 hrs. Lab.**

Prerequisite: ET 120. A study of electrical measurement and instrumentation devices and their application to practical situations. Devices and instruments covered include A.C. and D.C. measurement meters, impedance bridges, oscilloscopes, signal generators, signal tracers, and tube and transistor testers. A study of audio frequency and radio frequency test methods and equipment is included.

Electronics Technology 135 D.C.-A.C. Theory and Circuit Analysis (6) **3 hrs. Lab.**

Prerequisite: Credit or concurrent enrollment in Math 131E or equivalent. An accelerated course combining D.C. and A.C. theory in one semester's work. Topics covered include D.C. and A.C. analysis of resistive, capacitive inductive and combination circuits, magnetism, resonance, sine wave analysis, series, parallel and combination circuits, and schematic symbols.

Electronics Technology 231 Special Circuits with Communications Applications (4) **3 hrs. Lec. 3 hrs. Lab.**

Prerequisites: ET 133 and ET 134. Active devices are applied to circuitry common in communications equipment. Both the theory of operation and practical applications of the circuits in laboratory experiments are included. Circuits including amplifiers, oscillators, detectors, transmitters, modulators, transmission lines and antennas with application to various types of intelligence transmission and reception are emphasized in the course.

Electronics Technology 232 Analysis of Electronics Logic and Switching Circuits (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisites: ET 133 and ET 134. The course presents circuitry common to the increasing variety of electronic control systems and automatic measuring systems. These circuits require either a certain output waveform from a device or a specific response of a device to a particular input waveform. Typical circuit functions covered in the course include clamping, gating, switching and counting. The circuits which perform these functions are voltage discriminators, multivibrators, dividers counters and AND, or NOR, etc. gating circuits. A review of boolean algebra and binary numbers will be presented. Emphasis is placed on semiconductor devices. Fluidic switching devices are introduced.

Electronics Technology 233 Industrial and Microwave Electronic Technology (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisites: ET 134 and ET 231. The microwave portion of this semester's work involves a study of U.H.F. and V.H.F. components, circuits and measurement techniques including the use of distributed constant element waveguides, microwave links, and an introduction to radar and similar systems. The industrial electronics portion of the semester's work involves a study of time constant and electronic timing circuits, photoelectric controls, synchros and servomechanisms, induction and dielectric heating, radiation detention, applications in the field of industrial control and automation, combining of electrical electronic, magnetic and mechanical principles.

Electronics Technology 234 Electronic (3) Circuits and Systems — **6 hrs. Lab.**

Prerequisite: Must have completed all Electronic courses up to and including ET 231 and may take 232 and ET 233 simultaneously with ET 234. A supervised course consisting of design, layout construction and calibrating of an electronics project. Students will utilize all tools and equipment available. The student will be required to prepare a term paper which incorporates such material as functions of components, operating specifications, and schematics. The student must develop a project independently through conferences and activities directed by the instructor.

Engineering 101 Engineering Analysis (2) — **2 hrs. Lec.**

Prerequisite: Math 093 or equivalent. The past, present, and future role of the engineer in society branches and specialties in engineering, introduction to engineering analysis affording practice in

analyzing and solving engineering problems; computational methods and devices, to include slide rule theory and techniques; an introduction to numerical methods and computer programming.

Engineering 105 Engineering Graphics (3) **2 hrs. Lec. 4 hrs. Lab.**

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

Engineering 106 Descriptive Geometry (3) **2 hrs. Lec. 4 hrs. Lab.**

Prerequisite: Engineering 105 or Drafting 132. Provides training in the visualization of three-dimensional structures, and in accurately representing these structures in drawings by analyzing the true relationship between points, lines, and planes. Attention is given to the generation and classification of lines and surfaces, as well as intersections, developments, auxiliaries, and revolutions. The major theme is the correlation and integration of theory with practice.

Engineering 107 Engineering Mechanics I (3) **3 hrs. Lec.**

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

Engineering 131 Manufacturing Processes (2) **1 hr. Lec. 2 hrs. Lab.**

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

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

Prerequisites: Engineering 107 and credit or concurrent registration in Math 227. Dynamics — the study of linear and angular motions of particles and rigid bodies resulting from applied forces; time, mass, velocity, acceleration, work and energy, impulse and momentum: Kinematics

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

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

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

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

Engineering 240 Statics (3) 3 hrs. Lec.

Prerequisite: Math 132. A study of force and force systems, resultants and components of forces, friction, conditions of equilibrium, forces acting on members of trusses and frame structures applying both analytical and graphical methods to the solution of problems.

Engineering 241 Characteristics and Strengths of Materials (3) 3 hrs. Lec.

Prerequisites: Engineering 240 and Drafting 133. A study of the characteristics and strengths of materials as they relate to loads, stresses, and deformations within the elastic range.

English 101 Composition and Expository Reading (3) 3 hrs. Lec.

Writing practice in making reasonable and valid assertations followed by logical and clear support coincidental with the expository reading matter.

English 102 Composition and Literature (3) **3 hrs. Lec.**

Prerequisite: English 101. Writing practice in critical evaluation of prose narrative, poetry, and drama.

English 103 Creative Writing (3) **3 hrs. Lec.**

Prerequisite: English 101 and 102. Writing of fiction: short, story, poetry, and short drama.

ENGLISH IN THE SOPHOMORE YEAR

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

English 201 Masterpieces of English Literature (3) 3 hrs. Lec.

Prerequisite: English 101 and 102. Study of significant works of British literature from the Old English period through the eighteenth century.

English 202 Masterpieces of English Literature (3) 3 hrs. Lec.

Prerequisite: English 101 and 102. Study of important works from the Romantic Period to the present.

English 203 Literary Classics of the Western World (3) **3 hrs. Lec.**

Prerequisite: English 101 and 102. Reading and analysis of significant Continental European works from the Greek Classical Period through the Renaissance.

English 204 Literary Classics of the Western World (3) **3 hrs. Lec.**

Prerequisite: English 101 and 102. Study of ten to twelve important post-Renaissance works of Continental Europe, England, and America.

English 205 Major American Writers (3) **3 hrs. Lec.**

Prerequisite: English 101 and 102. Study of the works of the important writers before Whitman in the context of their times.

English 206 Major American Writers (3) **3 hrs. Lec.**

Prerequisite: 101 and 102. Reading and analysis of representative works by the chief literary figures of the past century.

English 207 Contemporary Literature (3) **3 hrs. Lec.**

Prerequisite: English 101 and English 102. Study of important contemporary writers in the twentieth century.

English 208 Life and Literature in the Southwest (3) **3 hrs. Lec.**

Prerequisite: English 101 and English 102. Fiction, travels, poetry, memoirs, art, and music to acquaint students with the social and cultural heritage of Texas and neighboring states.

Environmental Science 101 Environment and Man (3) **3 hrs. Lec.**

No Prerequisite. A one semester course dealing with topics relating to man and his environmental role. Subjects will be treated through discussions, guest speakers, films, and field studies. Recognized authorities and specialists from many disciplines will be used as guest lecturers and resource persons. The thesis of the course will be man's responsiblity to the environment and will be interdisciplinary. The course is designed for all students interested in the environmental problems of today.

French 101 Beginning French (5) **5 hrs. Lec.**
2 hrs. Lab.

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

French 102 Beginning French (5) **5 hrs. Lec.**
2 hrs. Lab.

Prerequisite: French 101 or equivalent or consent of the instructor. Continuation of French 101 with emphasis on idiomatic language and complicated syntax.

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

Prerequisites:: French 102 or equivalent or consent of the instructor. Reading, composition, grammar review and intense oral practice.

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

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

Geography 101 Geography (Physical) (3) **3 hrs. Lec.**

A survey of the physical makeup of the earth; weather and climate, topography, plant and animal life, land and sea. Attention is directed toward the earth in space, use of maps and charts and place geography.

Geography 102 World Geography (Economic) (3) **3 hrs. Lec.**

A study of the relation of man to his environment, and his utilization of natural resources, dealing with problems of production, manufacture, and distribution of goods throughout the world. The aspects of primitive subsistence and degrees of commercialism are considered.

Geology 101 General Geology (Physical) (4) **3 hrs. Lec.**
3 hrs. Lab.
or Field Studies

Study of earth materials and processes for science and non-science majors. Includes examination of the earth's interior, magnetism, gravity, setting in space, minerals, rocks, structure and geologic processes.

Geology 102 General Geology (Historical) (4) **3 hrs. Lec.**
3 hrs. Lab.
or Field Studies

Prerequisite: Geology 101. Study of earth materials and processes within a time perspective. For science and non-science majors. Utilizes fossils, geologic maps, and field studies to interpret geologic history.

German 101 Beginning German (5) **5 hrs. Lec.**
2 hrs. Lab.

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

German 102 Beginning German (5) **5 hrs. Lec.**
2 hrs. Lab.

Prerequisite: German 101 or equivalent. Continuation of German 101 with emphasis on idiomatic language and complicated syntax.

Government 201 American Government (3) 3 hrs. Lec.

An introduction to the study of political science; origin and development of constitutional democracy (United States and Texas); federalism and intergovernmental relations; civil rights and liberties, local government; parties, politics and political behavior. Satisfies requirements for Texas State Teacher's Certification.

Government 202 American Government (3) 3 hrs. Lec.

Prerequisite: Government 201. A study of the United States and Texas legislative process, the executive and the bureau structure, the judicial process, domestic policies. Other topics includes foreign relations and national defense. Satisfies requirements for Texas State Teacher's Certification.

Government 231 Municipal and County Government (3) 3 hrs. Lec.

A study of the governmental structure of the municipality and county including organs of government, administration, court system, taxation, utilities and public works, education, welfare and other public services. Presentations by local officials and surveys of area problems are stressed.

Guided Studies Oral Communications 120 Oral Communications (3) 3 hrs. Lec.

GSO 120 is designed for students with significant problems in language development. Small group sessions are supplemented with individual participation in listening, comprehension and oral expression of language using programmed materials in a language lab. Materials have been developed to enable the individual student to acquire increasing skill in the use of sounds, structure, and meanings of standard English. Emphasis is also placed on understanding the importance of the processes of oral communication in social and vocational situations.

History 101 History of the United States (3) 3 hrs. Lec.

A general presentation of United States History, commencing with the European background and first discoveries. The pattern of exploration, settlement, and development of institutions is followed throughout the colonial period and the early national experience to 1877.

History 102 History of the United States (3) 3 hrs. Lec.

A survey of the unfolding of United States history from the Reconstruction Era. The study includes social, economic and political aspects of American life and follows the development of the United States as a world power. History 101 is recommended.

History 105 Western Civilization (3) 3 hrs. Lec.

A survey of the background for development of civilization in the West from ancient time through the Enlightenment; the Mediterranean world, including Greece and Rome; the Middle Ages and the beginnings of modern history. Particular attention is paid to Renaissance, Reformation, the rise of the National state, the development of parliamentary government and the influences of European colonization.

History 106 Western Civilization (3) 3 hrs. Lec.

The unfolding of the pattern of modern western civilization from the Enlightenment to current times. A study of the Age of Revolution and the beginning of industrialism; the nineteenth century and the social, economic, and political factors of current world history.

History 120 Afro-American History (3) 3 hrs. Lec.

A study of the role of the Negro in American History; overview of the slave trade and slavery in the United States; focus on contributions of the Negro in the United States from colonial times. Emphasis on political, economic and sociological factors of the 20th Century.

Human Development 092 A Group Approach to Self-Understanding (3) 3 hrs. Lec. and Lab.

Human Development 092 is designed to enable the entering college student to more successfully communicate his needs in a college environment. The course will help him to explore his feelings and to develop self direction in setting and moving toward the achievement of realistic goals. The personal and social growth of students is improved and behavioral changes effected through opportunities to react and interact with others. Activities are planned to increase the student's awareness of his own abilities, skills, limitations, personality and needs.

Human Development 101 Developing Learning and Study Skills (2) 2 hrs. Lec.

A course to aid students in improving their study habits. Special emphasis is placed upon the time schedule, the discovery of the nature and extent of reading difficulities ,outlining the lecture and reading

assignments, the efficient use of the facilities for study, developing skill in note-taking, and preparing for and taking examinations. Ample opportunity is provided for the consideration of individual study problems and for the practice of suggested procedures.

Human Development 105 Basic Processes of Interpersonal Relationships (3) 3 hrs. Lec.

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

Human Development 106 Personal and Social Growth (3) 3 hrs. Lec. and Lab.

Human Development 106 deals with human development from the standpoint of the interdependence and interaction between growth and society. Processes of personal and social growth are explored, emphasizing the human dynamics of relating and reacting to influences largely outside one's own sphere of control. Understanding of self, the societal influences contributing to the development of self, and the successful existence of the individual within a society are investigated. Successful adjustment to family, school and society is developed.

Human Development 107 Developing Leadership Behavior (3) 3 hrs. Lec.

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

Humanities 101 Introduction to the Humanities (3) 3 hrs. Lec.

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

Industrial Welding (see Welding)

Journalism 101 Introduction to Mass Communications (3) 3 hrs. Lec.

A survey course designed to provide students with panoramic view of the field of mass communications and an understanding of the role of mass media in modern society. Not restricted to journalism majors.

Journalism 102 News Gathering and Writing (3) 2 hrs. Lec. 3 hrs. Lab.

Prerequisite: Typing ability. Required for all journalism majors. Journalism 101 not prerequisite for 102. Beginning reporting, study of types of news, body treatment of story, feature in lead, facts, background, and practice in writing straight news story.

Journalism 103 News Gathering and Writing (3) 2 hrs. Lec. 3 hrs. Lab.

Prerequisite: Journalism 102. Required of all journalism majors. A continuation of Journalism 102. The writing of more complex types of news stories. Specialized writing in the fields of sports, police news, markets, finance, society, amusement, government and news of interest to women. Additional laboratory work on the student newspaper.

Journalism 104, 105 (Freshman) 202, 203 (Sophomore) (1) 3 hrs. Lab.

Prerequisite: Permission of instructor. Individual staff assignments on the *Cornerstone* student newspaper, in one of the following journalistic fields: writing, advertising, photography, cartooning, editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may not be taken for credit concurrently with Journalism 102 or 103. Credit limited to one hour per semester. MAY BE REPEATED FOR A TOTAL OF THREE CREDIT HOURS.

Journalism 201 Editorial and Feature Writing (3) 3 hrs. Lec.

Prerequisites 6 hours of Journalism or consent of instructor. Emphasis is on handling of difficult news stories, editorial matter, and feature material. Research and interviewing techniques are emphasized with careful attention to development of feature stories for use in newspapers and magazines.

Journalism 204 News Editing and Copying Reading (3) 3 hrs. Lec.

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

Machine Shop 133 Basic Lathe (5) 1 hr. Lec. 8 hrs. Lab.

A basic course designed to provide practical experience in the area of hand tools, layout, and hand threading. Introduction to various types of drill press work. Introduction to the engine lathe. The student becomes familiar with the component parts of the machine and the function which each performs. The student also becomes familiar with the various types of cutting tools and operations performed on the engine lathes. Special emphasis is placed on safety measures. Instructions in the types and application of machine oils and greases, coolants and cutting oils.

Machine Shop 134 Basic Milling Machine (5) 1 hr. Lec. 8 hrs. Lab.

A basic course designed to provide practical experience in the area of hand threading. Introduction to various types of drill press work. Instruction is provided in some of the fundamental operations common to milling machine practice. The student becomes familiar with the various parts of the machine and with various cutters and arbors. Special emphasis is placed on safety measures. Instructions in the types and applications of machine oils and greases, coolants and cutting oils.

Machine Shop 135 Intermediate Lathe (5) 1 hr. Lec. 8 hrs. Lab.

Prerequisite: MS 131 or MS 133. Additional experience and skill are gained on the engine lathe. Workpieces become more complicated and tolerances more exacting. Operations are performed on machines of various sizes. Use is made of various work-holding methods in performing the operations of drilling, boring, and reaming on the lathe. Introduction to the various precision layout and measuring tools and practices is included. The student also develops further skill in determining cutting speeds and feeds.

Machine Shop 136 Intermediate Milling Machine (5) 1 hr. Lec. 8 hrs. Lab.

Prerequisite: MS 131 or MS 134. Additional experience and skill

are gained on the milling machine. Workpieces become more complicated and tolerances more exacting. Operations are performed on machines of various sizes and types. Use is made of various workholding methods. Introduction to the various precision layout and measuring tools and practices is included. The student also develops further skill in determining cutting speeds and feeds.

Machine Shop 233 Advanced Lathe (5) **1 hr. Lec. 8 hrs. Lab.**

Further experience is gained on the engine lathe. Skill is developed in making open set-ups. Location of holes by means of layout and triangulation is made. Further use of various attachments and accessories used on the engine lathe is made. Introduction to surface grinding and grinding wheel safety is made during this semester.

Machine Shop 234 Advanced Milling Machine (5) **1 hr. Lec. 8 hrs. Lab.**

Further experience is gained on the milling machine. Skill is developed in making open set-ups. Location of holes by means of layout and triangulation is made. Further use of various attachments and accessories used on the milling machine is made. Introduction to surface grinding and grinding wheel safety is made during this semester.

Machine Shop 235 Applied Lathe (5) **1 hr. Lec. 8 hrs. Lab.**

During this semester emphasis is placed on independent planning in selecting the means and methods of performing laboratory assignments on the lathe. Emphasis will be placed on interchangeability of workpieces, fits, and finishes. An attempt will be made to encourage initiative and ingenuity. During this semester an introduction will be made to tool and cutter grinding.

Machine Shop 236 Applied Milling Machine (5) **1 hr. Lec. 8 hrs. Lab.**

During this semester emphasis is placed on independent planning in selecting the means and methods of performing laboratory assignments on the mlling machine. Emphasis will be placed on interchangeability of workpieces, fits, and finishes. An attempt will be made to encourage initiative and ingenuity. During this semester an introduction will be made to tool and cutter grinding.

Mathematics 093 Intermediate Algebra (3) 3 hrs. Lec.

Prerequisite: DM 091 or 1 year of high school algebra. Includes the terminology of sets, properties of real numbers, fundamental operations on polynomials and fractions, products, factoring, radicals, and rational exponents. Also covered are solutions of linear, fractional, quadratic, and systems and linear equations, coordinate systems, and graphing.

Mathematics 100 Fundamentals of Mathematics (1) 1 hr. Lec.

Prerequisite: Two years of high school algebra or Mathematics 093. A study of the fundamentals of logic sets and the properties of the real and complex number systems.

Mathematics 104 Elementary Functions and Coordinate Geometry (5) 5 hrs. Lec.

Prerequisite: Two years of high school algebra or Mathematics 093. Study of concept of function, polynomials of one variable, arithmetic and geometric sequences, combinations and the binomial theorem, rational functions and polynomials of more than one variable, exponential functions, logarithmic functions, trigonometric functions, functions of two variables.

Mathematics 105 Elementary Functions and Coordinate Geometry (5) 5 hrs. Lec.

Prerequisite: Mathematics 104. A continuing study of the topics of Mathematics 104.

Mathematics 106 Elementary Functions and Coordinate Geometry (5) 5 hrs. Lec.

Prerequisite: Two years of high school algebra and one semester of trigonometry. A study of the algebra of functions and coordinate geometry to include the folliwing: polynomial and rational, exponential, logarithmic, trigometric, and functions of two variables.

Mathematics 111 Mathematics for Business and Economics I (3) 3 hrs. Lec.

Prerequisite: Two years of high school algebra or Mathematics 093. Study of equations and inequalities; functions to include: linear, quadratic, polynomial, rational, exponential, and logarithmic functions; and linear programming. Applications to business and economic problems are emphasized.

Mathematics 112 Mathematics for Business and Education II (3) 3 hrs. Lec.

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

Mathematics 115 College Mathematics I (3) 3 hrs. Lec.

Prerequisite: Mathematics 093 or 1 year high school algebra and 1 year of high school geometry or 2 years of high school algebra. A course designed for liberal arts students which includes the study of logic, mathematical patterns, mathematical recreations, systems of numeration, mathematical systems, sets and statements, and sets of numbers. Historical aspects of the above topics will also be emphasized.

Mathematics 116 College Mathematics II (3) 3 hrs. Lec.

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

Mathematics 121 Analytic Geometry (3) 3 hrs. Lec.

Prerequisite: Mathematics 102. Introduction to real numbers, distance, the straight line, the circle, conics, transformation of coordinates, parametric equations and three-dimensional space. The sequence Math 121-222-223-224 is equivalent to the sequence Math 126-227-228.

Mathematics 126 Introductory Calculus (5) 5 hrs. Lec.

Prerequisite: Mathematics 106 or equivalent. Study of slopes, some aspects of analytical geometry, tangents, limits, derivatives, continuity, interpretations and applications, chain rule, implicit differentiation, higher derivatives, differentials, and integration.

Mathematics 130 Business Mathematics (3) 3 hrs. Lec.

Prerequisite: One year of high school algebra or DM 091. Common application of percent to business problems, simple and compound interest, bank discount, payrolls, taxes, purchase discounts, periodic payment plans, depreciation, overhead, business statements, markup and markdown, various problems in retailing.

Mathematics 131 Technical Mathematics (3) 3 hrs. Lec.

Prerequisite: DM 091 or the equivalent. A course designed for technical students covering a general review of arithmetic, a treatment of the basic concepts and the fundamental facts of plane and solid geometry, computations with the slide rule, units and dimensions, a treatment of the terminology and concepts of elementary algebra, functions, coordinate systems of simultaneous equations, stated problems, determinants, progressions, and the binomial theorem.

Mathematics 132 Technical Mathematics (3) 3 hrs. Lec.

Prerequisite: Mathematics 131. A course for technical students which includes a study of the following: The trigonometric functions of angles, trigonometric identities, inverse trigonometric functions, trigonometric equations, complex numbers, logarithms, vectors, and the solution of triangles.

Mathematics 139 Applied Mathematics (3) 3 hrs. Lec.

Prerequisite: One year of high school algebra or DM 091. Commercial, technical and more simple scientific uses of arithmetic, alegebra, geometry and trigonometry. An effort will be made to tailor the course to fit the needs of the students enrolled in each section.

Mathematics 202 Introductory Statistics (3) 3 hrs. Lec.

Prerequisite: Two years of high school algebra and one semester of trigonometry, or Mathematics 104, or equivalent. Study of collection and tabulation of data, bar charts, graphs, sampling, averages, dispersion, correlation, index numbers, normal curve, probability, and applications to various fields.

Mathematics 221 Linear Algebra (3) 3 hrs. Lec.

Prerequisite: Math 112 or 126. Study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, dimensional space, and linear transformation.

Mathematics 227 Mathematical Analysis I (4) 4 hrs. Lec.

Prerequisite: Mathematics 126 or Mathematics 222. Study of techniques of differentiation and integration, limits, vectors, and multivariate calculus.

Mathematics 228 Mathematical Analysis II (3) **3 hrs. Lec.**

Prerequisite: MTH 227 or equivalent. A continuation of Mathematics 227. Introduction to differential equations, sequences, series.

Music 095 Applied Instruction: Beginners (1)

Private instruction in the student's performance area. Primarily for music majors who are beginners or with limited experience. One half hour lesson a week. Open to students registered in music theory, ensembles, and other music major or minor courses.

Music 101 Freshman Theory I (4) **3 hrs. Lec.**
4 hrs. Lab.

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

Music 102 Freshman Theory II (4) **3 hrs. Lec.**
4 hrs. Lab.

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

Music 104 Music Appreciation (3) **3 hrs. Lec.**

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

Music 105 Italian Diction (1) **2 hrs. Lab.**

Music 106 French Diction (1) **2 hrs. Lab.**

Music 107 German Diction (1) **2 hrs. Lab.**

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

Music 110 Literature (3) **3 hrs. Lec.**

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

Music 111 Literature (3) **3 hrs. Lec.**

A continuation of the studies introduced in Music 110.

A study of the compositional procedures and forms employed by the creators of music. Attention is focused upon the music of the Classical, Romantic, and Modern periods.

Music 113 Foundations in Music I (3) **3 hrs. Lec.**

Emphasis upon participation and the necessary skills for satisfactory performance in singing, playing an instrument, listening, creating rhythmic responses. Development of increasing ability to manage notation (music reading). Courses designed specifically for the non-music major.

Music 114 Foundations in Music II (3) **3 hrs. Lec.**

Prerequisite: Music 113. A continuation of Music 113 including a functional approach to music methods and materials needed for teaching in the elementary school.

Music 117 Piano Class I (1) **2 hrs. Lab.**

Class instruction in the areas of basic musicianship and piano skills designed primarily for those with no knowledge in piano skills. Open to all students.

Music 118 Piano Class II (1) **2 hrs. Lab.**

Prerequisite: Music 117 or the equivalent. Includes technique skills, harmonization, transposition, improvisation, accompanying, sight-reading, and performing various styles of repertoire.

Music 119 Guitar Class I (1) **2 hrs. Lab.**

Class instruction covering the basics of guitar skills, designed primarily for those with no knowledge in the reading of music or playing the guitar.

Music 120 Guitar Class II (1) 2 hrs. Lab.

Prerequisite: 119 or the equivalent. A continuation of the skills introduced in Music 119 with emphasis on perfecting classical guitar techniques and music reading skills.

Music 121-140 Applied Music (1)

Private instruction in the student's secondary area. One half hour lesson a week. Open to students registered in music theory, ensembles, and other music major or minor courses.

Music 150 Chorus (1) 3 hrs. Lab.

Open to all students of the college; the chorus studies and performs a wide variety of music representing the literature of the great eras of music history.

Music 151 Voice Class I (1) 2 hrs. Lab.

A course teaching the principles of breathing, voice production, tone control, enunciation and phrasing. Open to any student.

Music 152 Voice Class II (1) 2 hrs. Lab.

A continuation of Music 151 with emphasis on solo singing, appearance in studio recital, part-singing, stage deportment, personality development. Open to any student.

Music 155 Vocal Ensemble (1) 3 hrs. Lab.

Music 171 Woodwind Ensemble (1) 3 hrs. Lab.

Music 172 Brass Ensemble (1) 3 hrs. Lab.

Music 173 Percussion Ensemble (1) 3 hrs. Lab.

Music 174 Keyboard Ensemble (1) 3 hrs. Lab.

Music 175 String Ensemble (1) 3 hrs. Lab.

Prerequisite: Permission of instructor and audition. Select groups of instrumentalists or vocalists offering experience in the reading and performing of literature for small ensembles.

Music 176 Symphonic Wind Ensemble (1) **3 hrs. Lab.**

The symphonic Wind Ensemble functions as a group in which students study and perform stylistic literature of all periods. Required of all instrumental music majors.

Music 160 Band (1) **3 hrs. Lab.**

The band studies and performs a wide variety of music in all areas of band literature. Required of all instrumental music majors. Open to all other college students.

Music 181 Lab Band (1) **3 hrs. Lab.**

Prerequisite: Permission of the instructor. The lab band functions as a group in which students study and perform all forms of commercial music; i.e. jazz, pop, ballad, rock. Student arranging, composing, and conducting is encouraged.

Music 199 Recital (1) **2 hrs. Lab.**

One period per week designed to allow students of private lessons an opportunity to perform before an audience. Required of all music students and open to all other students.

Music 201 Sophomore Theory I (4) **3 hrs. Lec.**
3 hrs. Lab.

Prerequisite: Music 101-102 or by permission of instructor. A continuation of freshman theory including a study of larger forms, thematic devlopment, chromatic chords including the Neopolitan sixth and augmented sixth chords diatonic seventh chords with advanced sight-singing, keyboard harmony and ear training.

Music 202 Sophomore Theory II (4) **3 hrs. Lec.**
3 hrs. Lab.

Prerequisite: Music 201 or equivalent or by permission of instructor. A continuation of Music 201, including a study of sonata-allegro form, ninth, eleventh, and thirteenth chords, exploration of new key schemes, Impressionism, Twentieth Century melody and harmony, tonality in Twentieth Century music, Twentieth Century formal processes with a comparable advance in sight-singing keyboard harmony and ear training.

Music 221-240 Applied Music (2)

Private instruction in the area of the student's concentration. Two half hour lessons a week. Open to students registered in music theory, ensembles, and other music major or minor courses.

Music 251-270 Applied Music (3)

Private instruction in the area of the student's major instrument. Primarily for music performance majors. Two half hour lessons a week. Open to students registered in music theory, ensembles, and other music major or minor courses.

Philosophy 102 Introduction to Philosophy (3) 3 hrs. Lec.

A survey course designed to acquaint the student with some of the fundamental problems in philosophy and with methods used to deal with them. Some principle views, both ancient and modern, are examined as possible solutions.

Philosophy 105 Logic (3) 3 hrs. Lec.

An analysis of the principles of logical thinking. An effort is made to apply methods and tools of logic to real life situations; fallacies, definitions, analogies, syllogisms, Venn Diagrams, and other topics are discussed.

Philosophy 203 Ethics (3) 3 hrs. Lec.

Prerequisite: Three hours of philosophy or consent of instructor. A survey of the classical and modern theories of the moral nature of man, posing alternative views of his responsibilities to self and society. The course is designed to vivify the ethical issues and their metaphysical and epistemological bases so as to assist the student toward sound application of ethical principles in his own lfe.

Philosophy 207 History of Ancient Philosophy (3) 3 hrs. Lec.

Prerequisite: Open to sophomores only. This course is a historical examination of philosophy from Presocratic times to the Renaissance. Connections between the Presocraties, Plato, and Aristotle will be drawn. Stoicism, Epicureanism, and Scholasticism will be considered.

Philosophy 208 History of Modern Philosophy (3) 3 hrs. Lec.

Prerequisite: Open to sophomores only. A continuation of Philosophy 207. Starting with the Renaissance, it examines Western philosophic thought through the 19th century. Special emphasis will be

given Continental Rationalism, British Empiricism, Kantian metaphysics and epistemology, and the Hegelian system as it is related to the 20th century philosophies. Emphasis will be placed on the historical relationship existing between these schools of thought.

Photography 110 Introduction to Photography and Photo-Journalism (3) **2 hrs. Lec. 4 hrs. Lab.**

Introduction to photography and photo-journalism. The general mechanics of camera lenses and shutters, general characteristics of photographic films, papers and chemicals. Proper photographic darkroom procedures including enlarging, processing, contact printing, and exposing of photographic films and papers. Study of artificial lighting.

THE DIVISION OF HEALTH, PHYSICAL EDUCATION AND RECREATION

The curriculum of the Physical Education Division offered by this institution includes activity courses that are elective and are designed to meet the activity requirements of four year institutions. The Physical Education Division offers students an opportunity for participation in the following areas:

1. Physical education activity courses.
2. Intramural activities.
3. Theory and lecture courses for majors and minors.

The regular physical education program includes areas designed to offer beneficial activities and experiences that the student will find enjoyable and worthwhile. Such activities include volleyball, basketball, bowling, golf, tennis, rhythmic movements, etc. Activities within the program shall provide the student an opportunity to become involved on an individual, dual, and/or team basis.

Physical Education 100 Lifetime Sports Activities I (1) **3 hrs. Lab.**

Students are provided an opportunity for participation and instruction in various lifetime sports combinations. Activity combinations include selections from archery, bowling, badminton, golf, softball, tennis, handball, racquetball, and soccer. Activities shall be presented at the beginner and advanced-beginner levels. For male and female students. Course number may be repeated for credit.

Physical Education 101 Fundamentals of Health (3) 3 hrs. Lec.

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

Physical Education 104 M Touch Football/Soccer (1) 2 hrs. Lab.

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

Physical Education 110 Community Recreation (3) 3 hrs. Lec.

Principle, organization and the function of recreation in our society: Designed primarily for those students seeking a major or minor in health, physical education, or recreation.

Physical Education 111 Beginning Wrestling (1) 2 hrs. Lab.

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

Physical Education 113 Handball and Racketball (1) 2 hrs. Lab.

Designed to provide the student an opportunity for basic skills development in handball and racketball. Uniform required.

Physical Education 115 Physical Performance Activities (1) 3 hrs. Lab.

A course designed to evaluate and measure the student's physical condition and prescribe an individual program of exercise to carry him through life. Majority of course work involves active participation in prescribed use of the Physical Performance Lab.

Physical Education 120 Bowling (1) 2 hrs. Lab.

An activity course that will provide the student an opportunity to participate and improve skills in one of our more popular recreational activities.

Physical Education 121 Folk Dance (1) 2 hrs. Lab.

Participation in a variety of folk dances from other lands. Cultural backgrounds and costume study is included as a part of the course.

Physical Education 122 Tumbling and Gymnastics (1) 2 hrs. Lab.

A course provided for the students whereby instruction in the basic skills of tumbling and gymnastics are offered.

Physical Education 124 Social Dance (1) 2 hrs. Lab.

Students who have limited experience in dance will find this course beneficial. Ball room and Social Dance includes fundamental steps and rhythms of the foxtrot, waltz, tango, and recent dance steps. "Country" dancing includes reel, square dance, and other related dances.

Physical Education 125W Figure Training and Conditioning Exercise (1) 3 hrs. Lab.

A course for women designed to develop an understanding of controlling body weight and muscular development, through vigorous rhythmical activities. Uniform required.

Physical Education 127M Volleyball and Basketball for Men (1) 2 hrs. Lab.

Fundamental instructions and practice in volleyball and basketball skills. Male students only.

Physical Education 127W Volleyball and Basketball for Women (1) 2 hrs. Lab.

Fundamental instructions and practice that are designed to develop knowledge and skills in volleyball and basketball. Female students only.

Physical Education 129 Modern Dance (1) 2 hrs. Lab.

A course designed for those students who desire an opportunity to pursue creative dance instruction.

Physical Education 131M Weight Training and Conditioning for Men (1) 3 hrs. Lab.

A course designed for those students who desire instruction and participation in weight training and conditioning techniques. Uniform and fee required. Three activity hours per week.

Physical Education 144 Introduction to Physical Education (3) 3 hrs. Lec.

Designed for professional orientation in the area of physical education. Brief history, philosophy, modern trends in physical education, teacher qualifications, vocational opportunities, expected competences and skill testing are included within scope of the course. For majors and minors and students with specific interest.

Physical Education 147 Sports Officiating I (3) 3 hrs. Lec.

Designed for those students interested in officiating and/or to increase knowledge in and appreciation of sports; specific sports covered include football and basketball. As a part of the course requirement, the student will be expected to officiate the intramural programs.

Physical Education 148 Sports Officiating II (3) 3 hrs. Lec.

Designed for those students desiring further knowledge and appreciation of sports. Sports included are softball, track and field events, baseball and volleyball.

Physical Education 200 Lifetime Sports Activities II (1) 3 hrs. Lab.

A continuation of Physical Education 100. Students are provided an opportunity for participation and instruction in selected activities. Activities shall be presented at the intermediate and intermediate/advanced levels. This course number may be repeated two times for credit. For male and female students.

Physical Education 210 Sports Appreciation for the Spectator (3) 3 hrs. Lec.

A course specifically designed as an elective course for all students who desire a broader knowledge of major and minor sports. Rules, terminology and philosophies of many sports are studied. Special emphasis shall be directed toward football and basketball.

Physical Education 218 Intermediate and Advanced Golf (1) 2 hrs. Lab.

Prerequisite: Permission of instructor. A course designed to develop skills and techniques beyond the "beginner" stage.

Physical Education 219 Intermediate and Advanced Tennis (1) 2 hrs. Lab.

Prerequisite: Permission of instructor. A course designed to develop skills and techniques beyond the "beginner" stage.

Physical Education 222 Intermediate and Advanced Gymnastics (1) 2 hrs. Lab.

Prerequisite: Physical Education 122 or permission of instructor. Designed for those students who wish to pursue gymnastic training in a more advanced level. Emphasis on gymnastic routines and use of apparatus.

Physical Education 236 The Coaching of Football and Basketball (3) 2 hrs. Lec. 2 hrs. Lab.

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

Physical Education 257 Standard and Advanced First Aid (3) 3 hrs. Lec.

Theory and practice in the standard and advanced courses of the American National Red Cross in First Aid and Safety.

Physical Science 115 Physical Science (3) 3 hrs. Lec. 2 hrs. Lab.

A study of the basic principles and concepts of physics, chemistry, and nuclear science. The course relates these basic sciences to man's physical world at an introductory level. The course is directed toward the non-science major and carries no science prerequisite.

Physical Science 116 Physical Science (3) 3 hrs. Lec. 2 hrs. Lab.

The course encompasses the interaction of the Earth Sciences and man's physical world. Geology, Astronomy, Meteorology and Space Science are emphasized through the application of selected principles and concepts of the applied sciences. The course is directed toward the non-science major and carries no science prerequisite.

Physics 111-112 General Physics (4) (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisite: Math 093 or equivalent. For pre-med, pre-dental, pre-nursing, pre-aviation, pharmacy, architecture and all other students who require a two-semester course in physics but do not intend to take additional courses in physics. The first semester (111) is a study of mechanics and heat, vectors, force, momentum, energy, linear and angular motion, kinetic theory, calorimetry and change of state. The second semester (112) is a study of electricity, magnetism, light and sound. Courses must be taken in sequence.

Physics 131-132 Applied Physics (4) (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisite: High school algebra and trigonometry or equivalent. A one-year course designed to explain the basic concepts of the properties of matter and mechanics, heat, sound, light, electricity and magnetism, with emphasis on applications and problem solving. Designed primarily for technical programs.

Physics 201 General Physics (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisite: Credit or current registration in Math 126. Principles and applications of mechanics, wave motion and sound, emphasizing fundamental concepts, problem solving, notation and units. Designed primarily for physics majors.

Physics 202 General Physics (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisite: Physics 201 and credit or current registration in Math 227. Principles and applications of heat and electricity and magnetism, and optics emphasizing fundamentals, concepts, problem solving, notation and units.

Physics 203 General Physics (4) — **3 hrs. Lec. 3 hrs. Lab.**

Prerequisite: Physics 201 and concurrent registration in Physics 202. Principles and applications of light and atomic and nuclear physics. Designed for science majors.

Plastics Technology 131 Introduction to Plastics (4) — **3 hrs. Lec. 3 hrs. Lab.**

Covers a description of the different plastics, beginning with a brief outline of organic chemistry necessary for understanding. Discussion and laboratory will cover the different types of plastics: thermosets and thermoplastics, with identification tests in the lab including polymerization, molecular structure, molecular weight and various mechanical tests.

Plastics Technology 133 Extrusion Molding (4) — **3 hrs. Lec. 3 hrs. Lab.**

This course will cover extrusion equipment with emphasis on processing materials such as styrene, vinyls, polyethylene, polypropylene, A.B.S. and ancillary materials. Laboratory involves operating the extrusion equipment, determining operating conditons for different materials.

Plastics Technology 134 Thermo Forming (4) — **3 hrs. Lec. 3 hrs. Lab.**

Discussion will cover the material characteristics as related to thermo forming processes and thermo forming equipment. Thermo forming equipment will be discussed in lecture. Laboratory involves operating thermo-forming equipment with various materials.

Plastics Technology 135 Properties of Materials (4) — **3 hrs. Lec. 3 hrs. Lab.**

Study of various plastics with special emphasis on fitting the proper plastic to the correct end use. Problems will be introduced requiring the practical use of theory developed in lecture. Properties relating to mold construction, welding, decorating, and forming (extrusion, injection, thermo forming) will be discussed.

Plastics Technology 136 Injection Molding (4) — **3 hrs. Lec. 3 hrs. Lab.**

The lecture will cover the material characteristics of polymers as related to injection mold processes. The student will learn to operate the injection molding machines in the laboratory. Materials to be used in the machine operations will include such polymers as polystyrene, polyethylene, nylon and polycarbonates.

Plastics Technology 138 Plastic Finishing (4) **3 hrs. Lec. 3 hrs. Lab.**

Areas covered include printing, cementing, plating, hot stamping, polishing, punching, and drilling as they apply to thermoplastics and thermosets. Laboratory covers the practical applications of finishing.

Plastics Technology 231 Thermo Plastic Process Equipment Maintenance (3) **2 hrs. Lec. 3 hrs. Lab.**

A review of process equipment used for plastics previously studied with emphasis on maintenance problems. Additional topics will include lubrication and preventive maintenance of equipment and dies.

Plastics Technology 232 Plastic Fabrication Manufacture (4) **3 hrs. Lec. 3 hrs. Lab.**

An overview of all equipment for processing plastics. Both thermoplastic and thermosetting forming equipment will be discussed. In addition to forming equipment, other types of fabrication methods will be discussed. The laboratory will include forming plastics by the various methods.

Plastics Technology 233 Testing and Quality Control (4) **3 hrs. Lec. 3 hrs. Lab.**

Study is made of the mechanical, electrical, optical, and environmental characteristics of different plastics. Also a study and use of precison measurement tools and devices, with emphasis on their use in inspection of manufactured products.

Plastics Technology 234 Production Planning and Process Control (3) **3 hrs. Lec.**

A study of basic principles and techniques of plant production planning and control. Study of production objectives; design and improvement of processes, work methods, plant layout and physical facilities; quality control; budgetary and cost control; and materials management.

Plastics Technology 235 Fundamentals of Electricity (4) **3 hrs. Lec. 3 hrs. Lab.**

An introductory course for students requiring or desiring a background knowledge of electricity for related curriculums or occupations. Topics covered include basic A.C. and D.C. theory, voltage, current and resistance; electrical wiring principles and schematics, transformers, relays, timers, electrical measuring devices, and basic electrical calculations.

Plastics Technology 236 Hydraulics and Pneumatics (3) **2 hrs. Lec. 3 hrs. Lab.**

The course is designed to give the student a sound understanding of the basic principles of hydraulics and pneumatics. The student discusses and learns the operation and application of basic hydraulic and pneumatic circuits, pumps, valves, activators, power units, controls, and cylinders.

Psychology 105 Introduction to Psychology (3) **3 hrs. Lec.**

A study of basic problems and principles of human experience and behavior; heredity and environment, the nervous system, motivation, learning, emotions, thinking and intelligence.

Psychology 131 Human Relations (3) **3 hrs. Lec.**

A study involving the direct application of psychological principles to human relations problems in business and industry. Consideration is given to group dynamics and adjustment factors related to employment and advancement. The presentation will be tailored to fit the needs of the students enrolled in each section.

Psychology 201 Human Growth and Development (3) **3 hrs. Lec.**

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

Psychology 202 Applied Psychology (3) **3 hrs. Lec.**

Prerequisite: Psychology 105. Basic problems of psychological development, facts and theories of human behavior. Consideration is given the individual both as a social and biological organism. Particular attention is paid to human behavor and techniques of behavior modification.

Psychology 205 Psychology of Personality (3) **3 hrs. Lec.**

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

Psychology 208 Experimental Psychology (3) 3 hrs. Lec.

Prerequisites: Psychology 105 or equivalent. This course is designed to acquaint the student with basic experimental procedures and designs, laboratory apparatus, and the treatment of experimental data. Several experiments will be required of each student. Laboratory included.

Reading 101 Advanced Reading (3) 3 hrs. Lec. and Lab.

Prerequisite: Successful completion of DR 091 or equivalent. Advanced Reading 101 emphasizes the development of advanced techniques in reading for pleasure as well as for information. Improved reading comprehension, vocabulary development, and flexibility of reading rate are stressed. In addition, advanced techniques for note-taking, exam-taking, studying and reading for specialized content areas are developed.

Religion 101 Religion in American Culture (3) 3 hrs. Lec.

A systematic examination of religion in American culture. Emphasis will be placed upon the interaction of religion with politics, economics, the military, education, the arts and other cultural phenomena.

Religion 102 Contemporary Religious Problems (3) 3 hrs. Lec.

An analysis of the background and present expression of basic problems in religion, e.g., the problem of belief, the nature of religious literature, the existence of God, evil, human destiny and the relation of religion to society and the arts. Both Western and Eastern traditions will be considered.

Religion 201 Major World Religions (3) 3 hrs. Lec.

Prerequisite: Sophomore standing or consent of instructor. A survey of major world faiths. The course will concentrate on the basic texts of Eastern and Western religions and on the creative personalities of their founders. There will be some consideration of the problems of "objective" study of religions, of primitive religions, and of alternatives to major world religions such as astrology and atheism.

Secretarial Training (See Business 162)

Shorthand (See Business 163-164-263)

Social Science 131-132 American Civilization (3) (3) 3 hrs. Lec.

A course designed to provide the student with some historical perspective for understanding the economic, political, and social institutions of modern society. In this context, emphasis will be placed upon U. S. and Texas history and constitutional development. It is advised that these courses be taken in order: 131, 132.

Sociology 101 An Introduction to Sociology (3) 3 hrs. Lec.

An inquiry into the nature of society and the foundations of group life, including institutions, with a broad presentation of the bases of social change, processes and problems.

Sociology 102 Social Problems (3) 3 hrs. Lec.

Prerequisite: Sociology 101. A study of the background emergence and scope of current group relationships of our society, emphasizing topics as they apply to social adjustment in the family and the total community environment.

Sociology 203 Marriage and Family (3) 3 hrs. Lec.

An analysis of courtship patterns, marriage and family forms, relationships and functions, and socio-cultural differences in family behavior.

Sociology 204 American Minorities (3) 3 hrs. Lec.

The principal minority groups in American society; their sociological significance and historic contributions. An emphasis will be placed on problems of intergroup relations, social movements and related social changes occurring on the contemporary American scene. Sophomore standing or Sociology 101 recommended.

Sociology 231 Urban Social Problems (3) 3 hrs. Lec.

The sociology of urban groups and institutions; urbanization as a process; the inner city; the aspect of the neighborhood. Emphasis is placed on case studies, enabling the student to identify and understand the types of social problems inherent in the metropolitan environment.

Spanish 101 Beginning Spanish (5) 5 hrs. Lec.
2 hrs. Lab.

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

Spanish 102 Beginning Spanish (5) **5 hrs. Lec. 2 hrs. Lab.**

Prerequisite: Spanish 101 or equivalent or consent of the instructor. Continuation of Spanish 101 with emphasis on idiomatic language and complicated syntax.

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

Prerequisite: Spanish 102 or equivalent or consent of the instructor. Reading, composition, grammar review and intense oral practice.

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

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

Speech 105 Fundamentals of Public Speaking (3) **3 hrs. Lec.**

An introductory course in public speaking. Principles of reasoning. Emphasis upon the delivery of carefully prepared speeches. Special attention to audience analysis, collecton of materials, and outlining.

Speech 109 Voice and Articulation (3) **3 hrs. Lec.**

Prerequisite: Speech 105 or consent of instructor. A study of the mechanics of speech applied to improvement of the individual's voice and pronunciation.

Speech 110 Reader's Theatre Workshop (1) **2 hrs. Lab.**

Prerequisite: Permission of the instructor. A laboratory course for the preparation and presentation of scripts, readings, and book reviews, collecting and arranging all types of literature for group interpretation and performance. May be repeated once for credit.

Speech 201 Forensic Workshop (1) **1 hr. Lec.**

A laboratory course for the preparation of speeches, readings, and debate propositions which will be presented in competition and before select audiences. May be repeated for one additional hour of credit.

Speech 205: Discussion and Debate (3) **3 hrs. Lec.**

Prerequisite: Speech 105 or consent of the instructor. A study of theories and application of techniques of public discussion and argumentation. Special emphasis on development of ability to evaluate, analyze, and think logically, through application to current problems.

Speech 206 Oral Interpretation (3) **3 hrs. Lec.**

Prerequisite: Speech 105 or consent of instructor. A study of fundamental techniques of analyzing various types of literature, and practice in preparing and presenting selections orally. Emphasis on individual improvement.

Theatre 100 Rehearsal and Performance (1) **TBA**

Prerequisite: Acceptance as a member of the cast or crew of a major production. Participation in the class includes the rehearsal and performance of the current theatrical presentation of the division.

Theatre 101 Introduction to the Theatre (3) **3 hrs. Lec.**

A general survey designed to acquaint the student with the various aspects of theatre, plays and playwrights, directing and acting, theatres, artists, and technicians.

Theatre 102 Contemporary Theatre (3) **3 hrs. Lec.**

A study of the modern theatre and cinema as art forms, with attention to the historical background and traditions of each. Emphasis is placed on a better understanding of the social, cultural and aesthetic significance of these media in today's life. Includes the reading of a number of plays and the viewing of specially selected films.

Theatre 103 Stagecraft I (3) **3 hrs. Lec.**
3 hrs. Lab.

A study of the technical aspects of play production including set design and construction, stage-lighting, make-up, costuming, and related areas.

Theatre 104 Stagecraft II (3) **2 hrs. Lec.**
3 hrs. Lab.

Prerequisite: Theatre 103 or consent of the instructor. A continuation of Theatre 103 with emphasis on individual projects in set and lighting design and construction, including further exploration of the technical aspects of play production.

Theatre 106 Acting I (3) **2 hrs. Lec.**
3 hrs. Lab.

Individual and group activity with theory and exercises in bodily control, voice pantomime, interpretation, characterization, and stage movement. Analysis and study of specific roles for stage presentation.

Theatre 107 Acting II (3) — **2 hrs. Lec. 3 hrs. Lab.**

Prerequisite: Theatre 106 or consent of the instructor. Continuation of Theatre 106 with emphasis on problems of complex characterization, ensemble, acting, stylized acting and acting in period days.

Theatre 109 Voice and Articulation (3) — **3 hrs. Lab.**

A study of the mechanics of theatre speech applied to improvement of the individual's voice and pronunciation.

Theatre 115 MIME (2) — **1 hr. Lec. 2½ hrs. Lab.**

Prerequisite: Stage Movement, Theatre 106. Exploration of the expressive significance and techniques of mime.

Theatre 201 Television Production I (3) — **2 hrs. Lec. 3 hrs. Lab.**

A study of studio operations, equipment use, practical applications of the broadcasting arts. Includes units on camera, sounds, lights, continuity, and audio-video recording.

Theatre 202 Television Production II (3) — **2 hrs. Lec. 3 hrs. Lab.**

Prerequisite: Theatre 201. A continuation of Television Production I.

Theatre 203 Broadcasting Communications I (3) — **3 hrs. Lec. 2 hrs. Lab.**

Survey of broadcasting media; its nature, practice and basic techniques of operation.

Theatre 204 Broadcasting Communications II (3) — **3 hrs. Lec. 2 hrs. Lab.**

Prerequisite: Theatre 203. A continuation of Broadcasting Communications I. Required lab assignment.

Typing (See Business 173-174-273)

Industrial Welding 130 Pattern Layout (3) — **2 hrs. Lec. 3 hrs. Lab.**

This course is devoted to the preparation of patterns, pattern development, and the shop economics involved. Job applications, general layout work with structural material.

Industrial Welding 133 Introductory Welding (4) — **1 hr. Lec. 8 hrs. Lab.**

Study of the basic fundamentals of standard oxyacetylene and metallic arc welding and cutting processes currently utilized in the welding industry, practice of effective safety precautions and equipment care and preventive maintenance.

Industrial Welding 134 Welding Applications (4) — **1 hr. Lec. 8 hrs. Lab.**

Prerequisite: WE 133 or equivalent background experience by instructor's approval. A student may take WE 133 and WE 134 in lieu of WE 131. Study of the various soldering and brazing processes, standard welding symbols, welding positions and procedures with an introduction to inert gas shielded metallic arc welding processes.

Industrial Welding 135 Quality Control in Welding (4) — **1 hr. Lec. 8 hrs. Lab.**

Prerequisite: WE 131 or WE 133 and WE 134, or equivalent background experience by instructor's approval. Study of weld quality evaluation, standard inspection techniques, weld quality testing equipment, regulations, specifications, codes, material properties, and welder qualification requirements.

Industrial Welding 136 Special Welding Applications (4) — **1 hr. Lec. 8 hrs. Lab.**

Prerequisite: WE 131 and WE 135 or WE 133, WE 134, and WE 135, or equivalent background experience by instructor's approval. A student may take WE 135 and WE 136 in lieu of WE 132. Study of special cutting, joining and surfacing processes of ferrous and non-ferrous materials, specialized equipment, general welding shop production economics and related technical data.

TECHNICAL OCCUPATIONAL PROGRAMS

ACCOUNTING TECHNICIAN
(One-Year Certificate Program)

The objective of this program is to provide the student with a working knowledge of bookkeeping procedures currently in use in business; to introduce the student to accounting principles supporting bookkeeping procedures; and to give the student practical bookkeeping experience by the use of problem solving.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
Bus 105—Introduction to Business	3	0	3
Bus 131—Bookkeeping	3	0	3
Bus 161—Office Machines	1	2	2
Com 131—Applied Composition and Speech	3	0	3
Mth 130—Business Mathematics	3	0	3
	13	2	14
Spring Semester			
Bus 132—Bookkeeping	3	0	3
Bus 173—Beginning Typing or **Bus 174**—Intermediate Typing	1	2	2
CS 101—Introduction to Computing Science	3	0	3
Com 132—Applied Composition and Speech	3	0	3
***Elective**	3	0	3
	13	2	14

*Suggested electives: Bus 162, Bus 231, Bus 234, Psy. 131.

AVIATION ADMINISTRATION

options — AIR CARGO TRANSPORT
— AIRLINE MARKETING
— FIXED BASE OPERATIONS/AIRPORT MANAGEMENT
(Associate Degree in Applied Science)

Aviation Administration concerns the various aspects of business administration as relates to the multi-faceted aviation industry. General business, accounting, legal, socioeconomic, advertising, marketing, and public relations subjects are interspersed with the appropriate areas of aviation specialization.

Curriculum Pattern

FIRST YEAR
CORE CURRICULUM
(Common to all Aviation Administration Degree Programs)

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
AA 131—Introduction to Aviation	3	0	3
Com 131—Applied Composition and Speech	3	0	3
Bus 105—Introduction to Business	3	0	3
Bus 201—Principles of Accounting	3	0	3
Bus 234—Business Law	3	0	3
	15	0	15
Spring Semester			
AA 133—Air Transportation	3	0	3
AA 134—Aviation Law	3	0	3
Com 132—Applied Composition and Speech	3	0	3
Psy 131—Human Relations	3	0	3
Bus 202—Principles of Accounting	3	0	3
	15	0	15

AVIATION ADMINISTRATION
(continued)
AIR CARGO TRANSPORT
(Second Year Option)

This program prepares the student for entry into the career field of air cargo management. Typical positions span the range from management trainee, support staff member, assistant to administrative supervisor or station manager. The curriculum provides studies in the logistics of air cargo, special regulations and laws (local, national and international) relating to air cargo operations and prepares the graduate to perform the responsible operations essential to air shipment and transshipment of products and material.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
AA 231—Air Cargo	3	0	3
AA 233—Transportation and Traffic Management	3	0	3
Eco 201—Principles of Economics	3	0	3
SS 131—American Civilization	3	0	3
Bus 136—Principles of Management	3	0	3
	15	0	15
Spring Semester			
AA 235—Airline Management	3	0	3
AA 237—Transportation Regulations and Revenue	3	0	3
SS 132—American Civilization	3	0	3
CS 101—Introduction to Computing Science	3	0	3
Eco 202—Principles of Economics	3	0	3
	15	0	15

AVIATION ADMINISTRATION
(continued)
AIRLINE MARKETING
(Second Year Option)

Airline Marketing prepares the student for a position as an airline or cargo management trainee in the areas of customer service, sales or promotional efforts, to perform in advertising, public relations, economics, or marketing and evaluation of marketing effectiveness as relates to passenger and air cargo movement.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
AA 231—Air Cargo	3	0	3
Eco 201—Principles of Economics	3	0	3
SS 121—American Civilization	3	0	3
Bus 233—Advertising and Sales Promotion	3	0	3
Elective	3	0	3
	15	0	15
Spring Semester			
AA 235—Airline Management	3	0	3
AA 236—Aviation Marketing	3	0	3
Bus 230—Salesmanship	3	0	3
SS 132—American Civilization	3	0	3
Eco 202—Principles of Economics	3	0	3
	15	0	15

AVIATION ADMINISTRATION
(continued)
FIXED BASE OPERATION/AIRPORT MANAGEMENT
(Second Year Option)

This program prepares the student for entry into the career field of airport management. Typical positions include fixed base operator, manager of a small airport or staff member to operation superintendents, airport directors or aviation authority boards. Studies provide a basic business exposure that is aviation oriented and covers planning, organizing and administering the various functions of airport operations, local and federal regulations, facility and financial requirements.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
AA 231—Air Cargo	3	0	3
Bus 136—Principles of Management	3	0	3
Eco 201—Principles of Economics	3	0	3
SS 131—American Civilization	3	0	3
Elective	3	0	3
	15	0	15
Spring Semester			
AA 235—Airline Management	3	0	3
AA 239—Airport Management	3	0	3
Eco 201—Principles of Economics	3	0	3
SS 132—American Civilization	3	0	3
CS 101—Introduction to Computing Science	3	0	3
	15	0	15

AVIONICS TECHNOLOGY
(Associate Degree in Applied Science)

This 2-year program will provide the student with a general electronics background and knowledge and practical skills related to avionics systems which will prepare him for entry-level employment in the avionics industry.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
Com 131—Applied Composition and Speech	3	0	3
Mth 131E—Technical Mathematics for Electronics	3	0	3
Phy 131—Applied Physics	3	3	4
ET 135—D.C.-A.C. Theory and Circuit Analysis	5	3	6
AV 130—Introduction to Aircraft Electronics Systems	2	0	2
	16	6	18
Spring Semester			
Com 132—Applied Compositon and Speech	3	0	3
Mth 132E—Technical Mathematics for Electronics	3	0	3
Phy 132—Applied Physics	3	3	4
ET 133—Active Devices	3	3	4
AV 131—Aircraft Communications Systems	3	3	4
	15	9	18
Fall Semester			
SS 131—American Civilization	3	0	3
Dft 130—Technical Drafting	1	3	2
ET 232—Logic/Switch Circuits	3	3	4
AV 230—Aircraft Navigation Systems	3	3	4
AV 231—Aircraft Electrical and Instrumentation Systems	3	3	4
	13	12	17
Spring Semester			
SS 132—American Civilization	3	0	3
Psy 131—Human Relations	3	0	3
AV 232—Aircraft Radar Systems	3	3	4
AV 233—Aircraft Systems Installation, Wiring, and Modification	1	5	3
AV 234—Aircraft Electronic Systems Checkout and Trouble-shooting Procedures	2	5	4
	12	13	17

DRAFTING AND DESIGN TECHNOLOGY
(Associate Degree in Applied Science)

This program prepares the student for employment in a wide range of industries as a draftsman or engineering aide. Information in related fields is provided to enable the student to work effectively with the engineer and professional staff.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
Dft 132—Basic Drafting	2	6	4
Egr 131—Manufacturing Process	1	2	2
Com 131—Applied Composition and Speech	3	0	3
Mth 131—Technical Mathematics	3	0	3
SS 131—American Civilization	3	0	3
	12	8	15
Spring Semester			
Dft 133—Intermediate Drafting	2	4	3
Com 132—Applied Composition and Speech	3	0	3
Mth 132—Technical Mathematics	3	0	3
SS 132—American Civilization	3	0	3
Egr 106—Descriptive Geometry	2	4	3
	13	8	15
Fall Semester			
Egr 240—Statics	2	3	3
*Dft 231—Electronic Drafting	2	4	3
Dft 232—Technical Illustration	2	4	3
Phy 131—Applied Physics	3	3	4
Dft 135—Reproduction Processes	1	3	2
	10	17	15
Spring Semester			
*Dft 230—Structural Drafting	2	4	3
Dft 233—Machine Design	2	6	4
Egr 241—Characteristics of Materials	3	0	3
Phy 132—Applied Physics	3	3	4
Psy 131—Human Relations	3	0	3
	13	13	17

*The following courses may be substituted if there is sufficient demand for them: Dft 136, Dft 138, Dft 234, Dft 235.

ELECTRONICS TECHNOLOGY
(Associate Degree in Applied Science)

This 2-year program will prepare the student for work as an electronics technician by familiarizing him with most electronic testing equipment, training him in technical communications, and providing him with electronic theory and skills.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
Com 131—Applied Composition and Speech	3	0	3
Mth 131E—Technical Mathematics for Electronics	3	0	3
Phy 131—Applied Physics	3	3	4
Dft 130—Technical Drafting	1	3	2
ET 120—D.C. Circuits and Electrical Measurements	3	3	4
	13	9	16
Spring Semester			
Com 132—Applied Composition and Speech	3	0	3
Mth 132E—Technical Mathematics for Electronics	3	0	3
ET 131—A.C. Circuits	3	3	4
ET 133—Active Devices	3	3	4
ET 134—Instrumentation	2	3	3
	14	9	17
Fall Semester			
SS 131—American Civilization	3	0	3
Hum 101—Introduction to Humanities	3	0	3
Egr 131—Manufacturing Processes	1	2	2
ET 231—Special Circuits	3	3	4
ET 232—Logic/Switch Circuits	3	3	4
	13	8	16
Spring Semester			
SS 132—American Civilization	3	0	3
Psy 131—Human Relations	3	0	3
CS 101—Introduction to Computing Science	3	0	3
ET 233—Industrial and Microwave Electronics Technology	3	3	4
ET 234—Electronic Circuits and Systems	0	6	3
	12	9	16

MACHINE SHOP
(Associate Degree in Applied Science)

The 2-year Machine Shop program will prepare the student for employment as an entry-level machinist in industry. It will also prepare him for entry into an apprentice program for machinist, tool and die-maker, etc. Successful students will find access to supportive type jobs in the metal working field such as planner, programmer, etc.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
MS 133—Basic Lathe	1	8	5
MS 134—Basic Milling Machine	1	8	5
DM 091—Basic Math	3	0	3
Bpr 121—Blueprint Reading	1	3	2
Egr 131—Manufacturing Processes	1	2	2
	7	21	17
Spring Semester			
MS 135—Intermediate Lathe	1	8	5
MS 136—Intermediate Milling Machine	1	8	5
Mth 139—Applied Mathematics	3	0	3
Com 131—Applied Composition and Speech	3	0	3
Bpr 122—Blueprint Reading	1	3	2
	9	19	18
Fall Semester			
MS 233—Advanced Lathe	1	8	5
MS 234—Advanced Milling Machine	1	8	5
Phy 131—Applied Physics	3	3	4
SS 131—American Civilization	3	0	3
	8	19	17
Spring Semester			
MS 235—Applied Lathe	1	8	5
MS 236—Applied Milling Machine	1	8	5
Phy 132—Applied Physics	3	3	4
Psy 131—Human Relations	3	0	3
	8	19	17

MID-MANAGEMENT
(Associate Degree in Applied Science)

This program in business management is designed to develop the fundamental skills, knowledge, attitudes and experiences which enable men and women to function in decision-making positions as supervisors or junior executives.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
Bus 136—Principles of Management	3	0	3
Bus 150—Management Training	0	20	4
Bus 154—Management Seminar—Role of Supervision	2	0	2
Com 131—Applied Comp. & Speech or **Eng 101**	3	0	3
Hum 101—Introduction to Humanities	3	0	3
	11	20	15
Spring Semester			
Bus 105—Introduction to Business	3	0	3
Bus 151—Management Training	0	20	4
Bus 155—Management Seminar—Personnel Management	2	0	2
Comp 132—Applied Comp. & Speech or **Eng 102**	3	0	3
***Elective**	3	0	3
	11	20	15
Fall Semester			
Bus 201—Principles of Accounting or **Bus 131**	3	0	3
Bus 250—Management Training	0	20	4
Bus 254—Management Seminar—Organizational Development			
SS 131—American Civilization or **Hst 101**	3	0	3
***Elective**	3	0	3
	11	20	15
Spring Semester			
Bus 251—Management Training	0	20	4
Bus 255—Management Seminar—Business Strategy, the Decision Process and Problem Solving	2	0	2
Eco 201—Principles of Economics	3	0	3
SS 132—American Civilization or **Hst 102**	3	0	3
***Elective**	3	0	3
	11	20	15

*Suggested Electives: Bus 161, Bus 231, Bus 233, Bus 234, CS 101, Bio 115, Bio 116, Mth 130, Phy Sc 115, Psy 131, Spe 105

PLASTICS MANAGEMENT AND TECHNOLOGY
(Associate Degree in Applied Science)

This two-year program is designed to provide the student with the fundamental skills and knowledge of both management techniques and the plastics industry which will enable him to function in decision-making positions as a supervisor or junior executive and as a competent plastics technologist.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
PT 131—Introduction to Plastics	3	3	4
PT 133—Extrusion Molding	3	3	4
Bpr 121—Blueprint Reading	1	3	2
Mth 131—Technical Mathematics	3	0	3
Bus 105—Introduction to Business	3	0	3
	13	9	16
Spring Semester			
PT 134—Thermo Forming	3	3	4
PT 136—Injection Molding	3	3	4
Egr 131—Manufacturing Processes	1	2	2
PT 138—Plastic Finishing	3	3	4
Bus 131—Bookkeeping or Bus 201—Principles of Accounting	3	0	3
	13	11	17
Fall Semester			
PT 135—Properties of Materials	3	3	4
PT 233—Testing and Quality Control	3	3	4
Com 131—Applied Composition and Speech	3	0	3
Bus 136—Principles of Management	3	0	3
*Elective	3	0	3
	15	6	17
Spring Semester			
PT 232—Plastic Fabrication Manufacture	3	3	4
PT 234—Production Planning and Process Control	3	0	3
Com 132—Applied Composition and Speech	3	0	3
SS 131—American Civilization	3	0	3
Bus 139—Introduction to Supervision	3	0	3
	15	3	16

*Suggested Electives: Bus 230, Bus 233, Bus 234, CS 101, Bus 202, Eco 201

PLASTICS TECHNOLOGY
(Associate Degree in Applied Science)

This program is designed to give the student a working knowledge of plastic materials, processing methods, fabrication, finishing and decorating of plastic materials and to function in decision making positions in the plastics industry.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
PT 131—Introduction to Plastics	3	3	4
PT 133—Extrusion Molding	3	3	4
Bpr 121—Blueprint Reading	1	3	2
Mth 131—Technical Mathematics	3	0	3
Com 131—Applied Composition and Speech	3	0	3
	13	**9**	**16**
Spring Semester			
PT 134—Thermo Forming	3	3	4
PT 136—Injection Molding	3	3	4
PT 138—Plastic Finishing	3	3	4
Egr 131—Manufacturing Processes	1	2	2
SS 131—American Civilization	3	0	3
	13	**11**	**17**
Fall Semester			
PT 135—Properties of Materials	3	3	4
PT 233—Testing and Quality Control	3	3	4
PT 235—Fundamentals of Electricity	3	3	4
PT 236—Hydraulics and Pneumatics	2	3	3
	11	**12**	**15**
Spring Semester			
PT 231—Thermo Plastic Process Equipment Maintenance	2	3	3
PT 232—Plastic Fabrication Manufacture	3	3	4
PT 234—Production Planning and Process Control	3	0	3
Com 132—Applied Composition and Speech	3	0	3
Psy 131—Human Relations	3	0	3
	14	**6**	**16**

SECRETARIAL SCIENCE
(One-Year Certificate Program)

The basic purpose of this program is to acquaint students with the opportunities and responsibilities of a secretarial career.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
Bus 105—Introduction to Business	3	0	3
Bus 131—Bookkeeping	3	0	3
Bus 161—Office Machines	1	2	2
***Bus 163**—Beginning Shorthand	2	3	3
***Bus 173**—Beginning Typing	1	2	2
Com 131—Applied Composition and Speech or **Eng 101**—Composition and Expository Reading	3	0	3
	13	7	16
Spring Semester			
Bus 160—Machine Transcription	3	0	3
Bus 162—Secretarial Training	3	0	3
Bus 164—Intermediate Shorthand	2	3	3
Bus 174—Intermediate Typing	1	2	2
Bus 231—Business Correspondence	3	0	3
	12	5	14

*Students with previous training will be placed according to ability. Suggested Electives: Bus 263, Bus 273, CS 101, Mth 130.
A student is required to have his last semester of typewriting and shorthand at Mountain View College to complete this program.

SECRETARIAL SCIENCE
(Associate Degree in Applied Science)

The purpose of this program is to prepare students to become alert and responsive secretaries capable of performing the tasks required of them in the modern business office. Suggested electives are such that a student may take courses which will provide general knowledge in areas such as law, selling, advertising, and accounting.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
Bus 105—Introduction to Business	3	0	3
Bus 131—Bookkeeping	3	0	3
Bus 161—Office Machines	1	2	2
Bus 163—Beginning Shorthand	2	3	3
***Bus 174**—Intermediate Typing	1	2	2
Com 131—Applied Composition and Speech or **Eng 101**—Composition and Expository Reading	3	0	3
	13	7	16
Spring Semester			
Bus 160—Machine Transcription	3	0	3
Bus 162—Secretarial Training	3	0	3
Bus 164—Intermediate Shorthand	2	3	3
Bus 231—Business Correspondence	3	0	3
Bus 273—Advanced Typing	1	2	2
	12	5	14
Fall Semester			
Bus 263—Advanced Shorthand	2	3	3
CS 101—Introduction to Computing Science	3	0	3
Com 132—Applied Composition and Speech or **Eng 102**—Composition and Literature	3	0	3
SS 131—American Civilization or **Hst 101**—History of the United States	3	0	3
****Elective**	3	0	3
	14	3	15
Spring Semester			
Bus 264—Shorthand Transcription	2	3	3
Hum 101—Introduction to Humanities	3	0	3
Psy 131—Human Relations	3	0	3
SS 132—American Civilization or **Hst 102**—History of the United States	3	0	3
****Elective**	3	0	3
	14	3	15

*Students with previous training will be placed according to ability.

**Suggested Electives: Bus 230, Bus 233, Bus 234, Mth 130.

A student is required to have his last semester of typewriting and shorthand at Mountain View to complete this program.

INDUSTRIAL WELDING
(One-Year Certificate Program)

The student will learn the basic fundamentals of oxyacetylene welding, cutting and arc welding, with primary emphasis placed on arc welding and the use of various electrodes. Typical operations such as butt, lap, and fillet welding are performed. TIG and MIG processes also will be introduced.

Curriculum Pattern

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Fall Semester			
WE 133—Introductory Welding	1	8	4
WE 134—Basic Welding Applications	1	8	4
***Mathematics**	3	0	3
***Communications**	3	0	3
Bpr 121—Blueprint Reading	1	3	2
	9	19	16
Spring Semester			
WE 135—Quality Control in Welding	1	8	4
WE 136—Special Welding Applications	1	8	4
***Mathematics**	3	0	3
Egr 131—Manufacturing Process	1	2	2
WE 130—Pattern Layout	2	3	3
	8	21	16

*Students will be placed according to their ability in this area.

INDEX

NLC — North Lake College

BC — Brookhaven College

RC — Richland College

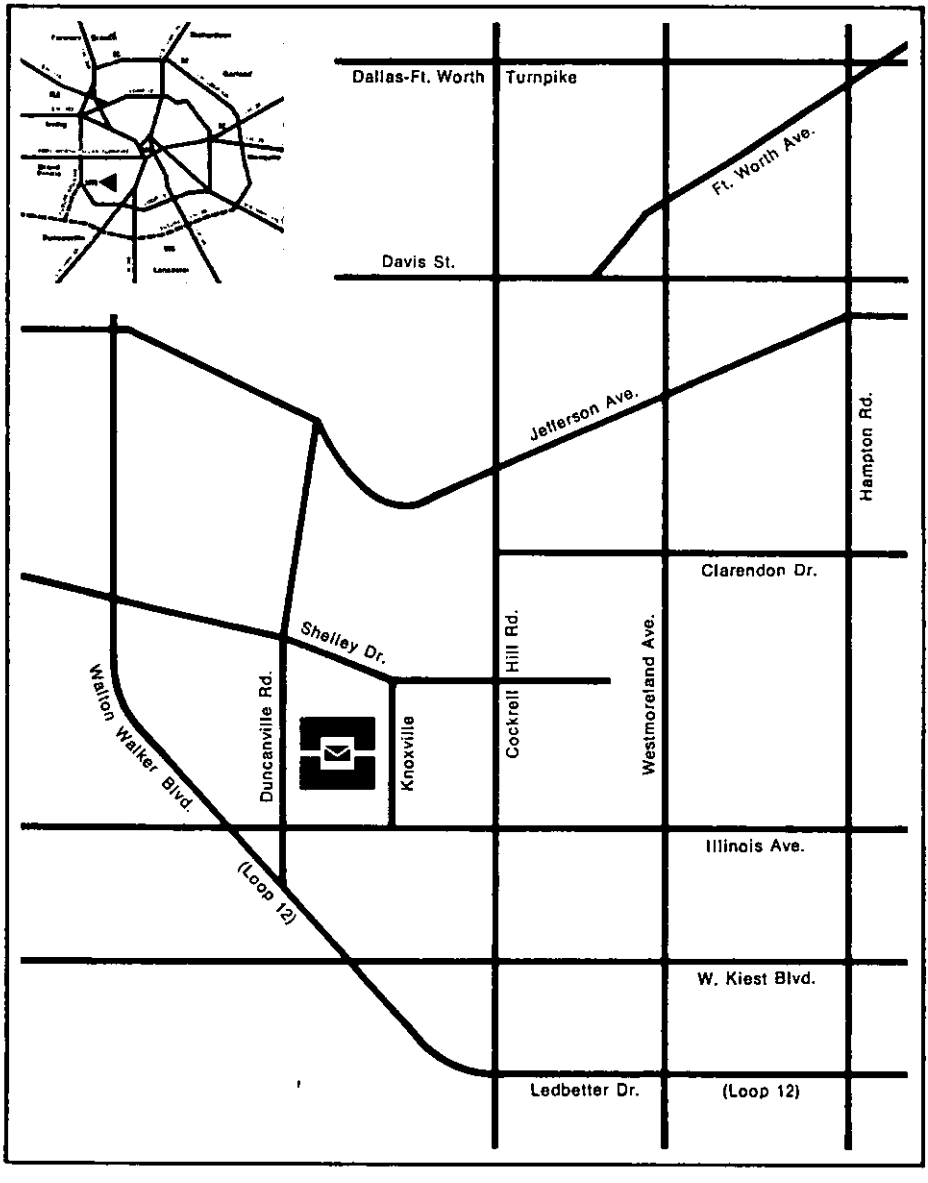
EC — Eastfield College

▶MVC — Mountain View College

ECC — El Centro College

CVC — Cedar Valley College

LOCATION



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