All blank pages have been removed from this document.
The official seal of Eastfield College is a square, representing the shape of Dallas County, with a central symbol incorporating the architectural flavor of Eastfield's distinctive village-type design into the letters "E" and "C". The lower portion of the square is earth brown, depicting the land and fields. The upper portion is golden-orange, as the morning sun might appear on the Eastern horizon.

Design of the central symbol evolved by separating the letter "E" into individual components and corresponding each with elements of the Eastfield design — a building with pitched roof, recessed base and central courtyard. Through gradual alterations this graphic treatment of the "E" was transformed into a final simplified silhouette of the Eastfield village design.
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ACADEMIC CALENDAR, 1972-1973

Fall Semester

August 28  Faculty reports
August 29-31  Registration
September 4  Labor Day Holiday
September 5  Classes begin 8:00 a.m.
November 22  Thanksgiving Holiday begins 10:00 p.m.
November 27  Classes resume 8:00 a.m.
December 8  Last day to withdraw with a grade of "W" 8:00 p.m.
December 15  Last day of classes
December 18-22  Final Examinations
December 22  Semester closes 5:00 p.m.

Spring Semester

January 3  Faculty reports
January 9-11  Registration
January 15  Classes begin 8:00 a.m.
April 13  Spring break begins 5:00 p.m.
April 23  Classes resume 8:00 a.m.
May 4  Last day to withdraw with a grade of "W" 8:00 p.m.
May 14-18  Final examinations
May 18  Semester closes 5:00 p.m.

A summer session will be held at Eastfield College. Application and administration information can be obtained from the Admissions Office in the spring of 1973.

The academic calendar may be subject to change or modification.
ADMINISTRATIVE STAFF

Eastfield College

President
Byron N. McClennen

Dean of Instruction
Arthur R. Southerland

Dean of Student Services
Norbert R. Dettmann

Associate Dean of Evening Administration
Robert W. Shofner

Associate Dean of Technical and Occupational Programs
Virginia Dobbs

Associate Dean of Administrative Services
Thomas J. Rector

Assistant Dean of Instructional Development and Director of Learning Resources
Bill F. Tucker

Assistant Dean of Community Service Programs
Jerry Cooper

Administrative Assistant
Don C. Yeager

Public Information Assistant
Jean Walke

Director of Student Development
Jacquelyn Moe

Director of Counseling
Marvin Arkovich

Director of Admissions and Registrar
Wilbur Dennis

Director of Financial Aids and Placement
Fred Scott

Director of Health Services
Barbara Stacy

Dallas County Community College District

Chancellor
Bill J. Priest

Vice-Chancellor of Academic Affairs
R. Jan LeCroy

Vice-Chancellor of Business Affairs
Walter L. Pike

Director of Planning and Research
Gary A. James

Director of Special Services and Government Relations
Robert J. Leo

District Director of Public Information
Sibyl Hamilton

Director of Computer Services
James R. Hill

Director of Program Development
Dexter Betts

Director of Personnel
Robert Boyle
Eastfield College seems to rise ominously from a broad, open field, giving the approaching student time to reflect on his first reaction to the stark white walls and erratically-pitched rooflines.

It seems to have no front entrance; more than that, it refuses to be aimed in any given direction, preferring to wait until its visitor steps from his car and moves inside its tall, narrow openings, into its graceful inner courtyards and terraces.

Once inside, the visitor senses that a protective cover has been thrown up around him, providing him with time and space and calmness in which to study, to think, to grow.

The architects were successful; they took that wide expanse of nothing and created in it an educational village for people who believe that brick and mortar are compatible with human habitation. They gave it closeness and concentration; they opened it up at just the right corners, providing expansive looks at sky, skyline and earth.

But there the architects ended their work. The job from there shifted to staffing. The far-sightedness of the District leaders had already provided the nucleus, and those men were challenged to match the creativity of the designers and builders of the physical surroundings.

These members of the nucleus felt that Eastfield could be different, and they worked diligently to design, to construct a faculty with traits that would meet these unique qualifications:

to give of one’s self, one must be willing to open up completely, ignoring the inherent dangers to personal security in such a situation;
to work effectively with other people, a person must possess a genuine belief and respect for the dignity, humanness, equality and worth of every person;
he must believe strongly that in every person there is the inherent capability, potential and talent which need only development and leadership;
for each individual to feel comfortable in his surroundings, he must know that he and his concerns are placed above those of machines and traditions, and that he is free to express himself, to grow to his full potential without fear of repression.

They put it all together, and it worked. Eastfield opened in the fall of 1970 with 3,500 people, and they spread the word. By spring, 1972, the enrollment totals almost reached 6,000.

The concern now is for preserving the openness and freedom, for maintaining the excellence in all areas of the College’s life, recognizing that uniqueness which is Eastfield’s and building on it for the future.

History of Dallas County Community College District

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 everchanging educational requirements of a growing metropolitan community.

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

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

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

There is, simply stated, a place for everyone.

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.

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

Therefore, competent, intensive initial and continuing counseling and guidance is offered every student to 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 for 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 student wishing to enter an occupation at a level above the bottom rung of the ladder, the colleges offer one-year and two-year programs of credit courses covering specific technical occupational fields.

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

for the person who simply wants to make life a little more interesting, 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 remarkable facilities and excellent faculties combine with the district's unique but 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.

Accreditation

The Dallas County Community College District is a full member of the American Association of Community and Junior Colleges and is recognized and sanctioned by the Coordinating Board of The Texas College and University System. Eastfield College has been granted candidate status by the Southern Association of Colleges and Schools, the final 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 Programs

In a vigorous, growing community such as that in which Eastfield College is located, people are involved in things and in events which bring forth the need for gaining and developing knowledge and skills in a wide range of subject areas. The things and events with which Eastfield's neighbors are concerned often occupy much of their time in the day.

In an effort to serve this busy community, the college offers a broad spectrum of educational programs in the evening. So, students who work or who have other obligations during the day may enroll in one or more courses in the evening programs.

It may be that the student desires to renew old skills or to acquire new ones. In the evening 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, and college transfer and technical-occupational programs of two years or less. The direction the student takes will be determined by his goals. As a comprehensive community college, however, Eastfield 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 he, with the help of qualified counselors, can draw a personalized blueprint for himself 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 College are selected from Eastfield's full-time staff and from among outstanding Dallas area educators and other professional specialists who are interested in teaching people enrolled in the rewarding enterprise of continuing education.

To enroll in college transfer and/or technical-occupational programs, call or write the Director of Admissions for an application of admission.

Community Service Programs

The Community Service Division of Eastfield College brings to the community programs for continuing education, personal entertainment, recreation, and cultural and community enrichment. Specifically, they are designed to provide opportunities to increase personal proficiency in particular skills or professions and for personal enrichment through planned cultural and recreational studies.

Instructors for Community Service programs are leading professional men and women, Eastfield College faculty members, and other
educators who bring to our community exciting learning opportunities, regardless of the student's age or previous educational experience.

Community Service programs are non-credit courses. There are no entrance requirements. Classes are offered both on and off campus during daytime and evening hours. 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 skills
- supervision
- public speaking
- problem solving
- communications
- photography
- auto mechanics
- music
- air conditioning
- pottery
- real estate
- physical fitness
- golf
- tennis
- archery
- ballet
- languages
- oil painting
- floral arrangement
- interior decoration

Special courses can be designed to meet the needs of individuals, groups, and organizations. For additional information about Community Service Programs, contact the Community Service Office, 746-3114.
Application Dates and Information

A student should complete the admissions requirements at the earliest date if he expects to receive adequate counseling and schedule planning. If the admissions data are not complete by the following dates, a student should not expect to receive a suitable class schedule:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall, 1972</th>
<th>July 15, 1972</th>
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<td>November 1, 1972</td>
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<tr>
<td></td>
<td>Summer, 1973</td>
<td>April 1, 1973</td>
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</table>

A notice for the Admissions Office stating that a student's admissions data are complete only qualifies a student to be admitted to registration; it does not guarantee a student that classes will be available.

Standards of Conduct

All students at Eastfield College are considered adults and are responsible for their own behavior. All students are expected to conform to all local, state and federal laws and all duly constituted college standards of conduct. These standards appear in The Informer which may be obtained from the Office of Student Development.

Eligibility for Admission

A student enrolling in college for the first time will be considered for admission if he is:

1. A graduate from an accredited high school.
2. A graduate from an unaccredited high school and is admitted by the Committee on Admissions and Retention.
3. A non-high school graduate who is eighteen years of age and whose high school class has graduated.
4. 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.

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

Students on scholastic or disciplinary suspension from another institution must apply to the Committee on Admissions and Retention. Petitions are available in the Admissions Office.
Former students of El Centro College or Mountain View College must submit an application for re-admission to Eastfield College.

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

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

Admission Procedures

Full-Time Applicants:

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

1. Application for Admission
2. Official Transcript from the last school attended (high school or college)
   College transfer students who are seeking a certificate or associate degree are required to submit transcripts of all previous college work prior to the end of the first semester.
3. Results of the American College Testing Program (ACT)
   The results of the ACT are used for counseling and placement. College transfer applicants who have earned at least 6 units of college credit with an average grade of "C" or above are exempt from this requirement. District colleges may substitute other standard testing scores for placement purposes.
   Students entering with composite ACT scores of 11 or below will be encouraged to enroll in the Developmental Studies Program. Individual decisions will, however, be made in conference with a counselor.
   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 number for Eastfield College is 4085.

Full-time applicants are required to complete the medical form in its entirety. This form is included in the admissions packet and should be returned by mail or in person directly to the Office of Admissions. Written proof from a medical office is required on the following:

1. A negative tuberculin skin test or chest X-ray.
2. Polio immunization if the applicant is under 19 years of age.
3. Diphtheria/Tetanus injection within the last ten years.

Part-Time Applicants (less than 12 semester units):

1. Application for admission
2. Official transcript from the last school attended (high school or college)

College transfer students who are seeking a certificate or associate degree are required to submit transcripts of all previous college work prior to the end of the first semester.

3. Medical Form

Part-time applicants are required to complete the health history report only. This form is included in the admission packet and should be returned by mail or in person directly to the Office of Admissions. Written proof from a medical office is also required on the following:

a. A negative tuberculin skin test or chest X-ray.

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

c. Diphtheria/Tetanus injection within the last ten years.

Transfer Credit

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

Students who are admitted with a grade point deficiency will not be graduated from Eastfield College until deficiency hours are cleared by means of earning additional grade points.

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

Student Diversity

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

Foreign Students

Eastfield 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.

Housing

Eastfield College does not operate dormitories of any kind nor maintain listing of available housing for students. Students who do not reside in the area must make their own arrangements for housing.
**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.

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 twelve (12) months immediately preceding the date of registration.

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

<table>
<thead>
<tr>
<th>Semester Cr. Hrs.</th>
<th>In-District Tuition Fees Total</th>
<th>Other Texas Counties Tuition Fees Total</th>
<th>Out-of-State Tuition Fees Total</th>
<th>Out-of-Country Tuition Fees Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<tr>
<td>19</td>
<td>96</td>
<td>236</td>
<td>760</td>
<td>760</td>
</tr>
<tr>
<td>20</td>
<td>100</td>
<td>240</td>
<td>800</td>
<td>800</td>
</tr>
</tbody>
</table>

**General Fees:**

- 6 - 11 Semester Credit Hours — $4
- 12 - Semester Credit Hours — $7
### SUMMER TUITION

#### In-District

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Fee Structure</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 6</td>
<td>$10. per credit hour, with minimum of $25.</td>
<td>1 cr. hr. = $25. plus any special fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 cr. hrs. = $30. plus any special fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 cr. hrs. = $60. plus any special fees</td>
</tr>
<tr>
<td>7 or more</td>
<td>$60. plus $4. per cr. hr. over 6.</td>
<td>7 cr. hrs. = $60. plus $4. = $64. plus any special fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 cr. hrs. = $60. plus $8 = $68. plus any special fees</td>
</tr>
</tbody>
</table>

#### Out-of-District

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Fee Structure</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 6</td>
<td>$30. per credit hour</td>
<td>1 cr. hr. = $30. plus any special fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 cr. hrs. = $180. plus any special fees</td>
</tr>
<tr>
<td>7 or more</td>
<td>$180. plus $4. per cr. hr. over 6.</td>
<td>7 cr. hrs. = $180. plus $4. = $184. plus any special fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 cr. hrs. = $180. plus $8 = $188. plus any special fees</td>
</tr>
</tbody>
</table>

#### Out-of-State

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Fee Structure</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 6</td>
<td>$45. per credit hour</td>
<td>2 cr. hrs. = $90. plus any special fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 cr. hrs. = $270. plus any special fees</td>
</tr>
<tr>
<td>7 or more</td>
<td>$270. plus $40. per credit hour over 6.</td>
<td>7 cr. hrs. = $270. plus $40. = $310. plus any special fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 cr. hrs. = $270. plus $80. = $350. plus any special fees</td>
</tr>
</tbody>
</table>

#### Out-of-Country

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Fee Structure</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 6</td>
<td>$45. per credit hour, with a minimum of $100.</td>
<td>1 cr. hr. = $100. plus any special fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 cr. hrs. = $135. plus any special fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 cr. hrs. = $270. plus any special fees</td>
</tr>
<tr>
<td>7 or more</td>
<td>$270. plus $40. per credit hour over 6.</td>
<td>7 cr. hrs. = $270. plus $40. = $310. plus any special fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 cr. hrs. = $270. plus $80. = $350. plus any special fees</td>
</tr>
</tbody>
</table>

20
### Special Fees and Charges

<table>
<thead>
<tr>
<th>Fee</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Fee (per lab)</td>
<td>$2 to $8 a semester</td>
</tr>
<tr>
<td>Physical Education Activity Fee</td>
<td>$5 a semester</td>
</tr>
<tr>
<td>Bowling Class Fee</td>
<td>$10 a semester</td>
</tr>
<tr>
<td>Private Music Lessons Fee*</td>
<td>$35 for 1 hour per week (maximum for one course)</td>
</tr>
<tr>
<td></td>
<td>$20 for 1/2 hour per week</td>
</tr>
<tr>
<td>*Available only to music majors enrolled for 12 hours or more.</td>
<td></td>
</tr>
<tr>
<td>Audit Fee</td>
<td>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.</td>
</tr>
<tr>
<td>Credit by Examination</td>
<td>Examination fee of $12 per examination</td>
</tr>
</tbody>
</table>

### 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 his cap and gown.

### Refund Policy

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

1. No 100% refund is granted unless college error is involved.
2. An 80% refund of tuition and fees is granted during the first week of classes of a long semester. (The first two days of a six-week summer session are considered to be equivalent to one week during a long semester.)
3. No refund will be made after the first week of classes.

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

Refund checks normally require a minimum of one month to process.
Scholastic Standards: Grades and Grade Point Average

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Interpretation</th>
<th>Grade Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4 Points</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3 Points</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2 Points</td>
</tr>
<tr>
<td>D</td>
<td>Poor</td>
<td>1 Point</td>
</tr>
<tr>
<td>P</td>
<td>Progress</td>
<td>Not Computed</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0 Points</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>Not Computed</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn</td>
<td>Not Computed</td>
</tr>
</tbody>
</table>

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

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 be converted to a "W" grade if the student has failed to complete the course requirements.

Grade Reports

Grade reports are issued to each student at the end of each semester. Grades will be sent to the student's address listed in the Office of the Registrar.

Degree Requirements

Associate in Arts and Associate in Science Degrees

A total of 60 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 hours minimum.

These 60 hours may be earned at any Dallas County Community College District college and must include:
English 101-102, plus an additional 6 hours of English 12 Hours

A minimum of 6 semester hours of a laboratory science. (Music majors are exempt from this requirement. Check listings under subject field.) 6 Hours

History 101-102 and Government 201-202 (No substitutions allowed) 12 Hours

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

In addition to the course requirements, each degree candidate must earn the last 15 hours as a resident student in the district colleges or accrue 45 hours in residence. The degree will be granted by the college in which the student took the last 15 hours or where the majority of hours were accrued. No more than \( \frac{1}{4} \) of the work required for any degree or certificate may be taken by correspondence. Correspondence work submitted for graduation credit must be approved by the Director of Admissions.

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.

The student is urged to consult the catalog of the institutions to which he may transfer for their special requirement. 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 and Associate in Applied Science Degrees

A minimum of 60 hours, excluding 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 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 one degree may be earned.

Procedure for Filing Degree and Certificate Plans

The student should request a degree plan from the Registrar's Office at the end of his first semester.
A student following a one-year certificate program should request an official plan during his first semester.

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

Graduation Ceremony

An annual graduation ceremony will be held at the conclusion of the spring semester. Students who have degree plans filed in the Office of the Registrar and who anticipate completion of the degree requirements by the end of the summer session are eligible to participate in the spring ceremony.

Application for a diploma and participation in the graduation ceremony must be made in the Registrar's Office prior to the deadline announced by the Registrar in the college newspaper.

A graduate is not required to participate in the ceremony to receive a diploma.

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 he is absent from a class.

Instructors are required to report students for excessive absences. Generally, first excessive absence reports are made when a student is absent from class the number of hours for which the class has credit. 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 Registrar 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.

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 Class Schedule

Extreme care should be exercised in the registration process. A student should schedule only those courses for the days and hours he knowingly is able to attend. Once course cards are computerized, only the following changes are permitted:

1. During the first two days of a regular semester a student may add classes which have openings. A student may not add and drop classes at the same time. Decisions regarding requests will be made by the Dean of Students.

2. During the last three days of the first week of classes the division chairmen may authorize class changes for students who have been incorrectly placed. Permission for any other changes must be obtained from the Dean of Students.

The change action is not completed until it has been processed by the Registrar.

Dropping a Course or Withdrawal from College

A student must drop a class or withdraw from college by completing a drop form. The form may be obtained in the Registrar’s or Counseling Office.

Should circumstances prevent a student from appearing in person to withdraw from college, he may withdraw by mail by writing to the Registrar. No drop or withdrawal requests are accepted by telephone.

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

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

Auditing a Course

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

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

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

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

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

Classification of Students

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

Definition of Acceptable Scholastic Performance

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

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

Scholastic Probation and Scholastic Suspension

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

The following criteria will be used to determine academic standing:
1. Students who have completed one or more semesters in a college will be placed on probation if they fail to maintain a 2.0 cumulative grade point average.

2. Students who have been placed on scholastic probation may be removed from probation when they earn a 2.0 cumulative grade point average.

3. Students on scholastic probation who achieve either a cumulative grade point average of 1.5 or above or the previous semester grade point average of 2.0 or above shall continue on scholastic probation.

4. Students on probation who do not meet the requirements of paragraph three 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.

An appeal of suspension may be made to the Admissions and Retention Committee. Petitions are available in the Office of the Registrar.

Transcripts of Credit from Eastfield College

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

Library Obligations

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

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

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 Eastfield College.

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 three or four 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 the Registrar who will provide the necessary petition forms and advise the student of the procedure. A student, whether part-time or full-time, will pay an examination fee of $12 per examination. There is no refund of this fee in case of failure to establish credit.

Only after the student has completed 12 semester hours credit in residency will the semester hours earned through examination become a part of the student's permanent record. Students planning to graduate under minimum residency requirements may not use credit by examination to establish residency. For further information concerning graduation requirements, consult the Degree Requirements in this catalog.
Counseling

Eastfield College's professional counselors are available to devote personal attention to everyone at the College. Office hours are 8:30 a.m. to 8:30 p.m. Monday through Thursday, and 8:30 a.m. to 4:30 p.m. Friday. Appointments may be scheduled by calling 746-3106 or by stopping at the counseling office (Campus Center second floor).

You will find the counseling services helpful, especially as you make plans and decisions in various phases of life, such as choosing or changing your vocation; gaining more independence; dating and marriage; or choosing areas of study. Confidential assistance is provided by the Eastfield Counseling Staff in any of the following areas:

Career Counseling — regarding possible vocational directions for you to explore, occupational information, or self-appraisals pertaining to job stability.

Personal-Social Counseling — regarding your adjustment within the college community, your relating to instructors or to other people, drug matters, marriage counseling, or any other concerns which interfere with your personal development.

Academic Advisement — regarding appropriate course choice, study habits, remedial work, or transferring to another college. Trained Student Personnel Aides also assist the counselors in this function.

Small Group Discussions — regarding matters of concern to you in areas where group feedback, with a counselor's participation, can be helpful. Confidential RAP groups are available as space permits.

Testing — to provide additional standardized testing information about yourself when called for in your planning or decision making.

Referral — to provide in-depth assistance if necessary for such matters as financial aid, tutoring, job placement and medical or psychiatric problems.

Because Eastfield is a community-centered college, we also provide counseling services to residents who are not yet enrolled. The following are examples of Counseling Community Services which may be offered, consistent with the needs of our student population:

Consultation regarding the decision of whether or not to enter college.

Consultation regarding possible course selections for vocational advancement or for personal enrichment.

Consultation with area high schools regarding their students' enrolling at Eastfield College.

Consultation for persons desiring to discover and develop their hidden talents.
Group discussions of a subject centered nature for parents interested in their children's development; married couples interested in learning to enrich the communication between themselves; mature people considering return to the classroom after many years absence; military veterans returning to civilian life.

Financial Aids

The Financial Aids Program at Eastfield College is designed to function as a multi-purpose financial assistance service for students. One objective is to provide assistance to students who without such aid would be unable to attend college. Basic to our philosophy is the belief that the educational opportunities of able students should not be controlled by their financial resources.

Three deadlines have been established for consideration of applications for aid during the 1972-1973 academic year: June 15, July 15, August 15. Applications received after the August deadline will be considered on a first come, first served basis, providing funds are still available. Special consideration will be given to students with greatest financial need among all applications at each deadline.

Loans

Hinson-Hazlewood College Student Loan This is a federally insured student loan which was formerly referred to and in many cases still called the "T.O.P. Loan." This loan program was established by the Coordinating Board of Texas in 1966. Any resident of the State of Texas may be eligible. A maximum loan of $1,500 each academic year for five years may be granted with repayment beginning nine months after termination or completion of course work. Minimum repayment of a loan is $30 per month (depending on the amount borrowed) at 7% interest. The student borrower has a maximum of ten years to repay the loan. The student must apply each academic year for renewal of the loan.

Eastfield College Short Term Loan A limited amount of funds are available for students who need financial assistance to register for classes. The amount of these loans varies between $25 and $75. The loan must be repaid during the semester for which it is borrowed. There is no interest charged on these loans.

Dye Foundation A limited amount of funds are available for assistance in buying educational materials. Loans for this purpose will vary depending upon the need factor and costs of materials. The loan must be repaid during the current semester the loan is made. There are no interest charges.

Sears Foundation These funds are designated for students in Mid-Management Programs. A limited amount of funds are available for
financial assistance in educational costs. The loan must be repaid during the semester for which it is borrowed. There is no interest charged on this loan.

Grants

*Eastfield College Institutional Scholarship*  The 1970 Texas Legislature passed a bill providing financial assistance for eligible county residents attending state supported colleges. There are a limited amount of funds available. To be eligible, a student must be a county resident, demonstrate a financial need, be a full-time student, and be progressing satisfactorily toward his educational goal. Scholarships are awarded by eligibility on a first come, first served basis. The amount of the scholarship will vary from $50 to $500. Students must apply each academic year for the Institutional Scholarship.

*Educational Opportunity Grant*  This program is authorized under the Higher Education Act of 1965 and is designed to assist students with exceptional financial need. To be eligible, a student must demonstrate financial need, be a full-time student, and must be making satisfactory progress toward the completion of his educational goal. The amount of the grants varies from a minimum of $200 to a maximum of $1,000 per academic year. Students must apply each academic year for the Educational Opportunity Grant.

Student Employment

*College Work-Study Program*  This student aid program was established by the Economic Act of 1964. To be eligible for the College Work-Study Program, a student must demonstrate financial need, be a full-time student, and be making satisfactory progress toward his educational goal. Eligible students may work up to a maximum of 15 hours per week during the academic year. Jobs are available for eligible students to work both on and off campus under the College Work-Study Program.

*Eastfield College Student Employment Program*  A limited number of jobs are available on campus to students who are not eligible for the College Work-Study Program. Students employed in this program must be full-time and making satisfactory progress toward their educational goal. Students may work a maximum of 15 hours per week. The rate of pay for all student employees working on campus is $1.60 per hour.

*Summer Student Employment for Eastfield College Students*  Eastfield College will have a limited number of jobs available for students who qualify both on and off campus. Applications will be accepted for summer employment beginning April 15, 1973. Students must be planning to attend Eastfield College on a full-time basis during the academic year 1972-1973.
Federal and State Programs

Veteran's Benefits The Veteran's Benefits Program for eligible students is coordinated in the office of Admissions and Records. Veterans of the Korean War, the Cold War, and the War in Southeast Asia who are interested in more details should contact the Admissions Office or the local Veterans Administration Benefits Office.

Veteran's Vocational Rehabilitation Benefits are available to veterans who meet the criteria set up by the Veterans Administration. The Financial Aids and Placement Office acts as liaison between Eastfield College students and the Vocational Rehabilitation Office or the local Veterans Administration Benefits Office.

Social Security Administration Benefits under this program are available to students who meet the criteria set up by the Social Security Administration. The Financial Aids and Placement Office acts as liaison between Eastfield College students and the Social Security Administration.

Vocational Rehabilitation—State The Texas Education Agency, through its Vocational Rehabilitation Division offers assistance for tuition and fees to students who are vocationally handicapped as a result of a physical disability. For further information, contact Vocational Rehabilitation, 3115 Swiss Ave., Dallas, Texas. Telephone: 528-8550.

Hazelwood Act Veterans of World War I, World War II, Korean War, and Spanish-American War 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. The Hazelwood Act provides for the waiver of tuition.

Requests for information should be directed to the Office of Financial Aids and Placement Eastfield College, 3737 Motley Drive, Mesquite, Texas 75149. Telephone: 746-3188.

Student Development

Student Development is that coordinating division dealing with student co-curriculum needs and involvement; especially cultural and experiential development. The main purpose of student development is to encourage unity of the student in his relationship with himself, in his relationship with fellow students, and a better understanding of the concept of the total impact of his college career. Several programs fulfill this purpose.

The Creative Curriculum College — a broad based, experimental organization designed to allow students to produce non-accredited programs related to curriculum development and expansion and to allow students the opportunity of creating special interests groups of their choosing.
Social Development — an area of concern relating to the student’s socialization needs. This area includes all entertainment programs as well as the opportunity for the student to participate in the planning and execution of these events.

Clubs and Organizations — designed to complement the routine of the community college student, clubs and organizations offer the student an opportunity to become a member of a small group of people whose goals are to socialize together and to aid the college in a service capacity. Among the types of organizations established are; men's and women's service/social clubs, religious organizations and special interest clubs.

Student Association — composed of four elected student officials and student/faculty committees whose purpose is to participate in the planning and operation of Eastfield College.

Student Leadership Development Program — designed to provide the student with workshop experience in the development of his leadership potential.

Varsity Athletics

Eastfield College is a member of the Metro Athletic Conference. This conference consists of those schools in the Dallas County Community College District and any other institutions accepted by the governing body of the conference.

The purpose of the program is to provide an opportunity for those students with unique and highly advanced skills to improve and exhibit these skills. Recruitment regulations will insure that no students are recruited because of their athletic ability and no financial aid grants will be based on athletic ability. Eligibility requirements reflect the policy of providing an opportunity for students to compete without overemphasis on athletics. Rules concerning eligibility are the following:

1. Participants must be paying "in district" tuition
2. Participants must be registered as full-time students (12 hours or more)
3. Participants must not be on disciplinary probation
4. Participants must have passed a minimum of ten credit hours and/or be eligible to remain in school according to policies set forth in the college catalog
5. Transfer students shall be eligible the first semester providing other eligibility rules are met.

Other eligibility standards and further information on the varsity athletic program can be obtained by calling the Physical Education Division.
### COURSES BY DIVISIONS

#### Business Division
- Accounting
- Bookkeeping
- Computer Science
- Directed Studies
- Economics
- General Business
- Mid-Management
- Secretarial
- Transportation

#### Communications Division
- Communications
- Directed Studies
- English
- French
- German
- Journalism
- Photography
- Spanish
- Speech

#### Developmental Studies Division
- Child Development
- Developmental Mathematics
- Developmental Reading
- Developmental Writing
- Directed Studies
- Human Development
- Reading
- Services for the Deaf

#### Humanities Division
- Art
- Directed Studies
- Humanities

#### Physical Education Division
- Directed Studies
- Physical Education
- Physical Education Activity
- Recreation

#### Science and Mathematics Division
- Air Conditioning and Refrigeration
- Auto Body
- Automotive Technology
- Biology
- Chemistry
- Diesel Mechanics
- Digital Electronics Technology
- Directed Studies
- Drafting
- Earth Science
- Engineering
- Geography
- Geology
- Graphic Arts
- Mathematics
- Physics

#### Social Science Division
- Anthropology
- Directed Studies
- Government
- History
- Psychology
- Religion
- Social Science
- Sociology
Accounting (See Business 201, 202)

Advertising and Sales Promotion (See Business 233)

Air Conditioning and Refrigeration 135 (5) 4 hrs. Lec. 7 hrs. Lab
Principles of Refrigeration and Domestic Refrigeration Systems

Basic refrigeration cycles, their components, and theories of operation are covered during the first portion of this course, with the remainder consisting of a thorough study of domestic refrigeration systems, such as refrigerators, freezers, and window air conditioners.

Air Conditioning and Refrigeration 136 (4) 3 hrs. Lec. 6 hrs. Lab
Fundamentals of Electricity

Starting with electron theory, this course includes DC and AC circuits, motors, generators, and power distribution systems. All of the material covered will be as it relates to the refrigeration and air conditioning industry.

Air Conditioning and Refrigeration 137 (5) 4 hrs. Lec. 7 hrs. Lab
Electrical Circuits and Controls

Prerequisite: Air Conditioning and Refrigeration 135 and 136.
A study of electrical power circuits, control circuits, wiring devices, and schematic wiring diagrams. Also a very large emphasis upon trouble shooting electrical problems within electrical systems.

Air Conditioning and Refrigeration 138 (4) 3 hrs. Lec. 6 hrs. Lab
Commercial Refrigeration Systems

Prerequisite: Air Conditioning and Refrigeration 135 and 136.
Refrigeration equipment used at any level of marketing or merchandising products, such as restaurant or supermarket equipment is included in the commercial refrigeration field. The primary objective of this course will be for the student to gain the knowledge and skills necessary to install and service commercial refrigeration systems.

Air Conditioning and Refrigeration 235 (5) 4 hrs. Lec. 7 hrs. Lab
Air Conditioning Systems (Cooling)

Prerequisite: Air Conditioning and Refrigeration 137 and 138.
Residential, central and small commercial air conditioning systems are the areas of study for this course. Psychometrics, heat transfer, air distribution, methods of control, and a familiarization with specific equipment of various manufacturers will be included.
COURSES BY ALPHABETICAL LISTING

Air Conditioning and Refrigeration 236  (4)  3 hrs. Lec. 6 hrs. Lab
Air Conditioning Systems (Heating)

Prerequisite: Air Conditioning and Refrigeration 137 and 138. This course will give the student the necessary knowledge and skills for installing and servicing gas fired, electric, and reverse cycle air conditioning heating systems on residential and small commercial applications.

Air Conditioning and Refrigeration 237  (5)  4 hrs. Lec. 7 hrs. Lab
Advanced Air Conditioning Systems
(Heating and Cooling)

Prerequisite: Air Conditioning and Refrigeration 235 and 236. Large commercial air conditioning cooling and heating systems such as those used in high rise office buildings are studied in this course; the objective being to acquaint the student with large tonnage equipment in order that he can understand the operation, proper maintenance, and service of these systems.

Air Conditioning and Refrigeration 238  (4)  3 hrs. Lec. 6 hrs. Lab
Air Conditioning System Design

Prerequisite: Air Conditioning and Refrigeration 235 and 236. Methods of heat loss and heat gain calculation, equipment selection, duct sizing and layout, will be taught in this course. Also the student will be given a residential structural blueprint and required to design an air conditioning system for the home and make an estimate of the total cost including equipment of such an installation.

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.

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

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.
COURSES BY ALPHABETICAL LISTING

Art 105-106 Survey of Art History (3) 3 hrs. Lec. (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 covers the Baroque through the present). Relates the thoughts behind each historical period to the visual concepts embodied in individual works of art of that 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 Basic Drawing I (3) 2 hrs. Lec. 4 hrs. Lab

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 115 Basic Drawing II (3) 2 hrs. Lec. 4 hrs. Lab

Prerequisite: Art 114. A continuation of Art 114.

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

Prerequisite: Art 110, Art 114, sophomore standing and/or permission of the Humanities chairman. Analytic and expressive drawing of the human figure, stressing study of movement and volume.
COURSES BY ALPHABETICAL LISTING

Art 202  Life Drawing II  (3)  2 hrs. Lec.  4 hrs. Lab

Prerequisite: Art 110, Art 114, Art 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

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

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

Prerequisite: Art 110, Art 114, Art 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

Prerequisite: Art 110, Art 111, Art 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

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

Art 210  Commercial Art I  (3)  2 hrs. Lec.  4 hrs. Lab

An introduction to the working world of commercial art with emphasis on the acquisition of professional attitudes and basic studio skills through the working out of typical commercial assignments.

Art 211  Commercial Art II  (3)  2 hrs. Lec.  4 hrs. Lab

A continuation of Art 210 with added emphasis on layout and design concepts through increased individual assignments, work with simple art for reproduction techniques, and the development of a professional portfolio.
Art 215  Ceramics I (3)  2 hrs. Lec.  
        4 hrs. Lab

Building of pottery forms by coil, slab and use of wheel; glazing and firing.

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

Prerequisite: Art 111, Art 215, 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, Art 111, and Art 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.

Auto Body 131  Basic Metal and Paint Principles (5)  1 hr. Lec.  
               9 hrs. Lab

Skill in the use of tools, equipment, and materials of the body shop is taught. Basic metal preparation and painting, the skills of primer applications, mixing colors, and spray gun usage are emphasized.

Auto Body 132  Minor Metal and Paint Repair (5)  1 hr. Lec.  
               9 hrs. Lab

Students develop skills in the use of metal grinders, filling with lead or plastic. Metal preparation, sanding, masking, and painting surfaces on minor damaged areas of automobiles are emphasized.

Auto Body 133  Major Metal Repair (5)  1 hr. Lec.  
               9 hrs. Lab

Skill in the repair, alignment, and fitting of major panels is taught in this unit. The student moves into the area of major collision repair. The student learns the procedures for removing trim sections, glass, and frame, hard trim, and lock mechanisms.
Auto Body 134 Major Collision Repair and Estimates (5) 1 hr. Lec. 9 hrs. Lab

The student replaces or repairs major sections of the automobile. He also develops skill in frame alignment, cross member replacement, and body alignment. Students are taught to make collision repair estimates on material and labor.

Auto Body 135 Metals Processing (3) 1 hr. Lec. 4 hrs. Lab

Methods of welding, designing, bending, and arranging of metals will be emphasized in this unit.

Auto Body 150 Auto Body Practicum (6) 2 hrs. Lec. (Offered in summer only. Class meets 42 hours 12 hrs. Lab per week for six weeks.)

Prerequisite: Auto Body 131, 132, 133, 134, 135 or consent of the instructor. This unit of instruction constitutes an accelerated work-study course representing industry conditions in which the student will improve speed and skill in one or all facets of the Auto Body program. Areas of concentrated specialization available include painting, metal repair and replacement, frame straightening and replacement, and glass installation.

Automotive Technology 131 Automotive Principles (5) 2 hrs. Lec. 6 hrs. Lab

The basics of automotive technology will be introduced in this course. Introductory lecture and laboratory experiences will be given on repair and maintenance of automotive electrical and fuel systems. The basic repair and test equipment will be the training instruments for this course.

Automotive Technology 132 Automotive Engines (6) 3 hrs. Lec. 9 hrs. Lab

The basic theory and operating principles of the automotive internal combustion engine will be studied. Theory and laboratory experiences will be provided in the repairing and rebuilding of the gasoline engine. The use of precision measuring instruments and other tools required to repair, adjust, and test automotive engines is presented.
COURSES BY ALPHABETICAL LISTING

Automotive Technology 133 Electrical Systems (5) 2 hrs. Lec. 6 hrs. Lab

This course is a continuation of Automotive Technology 131 and will complete the study of the carburetion, ignition, related electrical systems of the automobile. Modern diagnostic and test equipment including the dynamometer will be utilized.

Automotive Technology 134 Auto Air Conditioning (5) 2 hrs. Lec. 6 hrs. Lab

The principles and fundamentals of air conditioning and heating are treated as they relate to the automotive air-conditioning system. Installation, maintenance, and service of compressors, condensers, evaporators, and related components are covered.

Automotive Technology 135 Drive Lines and Differential (5) 2 hrs. Lec. 4 hrs. Lab

The automotive drive train, exclusive of the automatic transmission, is taught through theory and laboratory experiences. Attention is given to all aspects of service and rebuilding of standard transmissions, clutches and differentials.

Automotive Technology 231 Automatic Transmissions (6) 3 hrs. Lec. 9 hrs. Lab

In this unit of study, the operating principles, service and rebuilding of the automotive automatic transmission are taught. Included are torque converters, servos, control valve assemblies and the use of special service tools. All American made automatic transmissions are covered in this course.

Automotive Technology 232 Brakes and Front Suspensions (5) 2 hrs. Lec. 6 hrs. Lab

This unit of instruction includes brake service as applied to power brakes, drums, wheel cylinders, installation, and adjustment. Front end alignment, suspension, steering mechanisms, and wheel balancing are also included.

Automotive Technology 250 Automotive Practicum (10) 2 hrs. Lec. 24 hrs. Lab

Prerequisite: Automotive Technology 131, 132, 133, 134, 135, 231, 232 and the consent of the instructor. This course constitutes an on-the-job application of the theory and laboratory instruction received in the formal courses of the automotive technology curricula. The student will be placed in work-study position in the automotive industry that will test his skill and ability to function successfully as an automotive technician.
Automotive Technology 251 Advanced (10) 2 hrs. Lec. 24 hrs. Lab
Automotive Repair

Prerequisite: Automotive Technology 131, 132, 133, 134, 135, 231, 232 and the consent of the instructor. This course constitutes an application of the theory and laboratory instruction received in the formal courses of the automotive technology curricula. The student will work in the Eastfield College laboratory under conditions that will closely duplicate those of the industry.

Biology 101 General Biology (4) 3 hrs. Lec. 3 hrs. Lab

Prerequisite to all higher level biology courses and must be taken in sequence. Recommended for science majors. The first semester of a two semester sequence surveying in depth the principal concepts of biology, including a study of the cell, levels of organization, an introduction to metabolism, and evolutionary relationships. An introductory survey of the plant and animal kingdoms is included which emphasizes the classification and basic structure and function of the more important groups.

Biology 102 General Biology (4) 3 hrs. Lec. 3 hrs. Lab

Prerequisite: Biology 101. A continuation of Biology 101.

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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
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</thead>
<tbody>
<tr>
<td>Biology 203</td>
<td>Intermediate Botany</td>
<td>(4)</td>
<td>3</td>
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</tbody>
</table>

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

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<thead>
<tr>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Biology 211</td>
<td>Invertebrate Zoology</td>
<td>(4)</td>
<td>3</td>
<td>3</td>
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</tbody>
</table>

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

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Lecture Hours</th>
<th>Lab or Field Hours</th>
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</thead>
<tbody>
<tr>
<td>Biology 214</td>
<td>Field Biology</td>
<td>(6)</td>
<td>3</td>
<td>6</td>
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</tbody>
</table>

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

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<thead>
<tr>
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<th>Lecture Hours</th>
<th>Lab Hours</th>
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<tbody>
<tr>
<td>Biology 215</td>
<td>Human Anatomy and Physiology</td>
<td>(4)</td>
<td>3</td>
<td>3</td>
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</tbody>
</table>

**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. Recommended for science majors.

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<thead>
<tr>
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<tbody>
<tr>
<td>Biology 216</td>
<td>General Microbiology</td>
<td>(4)</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Prerequisite:** Biology 101-102. A study of microbes with emphasis on classification, growth, nutrition, metabolism, reproduction, and the genetics of micro-organisms. Recommended for science majors and science related programs.
Biology 290  Man and His Environment  (3)  3 hrs. Lec.

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

Body Shop Operations (See Business 138)

Bookkeeping (See Business 131, 132)

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 138  Body Shop Operations  (4)  3 hrs. Lec.  2 hrs. Lab

The student acquires knowledge of repair order, analysis and auditing, ratio of parts cost to labor cost, and basic bookkeeping procedures.
COURSES BY ALPHABETICAL LISTING

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

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

Business 154 The Role of Supervision (Formerly Business 152) (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 the development of management, goal setting and planning, leadership, communication and motivation as applied to the students' work experiences.

Business 155 Personnel Management (Formerly Business 153) (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 the students' 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.
### COURSES BY ALPHABETICAL LISTING

**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 used.

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

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.

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.

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.

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.
COURSES BY ALPHABETICAL LISTING

Business 180-181 Management Training (4) 20 hrs. Lab

Prerequisite: Concurrent enrollment in approved Transportation Technology Program. Supervised employment in the student's chosen transportation field. Intended to provide practical experience for students preparing for careers in transportation.

Business 182-183 Management Seminar (2) 2 hrs. Lec.

Prerequisite: Concurrent enrollment in approved Transportation Technology Program. Problem analysis and project development in a conference course for students working in the Transportation Technology Program. Business 182 will be offered first semester; Business 183 will be offered second semester.

Business 184 Introduction to Transportation (3) 3 hrs. Lec.

Provides over-all picture of transportation; includes analysis of specialized fields within the transportation industry; identifies role of transportation in modern society. Included also is transportation and the community, transportation and minority groups, determining community needs, philosophy of transportation, and the future of transportation.

Business 185 Transportation Rates and Tariffs (3) 3 hrs. Lec.

The student acquires knowledge of the rates and tariffs peculiar to the many facets of the transportation industry. Studied in this course are such items as tariff schedules, phases of tariff and classification, and technical tariffs and rates.

Business 186 Government Policies in Transportation (3) 3 hrs. Lec.

Provides students knowledge in the development of federal policy, states role, municipalities role, subsidy, taxation, and controls of transportation in the United States.

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.
COURSES BY ALPHABETICAL LISTING

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 Communications 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 237  Organizational Behavior  (3)  3 hrs. Lec.

This course endeavors to focus on the persisting human problems of administration in modern organization as they relate to the theory and methods of behavioral science.

Business 250-251  Management Training  (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 Organizational Development (Formerly Business 252) (2) 2 hrs. Lec.

Prerequisite: Business 151, 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 the student's work experiences.


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. Specific emphasis will be placed upon the application of the students' 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.
COURSES BY ALPHABETICAL LISTING

Business 280-281 Management Training (4) 20 hrs. Lab

Prerequisite: Business 180-181; concurrent enrollment in Business 282-283. Continuation of supervised employment in the student's chosen transportation field. Intended to provide increased supervisory responsibility for students preparing for careers in transportation. Business 280 will be offered first semester; Business 281 will be offered second semester.

Business 282-283 Management Seminar (2) 2 hrs. Lec.

Prerequisite: Business 182-183; concurrent enrollment in Business 280-281. Continued problem analysis and project development in a conference course for students working in the Transportation Technology Program. Business 282 will be offered first semester; Business 283 will be offered second semester.

Business 287 Transport Operations I (3) 3 hrs. Lec.

Students attain knowledge in areas such as material handling, production control, traffic and transportation procedures within industrial plants, private carrier operations and administration, exempt transportation and containerization.

Business 288 Transport Operations II (3) 3 hrs. Lec.

Prerequisite: Business 287. Students attain knowledge applicable to more details in the areas of material handling, production control, traffic and transportation procedures within industrial plants, private carrier operations and administration, exempt transportation and containerization.

Career Opportunities 101 Career Opportunities (1) 1 hr. Lec.

A study of local and national occupational trends with emphasis on the process of vocational choice. Designed to acquaint students with requirements of specific vocations and professions. Aptitude, interest, and personality inventories will be utilized and related to scholastic achievement, work experience, and occupational interests.

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

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

Chemistry 201  Organic Chemistry I  (4)  3 hrs. Lec.
4 hrs. Lab

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

Chemistry 202  Organic Chemistry II  (4)  3 hrs. Lec.
4 hrs. Lab

Prerequisite: Chemistry 201. Designed for science and science related majors, this course is a continuation of Chemistry 201. Emphasis will be given to the further development of aliphatic and aromatic systems, polyfunctional compounds including amino acids, proteins, carbohydrates, sugars, heterocyclic and related compounds. Instrumental techniques will be used to identify organic compounds.
### COURSES BY ALPHABETICAL LISTING

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Lecture Hours</th>
<th>Laboratory Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 203</td>
<td>Quantitative Analysis</td>
<td>2</td>
<td>6</td>
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<tr>
<td>Prerequisite: Chemistry 102, Math 104 or equivalent. This course includes the principles of chemistry as applied by the analytical chemist to quantitative determinations. Topics include gravimetry, oxidation-reduction, indicators, and acid-base theory. Laboratory experience focuses on the fundamentals of gravimetric and volumetric analysis with an introduction to colorimetry.</td>
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<tr>
<td>Chemistry 205</td>
<td>Chemical Calculations</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Prerequisite: Chemistry 102. Advanced review of chemical calculations of general chemistry with special emphasis on stoichiometry and chemical equilibrium.</td>
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<tr>
<td>Child Development 135</td>
<td>Survey of Child Service Programs</td>
<td>3</td>
<td>2</td>
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<tr>
<td>A study of the historical background of the child care movement and the laws and standards governing these facilities. This course will cover what constitutes a good environment for children in group facilities. The laboratory experience consists of observations in agencies and schools for young children in the community.</td>
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<tr>
<td>Child Development 137</td>
<td>Learning Programs for Young Children</td>
<td>3</td>
<td>2</td>
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<tr>
<td>Emphasis is placed on the methods of working with young children and the materials used to provide the greatest scope of experience and learning from them. The laboratory will be participation in child care facilities in the community.</td>
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<td>Child Development 140</td>
<td>Child Growth and Behavior, 0-4 (Formerly CD 136)</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Fundamental principles which guide the normal growth and development of the child from zero through four years of age are studied. Emphasis is on the child’s physical, intellectual, emotional, and social growth during these years.</td>
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<tr>
<td>Child Development 141</td>
<td>Child Growth and Behavior, 5-9 (Formerly CD 138)</td>
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<td>3</td>
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<tr>
<td>General principles concerning the normal growth and development of the child from five through nine years of age are studied. Physical, intellectual, emotional, and social aspects of the child’s development are emphasized.</td>
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</table>
Child Development 201  Adolescent Development (3)  3 hrs. Lec.
and Society

Prerequisite: Child Development 140 and Human Development 106, or Psychology 105. A comprehensive study of the physical, emotional and social development of the individual in pre-adolescence and adolescence is made. The impact of these major physical and psychological changes on family and social relationships is investigated, as well as the long-term effects of adolescent development on the individual's vocational and academic interests, values, and competence in interpersonal and social relationships.

3 hrs. Lab

A study of learning methods and theories and the practical application of these to the child care facility. Emphasis is placed on developing programs to meet the needs of young children. The laboratory experience will be comprised of participating work in various child care facilities.

Child Development 235  Application of Learning Theories (5)  3 hrs. Lec.
5 hrs. Lab

Emphasis will be on instructional programs for child care facilities which include the scope and sequence of learning experiences, readiness for learning skills, and experience in social living. The laboratory experience will be participation in child care facilities.

Child Development 236  Childhood Problem Situations (3)  3 hrs. Lec.

This course examines some of the special problems and challenges the child faces in his environment. Study will be made of children showing how problem situations can stem from personal or family factors and lead to deviant behavior patterns.

(Formerly CD 234)

A study is made of guidance in early childhood with emphasis placed upon the interpretation of anecdotal records and case studies of young children. Guidance is studied as used in the home as well as group experiences.
Communications 131 Applied Composition (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 (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 occupational 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 their effect on a career.

Developmental Mathematics 090 Pre-Algebra (3) 3 hrs. Lec.

Mathematics 090 is designed to develop an understanding of fundamental operations using whole numbers, fractions, decimals, and percents and to strengthen basic skills in mathematics. The course is planned primarily for students who need to review basic mathematical processes. It is the first step in the math sequence and includes an introduction to algebra. Same as GSM 090 in the El Centro College and Mountain View College catalogues.

Developmental Mathematics 091 Elementary Algebra (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 090-091 and DM 093 is preparatory to Math 104 as well as foundation for technical math. Same as GSM 091 in the El Centro College and Mountain View College catalogues.

**Developmental Mathematics 092  Design Math (3)  3 hrs. Lec.**

A course designed for those students in drafting, electronics, and refrigeration programs. The course includes a working knowledge of common and decimal fractions, percent, proportion, simple applied algebra, simple applied geometry, basic trigonometry, and the slide rule.

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

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

**Developmental Reading 090 Basic Reading (3)  3 hrs. Lec.**

Developmental Reading 090 is concerned with the improvement of comprehension 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, same as GSR 090 in the El Centro College and Mountain View College catalogues.

**Developmental Reading 091 Basic Reading (3)  3 hrs. Lec.**

Basic 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. Developmental Reading is offered in a laboratory setting employing individual instruction methods. Same as GSR 091 in the El Centro College and Mountain View College catalogues.
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. Same as GSW 090 in the El Centro College and Mountain View College catalogues.

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. Lab

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, rewriting 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.

Diesel Technology 131  Fundamentals of Diesel  (6) 3 hrs. Lec.
                   Engine Operation 9 hrs. Lab

The theory, principles, and operating procedures of the internal combustion engine will be studied as they contribute to the operation of the modern diesel engine. The proper use of the tools and precision measuring instruments required to maintain and service the diesel engine will be included.

Diesel Technology 133  Engine Components        (5) 3 hrs. Lec.
                    6 hrs. Lab

Prerequisite: Concurrent enrollment in or credit for Diesel Technology 131. A continuation of Diesel Technology 131 with an emphasis toward the service and maintenance of the components related to the modern diesel engine.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Lecture</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel Technology 134</td>
<td>Electrical Systems</td>
<td>(6)</td>
<td>3 hrs.</td>
<td>9 hrs.</td>
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<td>Lee.</td>
<td>Lab</td>
</tr>
<tr>
<td>Diesel Technology 136</td>
<td>Fuel Systems</td>
<td>(5)</td>
<td>3 hrs.</td>
<td>6 hrs.</td>
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<td>Lee.</td>
<td>Lab</td>
</tr>
<tr>
<td>Diesel Technology 138</td>
<td>Diesel Shop Practices</td>
<td>(2)</td>
<td>1 hrs.</td>
<td>3 hrs.</td>
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<td>Lee.</td>
<td>Lab</td>
</tr>
<tr>
<td>Diesel Technology 231</td>
<td>Engine Tune-Up and Operation</td>
<td>(4)</td>
<td>2 hrs.</td>
<td>4 hrs.</td>
</tr>
<tr>
<td>Diesel Technology 232</td>
<td>Drive Train and Brake Systems</td>
<td>(8)</td>
<td>4 hrs.</td>
<td>8 hrs.</td>
</tr>
<tr>
<td>Diesel Technology 234</td>
<td>Advanced Engine Overhaul</td>
<td>(6)</td>
<td>1 hrs.</td>
<td>12 hrs.</td>
</tr>
</tbody>
</table>

Electrical details involved in maintenance and repair of starters, alternators, regulators, switches, and wiring circuits on battery and magneto-systems will be studied as they relate to diesel technology.

Instruction is given in disassembling, rebuilding, testing, servicing, and operation of the various units which make up the fuel systems found on diesel engines, such as injectors and transfer pumps, filters, governors, and turbo-chargers.

Designed to acquaint the student with oxyacetylene welding and cutting. The basic principles of grinding, buffing, and the use of various machines that will be used in the trade are introduced.

Prerequisite: Diesel Technology 131, 133, 134, and 136. The principles and techniques of diagnosing, locating, and correcting troubles encountered in diesel engine operation will be applied through the use of various types of testing equipment including the dynamometer.

The principles and fundamentals of truck and tractor drive trains including the various types of transmissions, differentials, clutches, and torque converters will be treated. The various types of braking systems will be included in this course.

Prerequisite: Diesel Technology 131, 133, 134, 136 and 231. The complete rebuilding of the diesel engine and its related components will be accomplished. Performance and quality testing will be the evaluating criteria for the successful completion of this course.
Diesel Technology 250  Diesel Practicum  (8)  20 hrs. Lab

Prerequisite: Diesel Technology 131, 133, 134, 136, 138, 231, 232, and concurrent enrollment in or credit for Diesel Technology 234. This course constitutes an on-the-job application of the theory and laboratory instruction received in the formal courses of the Diesel Technology curricula. The student will be placed in a work-study position in the diesel industry that will test his skill and ability to function successfully as a Diesel Technician. Successful completion of this course and other degree requirements leads to the Associate in Applied Science Degree.

Directed Studies 901  (1)

Directed Studies 902  (2)

Directed Studies 903  (3)
(Formerly Directed Studies 202)

Prerequisite: Completion of twelve semester hours in residence and the approval of a division chairman and the Dean of 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.

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, measurements 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 projection; skill in orthographic, axonometric, and oblique sketching and drawing; lettering fundamentals; applied geometry; fasteners; sectioning; tolerancing; auxiliaries; experience in using handbooks and other resource materials; and development of skills. U.S.A.S.I., government, and industrial standards are used. Emphasis is placed on both mechanical skills and graphic theory.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
<th>Lectures</th>
<th>Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafting 133</td>
<td>Intermediate Drafting</td>
<td>3</td>
<td>2 hrs.</td>
<td>4 hrs.</td>
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<td><strong>Prerequisite:</strong> Drafting 132. The instructional units provide additional understanding of drafting problems, place emphasis on the design function, and introduce several specialized drafting areas that are valuable for the designer. This course includes the detailing and assembling of machine parts, gears and cams, jigs and fixtures, a study of metals and metal forming processes, drawing room standards and reproduction of drawings. The student is assigned to work that requires him to make complete and accurate detail and assembly drawings.</td>
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<tr>
<td>Drafting 135</td>
<td>Reproduction Processes</td>
<td>2</td>
<td>1 hr.</td>
<td>3 hrs.</td>
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<td>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, typography, xerography, engravings, 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.</td>
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<tr>
<td>Drafting 136</td>
<td>Geological and Land Drafting</td>
<td>3</td>
<td>2 hrs.</td>
<td>4 hrs.</td>
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<td><strong>Prerequisite:</strong> 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.</td>
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<tr>
<td>Drafting 137</td>
<td>Drafting Training</td>
<td>4</td>
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<td></td>
<td><strong>Prerequisite:</strong> Drafting 132; concurrent enrollment in Drafting 139, and consent of the instructor. This course offers supervised employment in the student's chosen phase of drafting. It is intended to provide practical experience for students preparing for careers in drafting.</td>
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</table>
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 139  Drafting Seminar  (2)  2 hrs. Lec.

Prerequisite: Concurrent enrollment in Drafting 137. This course provides problem analysis and project development in a conference course for students working in the Drafting and the Design Technology Cooperative Training Program.

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

Prerequisite: 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: Drafting 132. Develops skill in drawing and understanding of drawings used in the electronics industry. Topics include logic diagrams, schematic diagrams, interconnecting wiring diagrams, printed circuit 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.
COURSES BY ALPHABETICAL LISTING

Drafting 234 Advanced Technical Illustration (4) 2 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: Drafting 132 or Drafting 138. 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.

Drafting 236 Piping and Pressure Vessel Design (3) 2 hrs. Lec. 4 hrs. Lab

Prerequisite: Drafting 132 and Math 131 or equivalent. Presents the methods of piping of fluids for refineries, petrochemical plants, and industrial facilities. Consists of the application of ASME codes to the design of pressure vessels, pipe fitting, welded and seamless piping, pumps, and heat exchanges. Drawing techniques are emphasized in orthographic and isometric projections.

Drafting 238 Drafting Training (4)

Prerequisite: Drafting 137; concurrent enrollment in Drafting 239, and consent of the instructor. This course offers supervised employment in the student's chosen phase of drafting. It is intended to provide practical experience for students preparing for careers in drafting.

Drafting 239 Drafting Seminar (2) 2 hrs. Lec.

Prerequisite: Concurrent enrollment in Drafting 238. This course provides problem analysis and project development in a conference course for students working in the Drafting and Design Technology Cooperative Training Program.

Earth Science 117 Earth Science (4) 3 hrs. Lec. 3 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.
COURSES BY ALPHABETICAL LISTING

Economics 201  Principles of Economics I  (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 II  (3)  3 hrs. Lec.

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

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

Combines mathematics theory and laboratory fundamentals in direct current circuits. Elementary principles of magnetism, electric concepts and units, diagrams, resistance, electro-magnetism, series and parallel circuits, simple meter circuits, conductors and insulators will be emphasized.

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

Prerequisite: Electronic Technology 120. This course is directed to the study of fundamental theories of alternating current and their application in various circuits. Laboratory experiments will include power factor, sine wave analysis, resonant circuits, capacitance, inductance, Q of coils, magnetism and resistance.

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

Prerequisite: Electronic Technology 120 and concurrent enrollment in Electronic Technology 131. This is a course in semiconductors (active devices). This course will cover topics such as physical make-up, parameters, linear and nonlinear characteristics, in circuit action, amplifiers, rectifiers, and switching.

Electronic Technology 134  Instrumentation  (3)  2 hrs. Lec.  3 hrs. Lab

Prerequisite: Electronic Technology 120 and concurrent enrollment in Electronic Technology 131 and 133. A study of electrical measurement and instrumentation devices, and how they apply to work situations. Specific devices and measuring instruments in classes of measuring devices including basic AC and DC measurements meters, impedance bridge, oscilloscopes, signal generators, signal tracers, tube and transistor testers, conclude with a study of audio frequency test methods and equipment.
Electronic Technology 260  Sinusoidal Circuits  (4)  3 hrs. Lec.  3 hrs. Lab

Prerequisite: Electronic Technology 131, 133, and 134. Sinusoidal circuits are analyzed and discussed from the utilization standpoint. Small signal amplifiers, large signal amplifiers, regulated and nonregulated power supplies, SCR control circuits, oscillators, feedback circuits, and relays, will be explored in view of circuit function. These circuits will utilize semiconductors devices.

Electronic Technology 261  Pulse and Switching Circuits  (4)  3 hrs. Lec.  3 hrs. Lab

Prerequisite: Electronic Technology 134 and concurrent enrollment in Electronic Technology 260. The theory and verification of the nonlinearities of transistors, diodes, SCR, the use of these nonlinearities for nonsinusoidal wave generation and switching. Specific topics: logic circuits, multivibrators, flip-flops, clocks.

Electronic Technology 262  Digital Computer Principals  (3)  2 hrs. Lec.  2 hrs. Lab

Prerequisite: Electronic Technology 134 and concurrent enrollment in Electronic Technology 260 and 261. Fundamentals of digital computer programming (machine language) which is necessary to operate the electronics department computers: machine language, symbolic language, Boolean Algebra, memory elements, timing elements, and digital computer logic circuits.

Electronic Technology 263  Digital Computer Theory  (4)  3 hrs. Lec.  3 hrs. Lab

Prerequisite: Electronic Technology 262. The use and application of different configuration using AND, NAND, OR, NOT, operational amplifiers registers, A to D converters, memory decoders, counters, and arithmetic units.

Electronic Technology 264  Digital Systems  (4)  3 hrs. Lec.  3 hrs. Lab

Prerequisite: Electronic Technology 262 and concurrent enrollment in Electronic Technology 263. Analysis of operations and interphasing of memory elements, arithmetic unit, input and output equipment and controls. Flow charts and organization of the computer system will be analyzed.
Electronic Technology 265 Digital Research (3) 1 hr. Lec. 5 hrs. Lab

Prerequisite: Electronic Technology 262 and concurrent enrollment in Electronic Technology 263 and 264. A supervised research project consisting of design, layout, construction and calibrating. A major electronic project using digital circuits. The student will be required to prepare a term paper which incorporates such material as functions of components, operating specifications, and schematics. The students will develop a project independently through conferences and activities directed by the instructor.

Electronic Technology 266 Input and Output Devices (4) 3 hrs. Lec. 3 hrs. Lab

Prerequisite: Electronic Technology 262 or concurrent enrollment in Electronic Technology 263, 264, 265. Principles and mechanical operation of various digital input and output equipment including card reader and punch, paper tape reader punch, computer typewriters, high speed printers. Emphasis will be placed on mechanical aspect of these pieces of peripheral equipment.

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

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 and an introduction to numerical methods and computer programming.

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

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 and developments. The major theme is the correlation and integration of theory with practice instead of considering each a separate entity.

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

Engineering 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.

Prerequisite: Engineering 107, Math 227 or registration therein. 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.


Prerequisite: Engineering 107, Math 227 or registration therein. A study of forces, deformation and material properties of simple structural elements. Concepts of stress, strain and elastic properties are presented. 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, turning, boring, shaping, drilling, threading, milling, and grinding. Manufacturing of interchangeable parts, fixtures and jigs with theoretical applications.
Engineering 204 Electrical Systems Analysis (3) 3 hrs. Lec.

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

Engineering 240 Statics (3) 3 hrs. Lec.

Prerequisite: Math 132. A study of force and force systems, resultants, and components for 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.

Prerequisite: 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 assertions 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 201 Masterpieces of English Literature (3) 3 hrs. Lec.

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

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

Prerequisite: English 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 102. Reading and analysis of significant Continental European works from the Greek Classical period through the Renaissance.
<table>
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<tr>
<th>COURSES BY ALPHABETICAL LISTING</th>
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<tbody>
<tr>
<td><strong>English 204</strong> Literary Classics of the Western World (3) 3 hrs. Lec.</td>
</tr>
<tr>
<td>Prerequisite: English 102. Study of ten to twelve important post-Renaissance works of Continental Europe, England, and America.</td>
</tr>
<tr>
<td><strong>English 205</strong> Major American Writers (3) 3 hrs Lec.</td>
</tr>
<tr>
<td>Prerequisite: English 102. Study of the works of the important writers before Whitman in the context of their times.</td>
</tr>
<tr>
<td><strong>English 206</strong> Major American Writers (3) 3 hrs Lec.</td>
</tr>
<tr>
<td>Prerequisite: English 102. Reading and analysis of representative works by the chief literary figures of the past century.</td>
</tr>
<tr>
<td><strong>French 101</strong> Beginning French (5) 5 hrs. Lec. 2 hrs. Lab</td>
</tr>
<tr>
<td>Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension, and oral expression.</td>
</tr>
<tr>
<td><strong>French 102</strong> Beginning French (5) 5 hrs. Lec. 2 hrs. Lab</td>
</tr>
<tr>
<td>Prerequisite: French 101 or equivalent. Continuation of French 101 with emphasis on idiomatic languages and complicated syntax.</td>
</tr>
<tr>
<td><strong>French 201</strong> Intermediate French (3) 3 hrs. Lec.</td>
</tr>
<tr>
<td>Prerequisite: French 102 or equivalent or consent of the instructor. Reading, composition, grammar review and intense oral practice.</td>
</tr>
<tr>
<td><strong>French 202</strong> Intermediate French (3) 3 hrs. Lec.</td>
</tr>
<tr>
<td>Prerequisite: French 201 or equivalent. Continuation of French 201 with reading selections drawn more directly from contemporary literary sources. Composition.</td>
</tr>
<tr>
<td><strong>Geography 101</strong> Geography (Physical) (3) 3 hrs. Lec.</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>Geography 102</strong> World Geography (Economic) (3) 3 hrs. Lec.</td>
</tr>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>
### Geology 101  General Geology (Physical)  
3 hrs. Lec.  
3 hrs. Lab  

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

### Geology 102  General Geology (Historical)  
3 hrs. Lec.  
3 hrs. Lab  

*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 hrs. Lec.  
2 hrs. Lab  

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

### German 102  Beginning German  
5 hrs. Lec.  
2 hrs. Lab  

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

### German 201  Intermediate German  
3 hrs. Lec.  

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

### German 202  Intermediate German  
3 hrs. Lec.  

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

### Government 201  American Government I  
3 hrs. Lec.  

*Prerequisite:* Sophomore standing. 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.
Government 202  American Government II  (3)  3 hrs. Lec.

Prerequisite: Government 201. A study of the United States and Texas legislative process; the executive and the bureaucracy; the judicial process; domestic policies; foreign relations and national defense.

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

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

Graphic Arts 131  Graphic Processes  (3)  2 hrs. Lec.
4 hrs. Lab

This course provides the students with an understanding of what industry requires of its employees in the way of habits, abilities, etc. It provides an overview of all equipment and its interrelation. All equipment will be used for demonstration.

Graphic Arts 132  Bindery Procedures  (3)  2 hrs. Lec.
4 hrs. Lab

The student studies the operation of binding equipment. Methods of cutting, folding, drilling, assembling, gathering, collating, jogging, and fastening are studied.

Graphics Arts 133  Offset Printing  (4)  2 hrs. Lec.
6 hrs. Lab

Prerequisite: Concurrent enrollment in Graphic Arts 131. This is a course in basic offset lithographic printing methods and applications. The student operates offset duplicating machines to produce multiple copies from typed, transfer image, and presensitized masters.

Graphic Arts 134  Basic Camera Operations  (3)  2 hrs. Lec.
4 hrs. Lab

Prerequisite: Graphic Arts 131. A study of the mechanics of Photo-Lithographic camera operations, fundamentals of halftone photograph lithographic negative stripping, and plate making.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Lecture Hours</th>
<th>Laboratory Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphics Arts 136</td>
<td>Copy Preparation</td>
<td>(3)</td>
<td>2 hrs.</td>
<td>4 hrs. Lab</td>
</tr>
</tbody>
</table>

**Prerequisite:** Concurrent enrollment in Graphic Arts 131. The basic operations of the varityper and headline are studied, letters, memos, manuals, tables, graphs, charts, reports, and booklets are produced. The student uses the drafting table, and modern drafting tools to obtain desired results. The student operates the headliner to set bold heading, finishes rough copy, and makes ready for photographic master.

| Graphic Arts 138 | Graphic Projects                  | (3)     | 2 hrs.         | 4 hrs. Lab       |

**Prerequisite:** Concurrent enrollment or 16 hours of credit in Graphic Arts. This course provides problem analysis and project development. It gives the student the opportunity of producing a complete printed product.

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

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.         |

**Prerequisite:** History 101 recommended. A survey of the unfolding of United States History from the Reconstruction Era to the present day. The study includes social, economic and political aspects of American life and follows the development of the United States as a world power.

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

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.         |

The unfolding of the pattern of modern western civilization from the Enlightenment to current times. A study of the Age of Revolution and the beginnings of industrialism: the nineteenth century and the social, economic political factors of recent world history.
COURSES BY ALPHABETICAL LISTING

Human Development 092 A Group Approach (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. Same as GSD 092 in the El Centro College and Mountain View College catalogues.

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

Prerequisite: Human Development 092 or consent of instructor. Human Development 106 deals with human development from the standpoint of the interdependence and interaction between personal 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. and Lab

Prerequisite: Consent of instructor. A course in human development designed to meet specific needs of students through participation in activities. The focus of this course will be on the development of group dynamics, leadership, and human relations skills. Students will be required to participate in the management experience of planning, execution, and evaluation of activities. The theoretical body of knowledge regarding leadership development and growth in group dynamics and management skills will be emphasized.
Humanities 101 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 increases understanding of the nature of man and the values of human life.

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

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

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

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

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

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

Journalism 204 News Editing and Copy 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 Transcription (See Business 160)

Management (See Business Division)

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

Prerequisite: Two years of high school algebra or Developmental Math 093. A study of the fundamentals of logic, sets, mathematical symbolism, and the properties of the Real and Complex number system.
Mathematics 104 Elementary Functions and Coordinate Geometry I

Prerequisite: Two years of high school algebra or Developmental Math 093. A 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 II

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

Mathematics 106 Elementary Functions and Coordinate Geometry III

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 following: polynomial and rational, exponential, logarithmic, trigonometric, and functions of two variables.

Mathematics 111 Math for Business and Economics I

Prerequisite: Two years of high school algebra or Developmental Math 093. A study of equations and inequalities; functions to include: linear, quadratic, polynomial, rational, exponential, and logarithmic functions; and linear programming. Applications to business and economics problems are emphasized.

Mathematics 112 Math for Business and Economics II

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

Mathematics 115 College Mathematics

Prerequisite: Developmental Math 093 or one year of high school algebra and one year of high school geometry or two years high school algebra. A comprehensive modern treatment of the elements of mathematics for the liberal arts student. Emphasis is placed on mathematics as a deductive science. The cultural effects of mathematics on our civilization; historical aspects; and its role in communication are also major themes of the course.
Mathematics 116 College Mathematics (3) 3 hrs. Lec.

Prerequisite: Mathematics 115. A continuation of Mathematics 115.

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

Prerequisite: Mathematics 105, Mathematics 106 or equivalent. Study of slopes, some aspects of analytic 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: Developmental Math 091 or the equivalent. Skill in arithmetic essential. Simple and compound interest, bank discount, payroll, taxes, insurance, markup and markdown, corporate securities, depreciation, and purchase discounts. This course is intended primarily for specialized occupational programs.

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

Prerequisite: Developmental Math 091 or the equivalent. A course designed for technical students covering a general review of arithmetic; a treatment of the basic concepts of 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, progression, and the binomial theorem.

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

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

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

Prerequisite: Developmental Math 091 or equivalent. Commercial, technical, and more simple scientific uses of mathematics. 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 Math 101 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, n-dimensional space, and linear transformations.

Mathematics 227 Mathematical Analysis I (4) 4 hrs. Lec.
Prerequisite: Math 126 or 223. Study of techniques of differentiation and integration, limits, vectors, and multivariate calculus.

Mathematics 228 Mathematical Analysis II (3) 3 hrs. Lec.
Prerequisite: Math 227. Continuation of Math 227, introduction to differential equations, sequences, and series.

Music 095 Applied Music (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 (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 sightsinging, keyboard, and notation.

Music 102 Freshman Theory (4) 3 hrs. Lec.
4 hrs. Lab
Prerequisite: Music 101 or consent of instructor. Introduction to part-writing and harmonization with triads and their inversions; classification of chords; seventh chords, sight-singing, dictation, and keyboard harmony.

Music 104 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 influences upon the music of each era are observed.

Music 105 Italian Diction (1) 2 hrs. Lab
A study of the phonetic sounds of the Italian language, with selected vocabulary and little or no conversation. Primarily for voice majors.
### COURSES BY ALPHABETICAL LISTING

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Music 106</td>
<td>French Diction</td>
<td>(1)</td>
<td>2 hrs. Lab</td>
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<tr>
<td></td>
<td>A study of the phonetic sounds of the French language, with selected vocabulary and little or no conversation. Primarily for voice majors.</td>
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<tr>
<td>Music 110</td>
<td>Music Literature</td>
<td>(3)</td>
<td>3 hrs. Lec.</td>
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<tr>
<td></td>
<td>A course dealing with the characteristics of sound, the elements of music, performance media, and musical texture as seen in the music of recognized composers in the major periods of music history. Special emphasis is given to the music of the late Gothic, Renaissance, and Baroque era.</td>
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<tr>
<td>Music 111</td>
<td>Music Literature</td>
<td>(3)</td>
<td>3 hrs. Lec.</td>
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<tr>
<td></td>
<td>Prerequisite: Music 110. A continuation of the studies introduced in Music 110. A study of the compositional procedures and forms employed by the creators of music. Attention is focused upon the music of the Classical, Romantic, and Modern periods.</td>
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<tr>
<td>Music 113</td>
<td>Foundations in Music I</td>
<td>(3)</td>
<td>3 hrs. Lec.</td>
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<tr>
<td></td>
<td>Emphasis upon participation and the necessary skills for satisfactory performance in singing, playing an instrument, listening, creating rhythmic responses. Development of increasing ability to manage notation (music reading). Course designed specifically for the non-music major.</td>
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<tr>
<td>Music 114</td>
<td>Foundations in Music II</td>
<td>(3)</td>
<td>3 hrs. Lec.</td>
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<td></td>
<td>Prerequisite: Music 113. A continuation of Music 113 including a functional approach to music methods and materials needed for teaching in the elementary school.</td>
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<tr>
<td>Music 117</td>
<td>Piano Class I</td>
<td>(1)</td>
<td>2 hrs. Lab</td>
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<tr>
<td></td>
<td>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.</td>
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</tr>
<tr>
<td>Music 118</td>
<td>Piano Class II</td>
<td>(1)</td>
<td>2 hrs. Lab</td>
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<tr>
<td></td>
<td>Includes techniques, skills, harmonization, transposition, improvisation, accompanying, sightreading and performing various styles of repertoire. Open to all students.</td>
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80
Music 119  Guitar Class I  (1)  2 hrs. Lab

Class instruction covering the basics of guitar skill, designed primarily for those with limited knowledge in the reading of music or playing the guitar. Open to all students.

Music 121-140  Applied Music — Minor  (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 221-240  Applied Music — Concentration  (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 — Major  (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.

Music 150  Chorus  (1)  3 hrs. Lab

Prerequisite: Consent of instructor. Open to all students of the college, the chorus studies and performs a wide variety of music representing the literature of the great eras of music history.

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

A course teaching the principles of breathing, voice production, tone control, enunciation and phrasing. Two group lessons a week. Open to all non-voice majors.

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

A continuation of Music 151 with emphasis on solo singing, appearance in studio recital, stage deportment, personality development. Open to all non-voice majors. Two group lessons a week.

Music 155  Vocal Ensemble  (1)  3 hrs. Lab

A select group for mixed voices concentrating upon excellence of performance. Membership is open only to members of the chorus through an audition with the director.
COURSES BY ALPHABETICAL LISTING

Music 156 Madrigal Singers (1)  3 hrs. Lab

Select group of vocalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.

Music 160 Band (1)  3 hrs. Lab

Prerequisite: Non-wind instrument majors consent of the instructor. The band studies and performs a wide variety of music in all areas of band literature. Required of all wind instrument majors.

Music 171 Woodwind Ensemble (1)  3 hrs. Lab

Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.

Music 172 Brass Ensemble (1)  3 hrs. Lab

Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.

Music 173 Percussion Ensemble (1)  3 hrs. Lab

Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.

Music 174 Keyboard Ensemble (1)  3 hrs. Lab

Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.

Music 175 String Ensemble (1)  3 hrs. Lab

Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.

Music 177 Chamber Ensemble (1)  3 hrs. Lab

Select groups of instrumentalists or vocalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.
Music 185 Stage Band (1) 3 hrs. Lab

Prerequisite: Consent of instructor. The stage band studies and performs a wide variety of music with emphasis on the jazz oriented big-band styles of the 1960's.

Music 199 Recital (1) 2 hrs. Lab

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

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

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

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

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

Office Machines (See Business 161)

Organizational Behavior (See Business 237)

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 principal 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 logic's methods and tools 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 verify the ethical issues and their metaphysical and epistemological bases so as to assist the student toward sound application of ethical principles in his own life.

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

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

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

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 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 photojournalism. 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.

Photography 111  Advanced Photography and Photo-Journalism  (3)  2 hrs. Lec.  4 hrs. Lab

Advanced photography and photojournalism. Utilization of everything taught in 110, with emphasis on refining techniques. Special emphasis on photographic communication.

PHYSICAL EDUCATION ACTIVITY COURSES

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

**Physical Education 111 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 112M Softball and Soccer** (1) 2 hrs. Lab

Designed to provide the student an opportunity for instruction and participation in softball and soccer. 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 114 Beginning Badminton** (1) 2 hrs. Lab

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

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

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

**Physical Education 116 Intramural Athletics** (1) 2 hrs. Lab

A coeducational activity class designed to offer intramural competition in a variety of coeducational activities. Uniform required.

**Physical Education 117 Beginning Archery** (1) 2 hrs. Lab

Coeducational class in beginning archery. Equipment furnished. No uniform required.

**Physical Education 118 Beginning Golf** (1) 2 hrs. Lab

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

**Physical Education 119 Beginning Tennis** (1) 2 hrs. Lab

A co-educational course designed for the beginner. Basic tennis fundamentals will be stressed. Uniform required.
COURSES BY ALPHABETICAL LISTING

Physical Education 120 Beginning Bowling (1) 2 hrs. Lab
A co-educational class in beginning bowling. Held off campus. Equipment furnished, no uniform required.

Physical Education 122M Gymnastics and Tumbling (1) 2 hrs. Lab
Skills in tumbling, horizontal bar, parallel bars, rings and trampoline work will be taught and practiced. Uniform required.

Physical Education 125W Figure Training (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 Basketball and Volleyball (1) 2 hrs. Lab
Techniques, rules, and strategy of the game will be taught and the emphasis will be on playing the game. Uniform required.

Physical Education 127W Basketball and Volleyball (1) 2 hrs. Lab
Techniques, rules, and strategy of the game will be taught and the emphasis will be on playing the game. Uniform required.

Physical Education 128 Social and Folk Dance (1) 2 hrs. Lab
A co-educational, beginning class in social and folk dance. No uniform required.

Physical Education 129 Modern Dance (1) 2 hrs. Lab
Co-educational, beginning class in Modern Dance. Uniform required.

Physical Education 217 Intermediate and Advanced Archery (1) 2 hrs. Lab
This course is designed for the student who has had previous experience in archery and who would like to engage in target shooting and field archery. The student furnishes equipment, and no uniform is required.

Physical Education 218 Intermediate and Advanced Golf (1) 2 hrs. Lab
Instruction and practice in intermediate and advanced golf skills. No uniform required.
COURSES BY ALPHABETICAL LISTING

Physical Education 222  Intermediate and  Advanced Gymnastics  (1)  3 hrs. Lab

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 NON-ACTIVITY COURSES

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

A study of personal and community health. Emphasis is placed on causative factors of various diseases, means of transmission and prevention. For majors and non-majors.

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

Principles, organization, and the function of recreation in American society. Designed for students planning a major or minor in Health, Physical Education or Recreation.

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

Designed for professional orientation in physical education, health and recreation. Brief history, philosophy and modern trends of physical education, teacher qualification, vocational opportunities, expected competencies, and skill testing comprise the contents of the course. For students majoring in Physical Education.

Physical Education 147  Sports Officiating I (3)  2 hrs. Lec.

This course is especially designed for those students who would like to choose sports officiating for an avocation and/or to increase knowledge in and appreciation of sports. Sports covered in this course will be football and basketball. As part of the course requirement students will be expected to officiate Intramural games.

Physical Education 148  Sports Officiating II (3)  2 hrs. Lec.

This course is especially designed for those students who would like to choose sports officiating for an avocation and/or to increase knowledge in and appreciation of sports. Sports covered in this course will be softball, track and field, and baseball.
COURSES BY ALPHABETICAL LISTING

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

The theory and practice in the standard and advanced courses of the American National Red Cross in first aid and safety.

Physics 111 Introductory General Physics (4)  3 hrs. Lec.
3 hrs. Lab

Prerequisite: Developmental Math 093. The first semester of a two semester course designed for pre-medical, pre-dental, pre-nursing, pre-aviation, pharmacy, and architecture majors and other students who require a two semester technical course in physics, but do not intend to take additional courses in physics. The first half is a study of mechanics and heat.

Physics 112 Introductory General Physics (4)  3 hrs. Lec.
3 hrs. Lab

Prerequisite: Physics 111. A continuation of Physics 111 and includes the study of electricity, magnetism, light, and sound.

Physics 115 Elementary Physics (4)  3 hrs. Lec.
3 hrs. Lab

An introduction to the various areas of physics as they relate to the world in which we live, accomplished through the study of selected topics including mechanics, thermodynamics, acoustics, electrodynamics, optics, and atomic physics. This course is intended primarily for the non-science major.

Physics 131 Applied Physics (4)  3 hrs. Lec.
3 hrs. Lab

Prerequisite: Math 131 or concurrent enrollment in Math 131. The first half of a one year course designed to explain the basic concepts of the property of matter, mechanics, heat, sound, light, electricity, magnetism, and atomic theory with emphasis on applications and problem solving. Designed primarily for students enrolled in technical programs.

Physics 132 Applied Physics (4)  3 hrs. Lec.
3 hrs. Lab

Prerequisite: Physics 131. A continuation of Physics 131.
Physics 201  General Physics  (4)  3 hrs. Lec.  
        3 hrs. Lab

Prerequisite: Credit for or concurrent registration in Math 126 or Math 222. Principles and application of mechanics, wave motion, and sound emphasizing fundamental concepts, problem solving, notation, and units. Designed primarily for physics, chemistry, mathematics, and engineering majors.

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

Prerequisite: Physics 201 and credit or current registration in Math 223 or Math 227. Principles and applications of heat, electricity, magnetism and optics emphasizing fundamentals, concepts, problem solving, notation and units.

Physics 203  Introduction to Modern Physics  (4)  3 hrs. Lec.  
        3 hrs. Lab

Prerequisite: Physics 202. Principles of relativity, atomic and nuclear physics with emphasis on fundamental concepts, problem solving, notation, and units.

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 programs 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 206  Psychology of Adjustment  (3)  3 hrs. Lec.

Prerequisite: Psychology 105. A study of the adjustive process of the individual to his environment. Emphasis will be placed upon motivation, attitudes, defenses, and the role of learning in adaptive and on maladaptive behavior.

Psychology 207  Social Psychology  (3)  3 hrs. Lec.

Prerequisite: Psychology 105 and/or Sociology 101. A survey of the research and theories dealing with individual behavior in the social environment. Topics include socio-psychological process, attitude formation and change, interpersonal relations, and group processes.
Psychology 209 General Psychology (3) 3 hrs. Lec.
(Formerly Psy 205)

Prerequisite: Psychology 105. Consideration is given the individual both as a social and biological organism. Focus on behavior both from a humanistic and scientific perspective is emphasized. Brief introduction to experimentation.

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

Prerequisite: Successful completion of Developmental Reading 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.

Recreation 132 Social Recreation (3) 3 hrs. Lec.

Introduces the methods and materials for planning, organizing, and conducting social activities for different age groups.

Recreation 133 Field Observation I (2) 1 hr. Lec.
3 hrs. Lab

Designed to afford a direct observation of the techniques and procedures of Recreation Leadership being utilized in a variety of existing programs.

Recreation 231 Outdoor Recreation (3) 3 hrs. Lec.

A study of the development and trends of outdoor recreation and organized camping.

Recreation 235 Program Planning and Organization (3) 3 hrs. Lec.

Study of essential elements and basic principles involved in the planning and organization, supervision, promotion and evaluation of various recreation programs.

Recreation 236 Field Work II (3) 1 hr. Lec.
4 hrs. Lab

Prerequisite: Recreation 133 and sophomore standing. Designed to give the recreation student practical experience in developing recreational leadership skills. The student will work as a recreation leader with responsibility in planning, conducting, and evaluating an activity or program.
### COURSES BY ALPHABETICAL LISTING

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation 237</td>
<td>Business Procedures in Recreation</td>
<td>(3)</td>
<td>3 hrs. Lec.</td>
<td></td>
</tr>
</tbody>
</table>

Prerequisite: Sophomore standing. Study and application of routine procedures that are unique to the recreation leader. Included will be procedures in scheduling, tournament construction, budget, finance, records, office management, public relations, media reporting, and operation of areas and facilities.

<table>
<thead>
<tr>
<th>Recreation 238</th>
<th>Aquatics</th>
<th>(2)</th>
<th>4 hrs. Lab</th>
</tr>
</thead>
</table>

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

| Recreation 239 | Field Work III                                      | (3)     | 1 hr. Lec. | 4 hrs. Lab |
|----------------|-----------------------------------------------------|---------|------------|

Prerequisite: Recreation 236 and sophomore standing. The student will be placed in a recreation center and be a working member of the professional staff under proper supervision of the supervisor and director of recreation and the director of recreation at Eastfield.

<table>
<thead>
<tr>
<th>Religion 101</th>
<th>Religion in American Culture</th>
<th>(3)</th>
<th>3 hrs. Lec.</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th>Religion 102</th>
<th>Contemporary Religious Problems</th>
<th>(3)</th>
<th>3 hrs. Lec.</th>
</tr>
</thead>
</table>

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.

<table>
<thead>
<tr>
<th>Religion 201</th>
<th>Major World Religions</th>
<th>(3)</th>
<th>3 hrs. Lec.</th>
</tr>
</thead>
</table>

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

Salesmanship (See Business 230)
Secretarial Training (See Business 162)

Shorthand (See Business 163, 164, 263, 264)

Services for the Deaf 130 Deafness and Its Implications (3) 3 hrs. Lec. 2 hrs. Lab
A study of deafness, causes of deafness, and the problems caused by deafness. An introduction to techniques helpful to the deaf in development of skill in communication will be stressed. Observation experiences in training programs and vocational settings will be included.

Services for the Deaf 131 Educational Organizations and Procedures (2) 2 hrs. Lec. 1 hr. Lab
A study of various types of training and educational organizations with primary emphasis on development of skills in record keeping, materials utilization, and supportive activities that will provide assistance in all types of training and educational programs for the deaf.

Services for the Deaf 132 Communications Methods for the Deaf I (3) 2 hrs. Lec. 3 hrs. Lab
An introduction to communication behavior of the deaf with primary emphasis in this first course on finger spelling and beginning sign language. Laboratory experiences will involve practice in situations where sign language is the method of communication.

Services for the Deaf 133 Communications Methods for the Deaf II (3) 2 hrs. Lec. 3 hrs. Lab
Prerequisite: Services for the Deaf 132. A continuation of instruction in sign language and beginning study of oral language development. Laboratory experiences will involve students with the deaf of all ages with emphasis on communication methods utilized with the deaf in adult training programs.

Services for the Deaf 134 Media, Equipment and Materials (3) 2 hrs. Lec. 3 hrs. Lab
An overview of the types of media and the uses of each, with emphasis on those most useful in training programs for the deaf. Practice in equipment operation, maintenance and management of materials will be provided as laboratory experiences.
COURSES BY ALPHABETICAL LISTING

Services for the Deaf 135 Auditory Equipment and Materials (3) 2 hrs. Lec. 2 hrs. Lab

A study of the uses of auditory equipment with the deaf in all situations. Included will be instruction combined with practicum experiences in utilization of various types of group and individual auditory equipment. Training in techniques of utilization of equipment and materials to enable the deaf to respond meaningfully to their environments via the auditory channel will be included.

Services for the Deaf 136 Problems of Deafness (3) 3 hrs. Lec. 1 hr. Lab

A continuation of instruction and practicum experiences in understanding of problems caused by deafness and in utilization of learning theories in training programs and classrooms. Practicum experiences will involve providing assistance in vocational training programs, as counseling aides, and in classrooms for the deaf.

Services for the Deaf 232 Advanced Communication Methods I (3) 2 hrs. Lec. 4 hrs. Lab

A continuation of training in all communication methods utilized by the deaf. Speech reading techniques will be taught as well as advanced sign language. Numerous practicum experiences in vocational training programs, other classrooms, employment situations and community agencies will be included.

Services for the Deaf 233 Advanced Communication Methods II (4) 2 hrs. Lec. 5 hrs. Lab

Prerequisite: Services for the Deaf 232. Continuing training in communication methods utilized by the deaf. Emphasis will focus on need for total communication approach. Numerous practicum experiences in an even wider range of training and community programs will be included to give practice in signing, oral language and speech reading.

Services for the Deaf 234 Media Material (3) 2 hrs. Lec. 3 hrs. Lab

Emphasis will be placed on preparation of media materials, with practicum experiences deriving from needs of training programs for the deaf. Training in use of video tape recording in training programs will be included.
### COURSES BY ALPHABETICAL LISTING

<table>
<thead>
<tr>
<th>Services for the Deaf 236</th>
<th>Developmental Activities for the Deaf</th>
<th>(4)</th>
<th>3 hrs. Lec.</th>
<th>3 hrs. Lab</th>
</tr>
</thead>
</table>

Instruction will be given in techniques to aid in the development of social and employment behaviors for the deaf. Included will be instruction in techniques of training deaf children in play and group participation as basis for social development. Experiences in working with adult deaf in group interaction and in development of business and social skills will be emphasized. Practicum experiences will involve field work, outside training and classroom environments with attention to employment in residential schools.

<table>
<thead>
<tr>
<th>Services for the Deaf 237</th>
<th>Language Development In the Home</th>
<th>(3)</th>
<th>2 hrs. Lec.</th>
<th>3 hrs. Lab</th>
</tr>
</thead>
</table>

Training in areas of language development, utilization of amplification equipment and auditory training programs, and development of language enrichment programs to provide basis for language development in deaf infants will be offered. Practicum experiences will involve working with deaf infants and their parents.

<table>
<thead>
<tr>
<th>Services for the Deaf 238</th>
<th>Education of the Multiple-Handicapped</th>
<th>(3)</th>
<th>2 hrs. Lec.</th>
<th>2 hrs. Lab</th>
</tr>
</thead>
</table>

Overview of other handicapping conditions. Emphasis will be placed on problems of development and education and on severity of vocational problems when deafness is one of the handicaps. Techniques of management and instruction will be included. Instructional personnel will include professionals from areas of all handicaps. Extensive observation and practicum experiences in agencies and employment situations will be included.

<table>
<thead>
<tr>
<th>Services for the Deaf 239</th>
<th>Applied Special Practicum</th>
<th>(4)</th>
<th>11 hrs. Lab</th>
</tr>
</thead>
</table>

An opportunity will be provided for an extended practicum in carefully selected areas of service to the deaf on demonstration of both unusual interest and aptitude. Course content will consist primarily of applied practicum experiences in areas of interest to add to vocational aptitude.

<table>
<thead>
<tr>
<th>Social Science 131-132</th>
<th>American Civilization</th>
<th>(3)</th>
<th>3 hrs. Lec.</th>
<th>3 hrs. Lec.</th>
</tr>
</thead>
</table>

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.
COURSES BY ALPHABETICAL LISTING

Sociology 101 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 in our society, emphasizing topics as they apply to social adjustment in the family and the total community environment.

Sociology 203 Marriage and the 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.
Prerequisite: Sophomore standing or Sociology 101 recommended. The principal minority groups in American society; their sociological significance and historic contributions. An emphasis will be placed on problems of intergroup relations, social movements and related social changes occurring on the contemporary American scene.

Sociology 205 Introduction to Social Research (3) 3 hrs. Lec.
Prerequisite: Sociology 101. Principles and procedures in social research; sources of data and techniques of collection and analysis, including statistical description. Commonly required of sociology majors. Useful to students in all behavioral sciences.

Sociology 206 Introduction to Social Work (3) 3 hrs. Lec.
Prerequisite: Consent of instructor required. Development of the philosophy and practice of social work in the United States; survey of the fields and techniques of social work; attention given to requirements for training in social work.

Sociology 207 Social Psychology (3) 3 hrs. Lec.
Same as Psychology 207. The student may elect the subject area heading appropriate to his major. The student may not receive credit for both Psychology 207 and Sociology 207.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Lecture Hours</th>
<th>Laboratory Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish 101</td>
<td>Beginning Spanish</td>
<td>(5)</td>
<td>5 hrs.</td>
<td>2 hrs.</td>
</tr>
<tr>
<td></td>
<td>Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension, and oral expression.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Spanish 102</td>
<td>Beginning Spanish</td>
<td>(5)</td>
<td>5 hrs.</td>
<td>2 hrs.</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Spanish 101 or equivalent. Continuation of Spanish 101 with emphasis on idiomatic language and complicated syntax.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish 201</td>
<td>Intermediate Spanish</td>
<td>(3)</td>
<td>3 hrs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Spanish 102 or equivalent or consent of the instructor. Reading, composition, grammar review and intense oral practice.</td>
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<td></td>
</tr>
<tr>
<td>Spanish 202</td>
<td>Intermediate Spanish</td>
<td>(3)</td>
<td>3 hrs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Spanish 201 or equivalent. Continuation of Spanish 201 with reading selections drawn more directly from contemporary literary sources. Composition.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech 100</td>
<td>Speech Laboratory</td>
<td>(1)</td>
<td>3 hrs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A laboratory course for the preparation of speeches, readings of dialogue from literature, and debate propositions which will be presented throughout the community. May be repeated for one additional hour of credit each semester.</td>
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<td></td>
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</tr>
<tr>
<td>Speech 105</td>
<td>Fundamentals of Public Speaking</td>
<td>(3)</td>
<td>3 hrs.</td>
<td></td>
</tr>
<tr>
<td>Speech 109</td>
<td>Voice and Articulation</td>
<td>(3)</td>
<td>3 hrs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Speech 105 or consent of instructor. A study of the mechanics of speech applied to improvement of the individual's voice and pronunciation.</td>
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<td></td>
</tr>
<tr>
<td>Speech 205</td>
<td>Discussion and Debate</td>
<td>(3)</td>
<td>3 hrs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Speech 105 or consent of 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.</td>
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</tbody>
</table>
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.

Speech 207 Advanced Oral Interpretation (3) 3 hrs. Lec.

Prerequisite: Speech 105 and 206. Application of basic principles of interpretation to longer selections of literature; more detailed analysis and arranging of poetry and prose for various types of multiple reading situations including choral speaking and reader's theatre. Investigation of all types of literature which are suited to group interpretation work.

Theatre 100 Rehearsal and Performance (1)

Prerequisite: Acceptance as a member of the cast or crew of a major production. Participation in the class includes the rehearsal and performance of the current theatrical presentation of the Division. Students will be enrolled by the director upon being accepted for participation in a major production. Credit limited to one hour per semester.

Theatre 101 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 modern plays and the viewing of specially selected films.

Theatre 103 Stagecraft I (3) 2 hrs. Lec. 3 hrs. Lab

A study of the technical aspects of play production including set design and construction, stage lighting, make-up, costuming, and related areas.
Theatre 104  Stagecraft II  (3)  2 hrs. Lec.  
3 hrs. Lab

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

Theatre 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 instructor. Continuation of Theatre 106 with emphasis on problems of complex characterization, ensemble acting, stylized acting and acting in period plays.

Theatre 109  Voice and Articulation  (3)  3 hrs. Lec.

Same as Speech 109. The student may not receive credit for both Theatre 109 and Speech 109.

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 and lab fees.

Transport Operations (See Business 287, 288)
Transportation (See Business 184, 185, 186)
Typing (See Business 173, 174, 273)
Available Programs Requiring Two Years or Less of College:

**Eastfield College**
- Accounting Technician
- Air Conditioning and Refrigeration Technology
- Auto Body
- Automotive Technology
- Child Development
- Diesel Mechanics
- Digital Electronics Technology
- Drafting and Design Technology
- Graphic Arts
- Mid-Management
- Recreational Leadership
- Secretarial Science
- Services for the Deaf
- Transportation Technology

**El Centro College**
- Accounting Technician
- Apparel Design
- Architectural Technology
- Associate Degree Nursing
- Data Processing Programmer
- Dental Assisting Technology
- Drafting and Design Technology
- Fire Protection Technology
- Food Service—Dietetic Technician
- Food Service Operations
- Interior Design
- Library Technical Assistant
- Medical Assisting Technology
- Medical Laboratory Technician Program
- Medical Transcriptionist

**Mid-Management**
- Office Skills and Systems
- Pattern Design
- Police Science
- Radiologic Technology
- Respiratory Therapy Technology
- Secretarial Science
- Television and Radio Servicing
- Vocational Nursing

**Mountain View College**
- Accounting Technician
- Aviation Administration
- Avionics Technology
- Drafting and Design Technology
- Electronics Technology
- Industrial Welding
- Machine Shop
- Mid-Management
- Plastics Management and Technology
- Plastics Technology
- Secretarial Science
- Watchmaking and Jewelry Craft

**Richland College**
- Accounting Technician
- Construction Management and Technology
- Electro Mechanical Technology
- Fluid Power Technology
- Horticulture Technology
- Mid-Management
- Quality Control Technology
- Secretarial Science
Accounting Technician (1-year program)

The objective of this program is to provide the student with a working knowledge of bookkeeping procedures currently in use in business; to introduce the student to accounting principles supporting bookkeeping procedures; and to give the student practical bookkeeping experience by the use of problem solving.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Lec. Hrs.</th>
<th>Lab. Hrs.</th>
<th>Credit Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus 105—Introduction to Business</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Bus 131—Bookkeeping</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Bus 161—Office Machines</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Com 131—Applied Composition and Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Mth 130—Business Machines</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>2</td>
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</table>

<table>
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<tr>
<th>Spring Semester</th>
<th>Lec. Hrs.</th>
<th>Lab. Hrs.</th>
<th>Credit Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus 132—Bookkeeping</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Bus 173—Beginning Typing or</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Bus 174—Intermediate Typing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 101—Introduction to Computing Science</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Com 132—Applied Composition and Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
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<tr>
<td></td>
<td>13</td>
<td>2</td>
<td>14</td>
</tr>
</tbody>
</table>

Air Conditioning and Refrigeration (Certificate Program)

This program will qualify the student to install, repair, and maintain equipment in the fields of domestic refrigeration, commercial refrigeration, and air conditioning, cooling or heating systems.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Lec. Hrs</th>
<th>Lab. Hrs</th>
<th>Credit Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
<td><strong>ACR 135</strong></td>
<td>Principles of Refrigeration and Domestic Refrigeration Systems</td>
<td>4</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>ACR 136</strong></td>
<td>Fundamentals of Electricity</td>
<td>3</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
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<td>Total</td>
<td>7</td>
<td>13</td>
<td>9</td>
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<tr>
<td><strong>Spring Semester</strong></td>
<td><strong>ACR 137</strong></td>
<td>Electrical Circuits and Controls</td>
<td>4</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>ACR 138</strong></td>
<td>Commercial Refrigeration Systems</td>
<td>3</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>7</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td><strong>ACR 235</strong></td>
<td>Air Conditioning Systems (Cooling)</td>
<td>4</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>ACR 236</strong></td>
<td>Air Conditioning Systems (Heating)</td>
<td>3</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>*Elective</td>
<td></td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>8</td>
<td>16</td>
<td>11</td>
</tr>
</tbody>
</table>

*Suggestive Electives: One course to be selected from the following: Dft 130, Egr 131, Mth 131, Com 131, and Phy 131.
Air Conditioning and Refrigeration Technology (2-year program)

This program furnishes both the theory and practice required to qualify a person for employment in the various areas of the air conditioning and refrigeration industry. Successful completion of this program leads to the Associate in Applied Science Degree.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Lec. Hrs.</th>
<th>Lab. Hrs.</th>
<th>Credit Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester</td>
<td>ACR 135—Principles of Refrigeration and Domestic Refrigeration Systems</td>
<td>4</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>ACR 136—Fundamentals of Electricity</td>
<td>3</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Mth 131—Technical Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Com 131—Applied Composition and Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Egr 131—Manufacturing Processes</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
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</table>
Auto Body (1-year program)

This two-semester (one year) program introduces the student to all facets of auto body repair. Emphasis is placed upon the development of the necessary skills and knowledge required to function successfully in this industry. Upon successful completion of this program of study the student will be awarded a certificate of completion from Eastfield College.

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<th>Lab. Hrs.</th>
<th>Credit Hrs.</th>
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104
Automotive Technology

This curriculum prepares the student for employment in the automotive industry as an automotive technician. The program of study emphasizes both the theory and practical skills of mechanics. The Associate in Applied Science Degree is awarded by Eastfield College upon successful completion of the program.

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<td>AT 132—Automotive Engines</td>
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<td>AT 134—Auto Air Conditioning</td>
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<td>AT 135—Drive Lines and Differential</td>
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<td>AT 232—Brakes and Front Suspensions</td>
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*AT 251—Advanced Automotive Repair may be substituted with consent of the instructor.
Child Development Assistant (1-year program)

An introduction to the various areas of child care work, includes the history, philosophy and practices of specialized care, with emphasis on the educational, recreational and health needs of the child.

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<th>Credit Hrs.</th>
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<td>*CD 140—Child Growth and Behavior, 0:4</td>
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*CD 140 formerly CD 136

*CD 141 formerly CD 138
Child Development Associate (2-year program)

The Associate Degree Program will provide an opportunity for the student to study in depth the whole development of the child. The certificate program will be extended to a special chosen area of interest. Internship will complete the preparation in child development.

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<td>PEH 101—Fundamentals of Health</td>
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<td>CD 237—Studies in Child Guidance</td>
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<td>CD 201—Adolescent Development and Society</td>
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Diesel Mechanics

The objective of this program is to furnish the diesel industry with a technician who possesses both the theory and performance skills demanded by the industry. Successful completion of this prescribed program of study leads to the Associate in Applied Science Degree from Eastfield College.

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*Suggested Electives: SS 132, Humanities Elective (Art 104, Music 104, Theatre 101 or Humanities 101).
**Digital Electronics Technology**

This curriculum is designed to prepare a graduate to work as a technician on devices that require digital circuits such as computers, test equipment, automatic control units and central distribution systems. The student will learn schematic interpretation, test equipment usage and technical communications. Successful completion of this curricula leads to the Associate in Applied Science Degree.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Lec. Hrs.</th>
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<th>Credit Hrs.</th>
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<td>ET 131 A.C. Circuits</td>
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<td>ET 133—Active Devices</td>
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<td>ET 134—Instrumentation</td>
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<td>ET 261—Pulse and Switching Circuits</td>
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<td>ET 262—Digital Computer Principles</td>
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<td>ET 265—Digital Research</td>
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*ET 266—Input and Output Devices may be substituted upon recommendation of electronics instructor.
Drafting and Design Technology

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. Successful completion of this program leads to the Associate in Applied Science Degree.

<table>
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<tr>
<th>Course</th>
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<th>Credit Hrs</th>
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<td>Dft 231—Electronic Drafting</td>
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<tr>
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The following courses may be offered if there is sufficient demand for them: Dft 136—Geological and Land Drafting; Dft 138—Architectural Drafting; Dft 235—Building Equipment; Dft 234—Advanced Technical Illustration; Dft 236—Piping and Pressure Vessel Design.
Drafting and Design Technology (Co-op Training Program)

This program prepares the student for employment as a draftsman by supplementing classroom training with on-the-job work experience. Students enrolled in this program work as draftsmen one long semester per year. Successful completion of this program leads to the Associate in Applied Science Degree.

<table>
<thead>
<tr>
<th>Lec. Hrs.</th>
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<th>Credit Hrs.</th>
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<td>Dft 132—Basic Drafting</td>
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<td>Dft 231—Electronic Drafting</td>
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### Drafting and Design Technology (Co-op Training Program) (continued)

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<td><strong>Fall Semester</strong></td>
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<tr>
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<td>Dft 232—Technical Illustration</td>
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The following courses may be offered if there is sufficient demand for them: Dft 136—Geological and Land Drafting; Dft 138—Architectural Drafting; Dft 235—Building Equipment; Dft 234—Advanced Technical Illustration; Dft 236—Piping and Pressure Vessel Design.
Graphic Arts (1-year program)

A one-year program providing the student with skill development opportunities in the field of Graphic Arts. Successful completion of this one-year program would prepare a person for employment in a commercial printing firm or in a printing division of a large company.

<table>
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<th>Credit Hrs.</th>
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<td>GA 133—Offset Printing</td>
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<td>Mth 139—Applied Mathematics</td>
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<td>Spring Semester</td>
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<tr>
<td>GA 132—Bindery Procedures</td>
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<td>GA 134—Basic Camera Operations</td>
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<td>GA 136—Copy Preparation</td>
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Mid-Management

This program in business management is designed to develop the fundamental skills, knowledge, attitudes and experiences which enable men and women to function in decision-making positions as supervisors or junior executives.

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<th>Credit Hrs.</th>
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<td>Hum 101—Introduction to the Humanities</td>
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<td>Bus 105—Introduction to Business</td>
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<td>Bus 151—Management Training</td>
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<td>Bus 201—Principles of Accounting or Bus 131—Bookkeeping</td>
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Recreation Leadership

This curriculum is offered for men and women who desire to become leaders in the field of recreation. The program will provide a comprehensive study of opportunities to prepare the student to plan, coordinate and supervise programs in the various recreational settings.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Title</th>
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<th>Lab. Hrs.</th>
<th>Credit Hrs.</th>
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<td>Soc 101—Introduction to Sociology</td>
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<td>PEH 257—Standard and Advanced Course in First Aid and Safety Education</td>
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<td>Rec 132—Social Recreation</td>
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Secretarial Science (1-year program)

The basic purpose of this program is to acquaint students with the opportunities and responsibilities of a secretarial career.

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<th>Credit Hrs.</th>
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**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: 3 0 3

Total: 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

Total: 12 5 14

*Students with previous training will be placed according to ability.

Suggested Electives: Bus 234, Bus 263, Bus 273, CS 101, Mth 130.

A student is required to have her last semester of typewriting and shorthand at Eastfield to complete this program.
Secretarial Science (2-year program)

The purpose of this program is to prepare students to become alert and responsive secretaries capable of performing the tasks required of them in the modern business office. Suggested electives are such that students may take courses which will allow specialties in secretarial areas as law, selling, advertising, and accounting.

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*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 her last semester of typing and shorthand at Eastfield.
Services for the Deaf (1-year program)

This one-year program will offer training for working with the deaf in a range of occupational settings with primary emphasis on those in vocational training, educational environments, and community agencies. A minimum of 30 credit hours is required for the certificate program.

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Services for the Deaf (Alternate 1-year program)

This alternate one-year program will train individuals to work in vocational settings and community agencies. A minimum of 30 hours credit is required for the certificate program.

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Suggested Electives: Bus 173, CD 136, CD 137, Com 131, Com 132, Eng 101, Eng 102, Hst 101, Hst 102, HD 106, HD 107, Psy 105, Psy 206, Rec 132, Soc 102. Other courses having direct relationship to career choice may be substituted on approval by program faculty.
Services for the Deaf (2-year program)

This program is designed to train individuals at a paraprofessional level to work with the deaf. The curriculum pattern is planned for a two-year associate degree program. Course work will provide skills to work as an interpreter for the deaf, educational assistant, media specialist, aide with the multiple-handicapped; house parent in residential schools, or language development specialist with deaf infants.

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<th>Semester</th>
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Transportation Technology

The objectives of the Transportation Technology Program are to prepare trained entry-level manpower to the transportation industry of North Texas with the ability to advance into management positions such as traffic managers, terminal managers, safety specialists, ICC practitioners and other related areas.

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<th>Course</th>
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<th>Lab. Hrs.</th>
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*Elective

ALLISON, JOE F.  
Science and Mathematics Division  
B.S., Stephen F. Austin State College  
M.Ed., Texas A & M University  
Ph.D., Texas A & M University

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134
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